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CATALOGO
BUILDING-HOME
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2023 Q3

Building-Home Distribution

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ALCAD Digital Antenna 5G

NEO-047 (Z19000189) 1 PEZZO

GA-047 (Z19000199) 4 PEZZI DI NEO-047

SPECIFICA	Z19000189	Z19000187
MODEL	NEO-047 / GA-047	NEO-087
FREQUENCY		
Band	UHF	
Channels	21...48	
Frequency range UHF	470...694 MHz	
LTE protection	@ 700Mhz	
Gain	16.0 dBi	18 dBi
LOSS		
LTE700 rejection	≥ 10 dB	
ELECTRICAL		
Front /back ratio	30.0 dB	32.0 dB
Impedance	75 Ohm	
MECHANICAL		
Wind loading H/V	105 / 92 N	125 / 95 N
Beamwidth Horizontal / Vertical	28° / 34°	30° / 28°
Protection index	IP53	IP55
Product Length	800 mm	1160 mm
Packing QTY	1 / 4 (GA-047)	1

NEO-087 (Z19000187) 1 PEZZO

Main Features:

- Interference protection from LTE 700 signals
- Quick and easy installation with semi-assembled aerials
- No needs for tools
- Mechanical filtering for higher gain
- Reliable high-quality aerials secures end-consumer satisfaction
- The reflectors help avoid interference from the signal received from the back of the antenna
- Designed to cover thew UHF band up to 790 MHz

MX-047 (Z19000109) 1 PEZZO

SPECIFICA	Z19000109
MODEL	MX-047
FREQUENCY	
Band	UHF
Channels	21...48
Frequency range UHF	470...694 MHz
LTE protection	@ 700Mhz
Gain	15.5 dBi
LOSS	
LTE700 rejection	≥ 10 dB
ELECTRICAL	
Front /back ratio	27.0 dB
Impedance	75 Ohm
MECHANICAL	
Wind loading H/V	111 / 128 N
Beamwidth Horizontal / Vertical	34° / 35°
Protection index	IP53
Product Length	1152 mm
Packing QTY	1

ALCAD Digital Antenna 5G

BU-117 (Z19000110) 12 PEZZI DI BU-117

GA- 457R (Z19000112A) 5 PEZZI DI BU-457R

SPECIFICA	Z19000110	Z19000112A
MODEL	BU-117	BU-457R
FREQUENCY		
Band	UHF	
Channels	21...48	
Frequency range UHF	470...694 MHz	
LTE protection	@ 700Mhz	
Gain	12.5 dBi	14.0 dBi
LOSS		
LTE700 rejection	≥ 10 dB	
ELECTRICAL		
Front /back ratio	21.0 dB	25 dB
Impedance	75 Ohm	
MECHANICAL		
Wind loading H/V	40 / 49 N	89 / 94 N
Beamwidth Horizontal / Vertical	34° / 35°	28° / 34°
Protection index	IP53	
Product Length	1146 mm	1298 mm
Packing QTY	12	5

GAN-267 (Z19000198) 10 PEZZI DI BU-267

GA-452 (Z19000203) 5 PEZZI DI BU-452

SPECIFICA	Z19000198	Z19000203
MODEL	BU-267	BU452
FREQUENCY		
Band	UHF	
Channels	21...48	
Frequency range UHF	470...694 MHz	
LTE protection	@ 700Mhz	
Gain	13.0 dBi	14 dBi
LOSS		
LTE700 rejection	≥ 10 dB	
ELECTRICAL		
Front /back ratio	23.0 dB	25.0 dB
Impedance	75 Ohm	
MECHANICAL		
Wind loading H/V	48 / 70 N	89 / 94 N
Beamwidth Horizontal / Vertical	26° / 31°	28° / 34°
Protection index	IP53	
Product Length	1087 mm	1298 mm
Packing QTY	1	5 (GA-452)

Main Features:

- Interference protection from LTE 700 signals
- Quick and easy installation with semi-assembled aerials
- No needs for tools
- Mechanical filtering for higher gain
- Reliable high-quality aerials secures end-consumer satisfaction
- The reflectors help avoid interference from the signal received from the back of the antenna
- Designed to cover thew UHF band up to 790 MHz

IKUSI Digital Antenna 5G

IK1818

- The key feature of the **FLASHD** LTE antennas is that they provide a strong rejection of LTE while maintaining current gains, very often without the need to incorporate a filter.
- Unfold with a simple press of a button.

SPECIFICA	IK1818
FREQUENCY	
Band	UHF
Channels	21...48
Frequency range UHF	470...694 MHz
LTE protection	@ 700Mhz
Gain	17.0 dBi
ELECTRICAL	
Front /back ratio	≥ 20.0 dB
Impedance	75 Ohm
MECHANICAL	
Wind loading H/V	105 / 150 N
Beamwidth Horizontal / Vertical	40° / 50°
Protection index	IP55
Product Length	1050 mm
Packing QTY	1

IK1824

- The smallest antenna range **COMPACT** for reception of TV signals in the UHF band, formed by a dihedral reflector made up of four aluminium tubes and a dipole.
- Minimum packaging volume for transport and easy assembly without tools

SPECIFICA	IK1824
FREQUENCY	
Band	UHF
Channels	21...48
Frequency range UHF	470...694 MHz
LTE protection	@ 700Mhz
Gain	14.0 dBi
ELECTRICAL	
Front /back ratio	≥ 16.0 dB
Impedance	75 Ohm
MECHANICAL	
Wind loading H/V	18 / 23 N
Beamwidth Horizontal / Vertical	60° / 80°
Protection index	IP55
Product Length	800 mm
Packing QTY	1

IK1825

- The smallest antenna range **NANO** for reception of TV signals in the UHF band, formed by a dihedral reflector made up of four aluminium tubes and a dipole.
- Clamping system for masts Ø 25 to 50 mm

SPECIFICA	IK1825
FREQUENCY	
Band	UHF
Channels	21...48
Frequency range UHF	470...694 MHz
LTE protection	@ 700Mhz
Gain	12.0 dBi
ELECTRICAL	
Front /back ratio	≥ 16.0 dB
Impedance	75 Ohm
MECHANICAL	
Wind loading H/V	15 / 20 N
Beamwidth Horizontal / Vertical	60° / 80°
Protection index	IP55
Product Length	500 mm
Packing QTY	1

J6700H - J6701 - J6711 Profiler Revolution

J6700H

4G LTE

5G LTE

SPECIFICA	J6700H	J6701	J6711
Inputs	4 VHF/UHF + 1FM		1 FM + 1 DAB/VHF + 2 UHF
Outputs	1 main port FM-VHF-UHF 1 test port (-30 dB) FM-VHF-UHF		1 main port FM-DAB-VHF-UHF 1 test port (-30 dB) FM-DAB-VHF-UHF
Frequency range	FM: 88 ~ 108 MHz I VHF: 174 ~ 240 MHz I UHF: 470 ~ 862 MHz		
LTE Protection	Automatic selection: 694 MHz, 790 MHz or OFF		
Input level (dBµV)	FM: 37 ~ 77 I VHF: 40 ~ 109 I UHF: 40 ~109		FM: 37 ~ 77 I VHF: 45 ~ 109 UHF: 45 ~109
FM output power (60 dB/IM3)	113 dBµV		
VHF/UHF output power (60dB/IM3)	120 dBµV	117 dBµV	114 dBµV
VHF/UHF output power (35 dB/IM3)	131 dBµV	126 dBµV	
VHF/UHF output power with 1 MUX	118 dBµV	113 dBµV	108 dBµV
VHF/UHF output power with 6 MUX	113 dBµV	110 dBµV	107 dBµV
Conversion	Yes (from any VHF-UHF channel to any VHF-UHF channel)		
Add MUXes	Per 1 or 2 or 3 or 4 or 5 or 6 Muxes		
Number of channels	More than 50 (32 filters)		More than 50 (15 filters)
Gain	FM: 35 dB I VHF: > 75 dB I UHF: > 75 dB	FM: 35 dB I VHF: > 65 dB I UHF: > 65 dB	FM: 35 dB I VHF: > 60 dB UHF: > 60 dB
Gain adjustment	FM: 20 dB I VHF / UHF: Channel AGC		
General attenuator	20 dB		
VHF/DAB attenuator	15 dB		
Slope adjustment	15 dB		-
Selectivity	50 dB/1 MHz		
Output MER	VHF: 35 dB I UHF: 35 dB		
ESD protection	All inputs		
Remote voltage for preamp Remote current	12 V or 24 V 100 mA (total for the 4 inputs)		12 V or 24 V 100 mA (total for the 3 inputs)
SD port	Yes (for copy configuration)		No
Operating temperature	-5° ~ +50° C		
Power Supply	100 V - 240 V		
Power Consumption	15 W	14 W	12 W
Dimensions	217 x 165 x 59 mm		
Weight	0,8 kg		

The most cost-efficient channel convertor solution on the market, with great flexibility to assign any VHF/UHF input to any VHF/UHF output. Very easy and fast installation, without the need for a field strength meter Extremely sharp filters , 50 dB on adjacent channels and integrated 4G/5G/LTE filters. The Profiler Revolution can filter and amplify very weak signals. This is something that our test users could not do in the past with other equipment. Perfect headend for your fibre installation to equalise and optimise the signals. Excellent quality of the output signal , the Profiler Revolution optimises the incoming digital terrestrial signal to assure supreme video quality on the end-users' TV-screens.

Main Features:

- programmable terrestrial filter amplifier
- 5 inputs: 4 VHF (DAB) / UHF and 1 FM
- read-out of input level strength: no need for field strength meter
- can process and convert more than 50 channels
- sharpest filters on the market (50 dB on adjacent channels)
- real-time AGC on all individual multiplexes
- flex matrix: complete flexibility in assigning filters from any input
- made in Europe, for worldwide application
- the Profiler Revolution facilitates straightforward configuration and is the most cost-efficient Profiler on the market
- configuration possible in different languages (English, French, Italian, Spanish)
- prepare your configuration file with uCloud
- RED compliant
- J6700W Wi-Fi Programmable.

J6714 Profiler Revolution Lite

SPECIFICA	J6714
Inputs	3 VHF/UHF (wideband)
Outputs	1 main (VHF-S UHF)
Input frequency range	VHF: 174 ~ 240 MHz - UHF: 470 ~ 694 MHz
Output frequency range	174 ~ 862 MHz
LTE Protection	694 MHz, (5G)
Input level (dBµV)	VHF: 37 ~ 109 - UHF: 37 ~ 109
SAT output power (-35 dBc/IM3 2 carriers)	119 dBµV
FM output power (60 dB/IM3)	113 dBµV
VHF/UHF output power (60dB/IM3)	114 dBµV
VHF/UHF output power (36 dB/IM3)	125 dBµV
VHF/UHF output power with 1 MUX	108 dBµV
VHF/UHF output power with 6 MUX	108 dBµV
VHF/UHF output power with 15 MUX	105 dBµV
VHF/UHF output power with 32 MUX	102 dBµV
Conversion	Yes (from any VHF-UHF channel to any VHF-S-UHF channel)
Add channels	Per 1, 2, 3, 4, 5 or 6 MUXes
Number of channels	More than 50 (32 filters)
Gain	VHF: > 65 dB - UHF: > 65 dB
Gain adjustment	Channel AGC
Noise figure	7 dB
General attenuator	20 dB
VHF/DAB attenuator	15 dB
Selectivity	50 (dB/1MHz)
Return loss	10 dB
Output MER	VHF: 35 dB - UHF: 35 dB
ESD protection	All inputs
Operating temperature	-5° ~ +50° C
Power Supply	12 V
Power Consumption	9 W
Dimensions	190 x 165 x 59 mm
Weight	0,65 kg

Main Features:

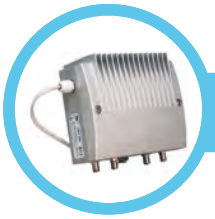
- Read-out of input level strength: no need for field strength meter
- Can process up to > 50 channels
- Sharpest filters on the market (50 dB on adjacent channels)
- Real-time AGC on all individual multiplexes
- Flex matrix: complete flexibility in assigning filters from any input
- Made in Europe, for worldwide application.
- Patented technology!
- With the Auto-scan function, the Profino Revolution Lite is really easy to install
- RED compliant (selectivity classification 0-1-2-3-4)

5G LTE

Programmable terrestrial filter amplifier:
AUTOSCAN FUNCTION / 3 VHF/UHF inputs / >50 Channels (32 filters) / 108 dBµV / AGC / Power over Coax / 12V Power Supply Included

The Profino Revolution Lite is a light version digital Profiler with Auto-scan function.

The KIT6714 has 3 VHF/UHF inputs
> 50 Channels can be filtered, amplified and converted
The filters on adjacent channels are extremely sharp
DC powering via output
12V Power Supply Included



PRODOTTO CORRELATO TX323170

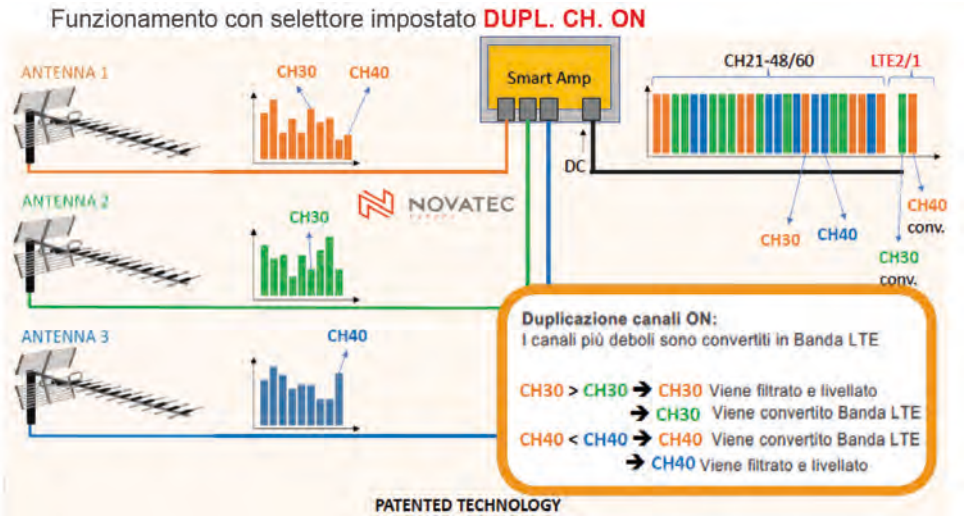
PRODOTTO CORRELATO 3LHE1040P

Smart Amplifier Kit J747xxx

J7473L2

Smart Amp caratteristiche principali:

- La scansione e la memorizzazione dei canali in ingresso, compreso il relativo filtraggio, sono completamente automatici
- Tutti i canali in uscita sono equalizzati ed hanno la stessa potenza
- Ottimo nelle installazioni con canali adiacenti, con livelli di segnale e qualità diversi
- I canali con la stessa frequenza e diversa qualità vengono scelti e gestiti automaticamente
- Riconoscimento automatico delle bande di ricezione nei diversi Stati



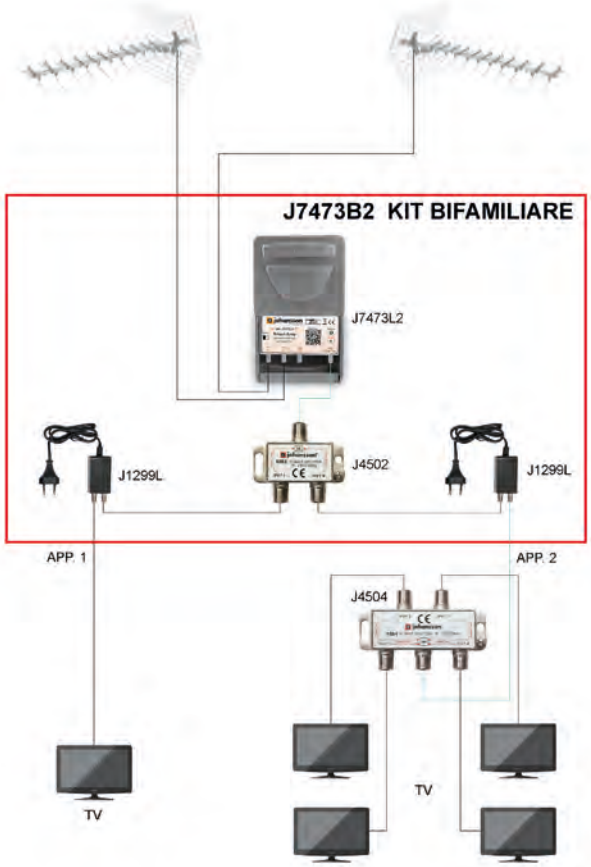
5G LTE

NEW 90dB

SPECIFICA	UNITA'	J7471L2	J7472L2	J7473L2	J7472S2 / J7473S2
Tipologia KIT SMART AMP		Monofamiliare	Monofamiliare	Monofamiliare	Monofamiliare 1 uscita
Ingressi	n	1	2	3	2 / 3
Filtri LTE	-	5G (> C48)			
Frequenza ingresso	-	VHF BIII + UHF (Selezione automatica della larghezza di banda per nazione)			
Soprressione frequenza LTE	db	> 40			
Livello di uscita - singola uscita	dBµV	90			
Gamma di frequenza	Mhz	174 - 862			
Separazione canali adiacenti	dB	> 35			
Sensibilità ingresso	dBµV	minimo 40			
Alimentatori ed accessori	n	-			1x 12 Vdc - 400 mA
Alimentazione ed assorbimento	-	12 Vdc-275 mA (DC su coax)		12 Vdc - 300mA (DC su coax)	
Dimensioni	mm	120 x 115 x 50			
Temperatura operativa	°C	-20 ~ +50			

SPECIFICA	UNITA'	J7472B2 / J7473B2	J7472T2 / J7473T2	J7472Q2 / J7473Q2	J7472HP2 / J7473HP2
Tipologia KIT SMART AMP		Bifamiliare 2 uscite ind.	Trifamiliare 3 uscite ind.	Quadrifamiliare 4 usc. ind.	Condominiale 1 uscita
Ingressi	n	2 / 3			
Filtri LTE	-	5G (> C48)			
Frequenza ingresso	-	VHF BIII + UHF (Selezione automatica della larghezza di banda per nazione)			
Soprressione frequenza LTE	db	> 40			
Livello di uscita - singola uscita	dBµV	86	84	82	121 reg. - 30 dB
Gamma di frequenza	Mhz	174 - 862			
Separazione canali adiacenti	dB	> 35			
Sensibilità ingresso	dBµV	minimo 40			
Alimentatori ed accessori	n	2x 12 Vdc-400 mA + J4502	3x 12Vdc 400 mA + J4503	4x 12Vdc 400 mA + J4504	1x 12 Vdc-400 mA+Booster 34db
Alimentazione ed assorbimento	-	12 Vdc-275 mA (DC su coax)		12 Vdc - 300mA (DC su coax)	
Dimensioni	mm	120 x 115 x 50			
Temperatura operativa	°C	-20 ~ +50			

SMART Amplifier Kit J747xxx



NEW KIT

J9780ETH, J9780 - Digital IF/IF Solutions

J9780ETH is the new generation converter for satellite signals to be used in MDU's.
The compact plug-and-play module has a straightforward and easy configuration.
Perfect for equalizing and optimizing satellite transponders as input for your fiber headend.

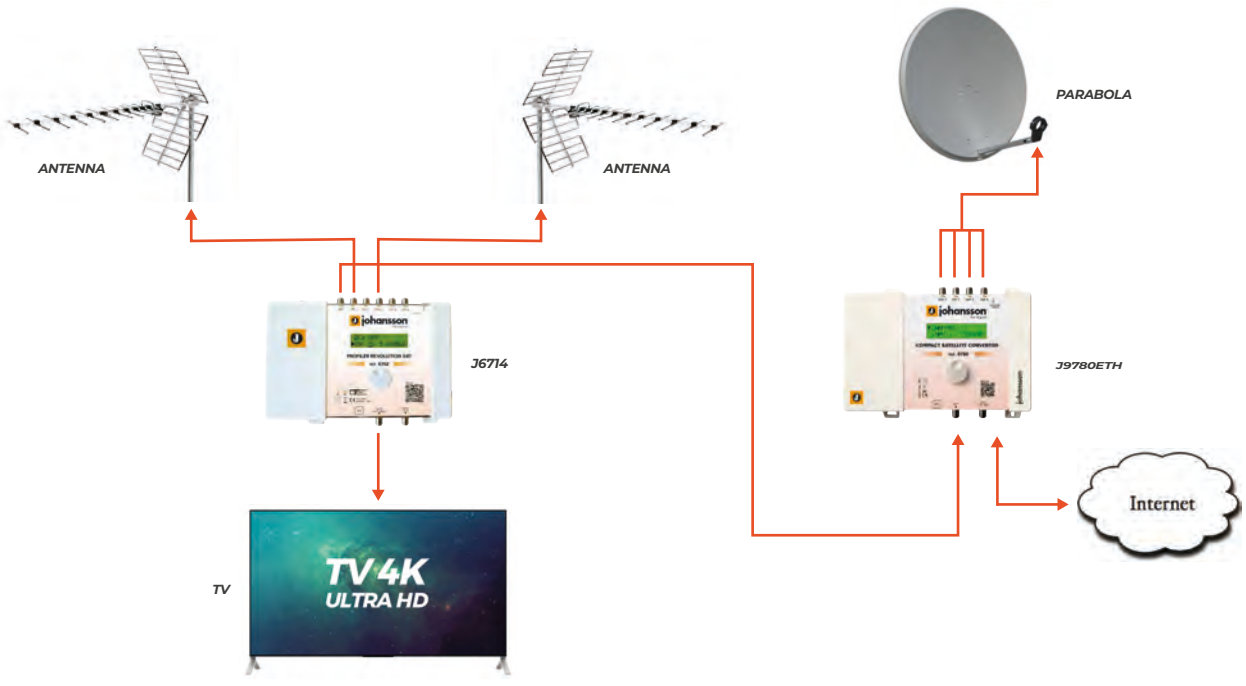
Main Features:

- Multi-functional satellite IF-IF headend: convertor, stacker, equalizer, optimizer
- ethenet port for remote access and web interface
- programmable satellite IF converter
- up to 32 DVB-S/S2 transponders
- 4 satellite inputs (Quattro/Quad/Wideband LNB)
- realtime AGC on all individual transponders
- read-out of input level strength: no need for field strength meter
- 110 dBµV (output level)
- auto-tuning functionality
- can be used in fiber optic system with up to 128 passive splits

SPECIFICA	J9780ETH	J9780
Inputs	4 SAT (wideband/quattro/quad)	
Outputs	1x main (SAT) + 1x test port (-30 dB)	
Frequency range IO	SAT: 290 MHz ~ 2340 MHz	
LTE Protection	Automatic selection: 694 MHz, 790 MHz or OFF	
Input level	40 ~ 95 dBµV	
SAT output power (per transponder)	110 dBµV	
SAT output power (35 dB/IM3)	132 dBµV	
SAT output level flatness	< 1 dB	
SAT output level adjustment	> 40 dB	
Slope adjustment	15 dB	
SAT Gain	> 40 dB	
Number of transponders	32	
Conversion	Yes (all 32 transponders)	
Transponder Bandwidth	1 MHz ~ 77 MHz (per 1 MHz steps)	
Selectivity	35 dB (@ 1 MHz)	
Return loss	10 dB	
Auto tuning	Yes (incoming transponders are copied from input 1 to output)	
ESD protection	All inputs	
DC @ SAT input	13 V / 18 V / & 0 / 22 kHz selectable by SW	
DC Load current @ SAT input	500 mA	
Ethernet port	Yes (for web interface / remote access)	No
SD port	No	Yes (for copy configuration)
Operating temperature	-5° ~ +50° C	
Power Supply	100 V - 240 V	
Power Consumption	25 W	
Dimensions	217 x 165 x 59 mm	
Weight	0,8 kg	

J9780ETH - Digital CSCR Solutions

SCHEMA COLLEGAMENTO



ONE+ SAT, ONE+ - Programmable digital amplifiers

ONE+ SAT
IK2864

ONE+
IK2865

The ONE+ and ONE+ SAT are programmable digital amplifiers, designed to selectively filter TV channels. Suitable for both household requirements and for collective housing, they are the perfect solution for managing signals of different frequencies and amplitudes.
In addition to UHF signals, FM and VHF signals are also amplified. The ONE+SAT model also amplifies FI satellite signals, as well as signals from an extension input. The individual adjustment of each filter allows them to be adapted to the specific situations of each TV channel in question, in addition to offering the possibility of being able to work in converter mode, transferring the TV channel to different frequency from the original one. The reading system for the input power allows the levels of the output channels to be automatically equalised.
The amplifier is configured through the user interface that is integrated into the equipment itself, formed by a joystick and an OLED screen.

Main Features:
- Unique on the market with over 131 dBµV in output level (IMD3 -36 dB)
- Automatic installation in less than 10 seconds
- No external programmer is required; programming can be carried out using the equipment itself
- 32 tunable variable bandwidth VHF/UHF filters from 1 to 4 channels
- Input greater dynamic range (allows operation with weaker signals)
- Configuration copy & software field upgrade over microSD card
- Cloning of the internal configuration with uploading onto a microSD card
- Equipment locking using a security code.

4G LTE

5G LTE

SPECIFICA	IK2864 - IK2865				
Inputs	BI / FM	EXT (VHF / UHF) (IK2864)	BIII / DAB	UHF 3 UHF 2 UHF 1	FI-SAT (IK2864)
Bands covered	47 - 108 Mhz	47 - 862 Mhz	174 - 240 Mhz	470 - 862 Mhz 470 - 790 Mhz 470 - 694 Mhz	950 - 2400 Mhz
N. programmable filters N. channels per filter	-		32 1 - 4		-
Filter bandwith	-		7 / 8 / DAB	8 / 16 / 24 / 32	-
Input level	40 ~ 90 dBµV	60 ~ 80 dBµV	40 ~ 100 dBµV		50 ~ 80 dBµV
AGC	-		Yes		-
End-of-channel selectivity ± 1 Mhz	-		35 dB		-
Output level OUT 1	131 dBµV (IMD3 -36 dB) ; 122°				122 dBµV (IMD3 -35 dB) OUT 1 only
Output level OUT 1 + 2 (IK2864)	128 dBµV (IMD3 -36 dB) ; 119°				
VHF / UHF output equalization	-		± 1 dB		-
Output regolation	25 dB	20 dB	30 dB		20 dB
Slope control	-			0 - 6 dB	0 - 9 dB
Noise figure	< 6 dB				
Test output	-30 dB				
Output voltage				Off / 12 Vdc 100 mA / 24 Vdc 200 mA	Bypass / 13 Vdc 300 mA / 18 Vdc 300 mA
Tone	-				0 ~ 22 Khz
Operating temperature	-5°C ~ +50°C				
Power Supply	100 V - 240 Vac				
Power Consumption	25 W (IK2865) - 17 W (IK2864)				
Dimensions	300 x 250 x 40 mm				
Weight	2.2 kg				

CAD-804 (Z19040256), CAD-814 (Z19040257) - Programm. ampli

CAD-804

5G
LTE

CAD-814

CAD-804 (Z19040256)
CAD-814 (Z19040257)
High selectivity programmable amplifier to filter, convert and equalize up to 32 terrestrial channels. Ideal for home TV distribution or MATV systems.
Programmable amplifier with 4 UHF/BIII/DAB inputs, 1 FM/BI input and LTE700 compatible. Its 32 digital filters are easy to program thanks to the LCD 32-digit display with keyapd and autosettings option. In addition, thanks to the Automatic Gain Control of the amplifier we can obtain a stable output level, which can be adjusted to our needs, without worrying about input signal fluctuations.
Moreover the chassis made of zamak gives the amplifier the maximum shielding and sturdiness.

Main Features:
- Output level 120 dBµV
- 32 programmable filters with high selectivity
- LTE700 / No LTE
- Easy and fast autoconfiguration with display
- External power supply for easy maintenance
- 4 UHF/BIII/DAB inputs + 1 FM/BI input
- Channel conversion
- Automatic Gain Control with output level adjustment
- Extra gain regulation per channel
- Robust chassis made of zamak

SPECIFICA	CAD-804 (Z19040256)	CAD-814 (Z19040257)
TERRESTRIAL		
Inputs	4x UHF / BIII / DAB - 1x FM/BI	
Frequency range	UHF (470 ~ 862 Mhz) - BIII/DAB (170 ~ 240 MHZ) - FM/BI (40 ~ 108 MHZ)	
Programmable filters	32	
Number of channels per filter	1	
Input level	UHF (35 ~ 95 dBµV) - BIII/DAB (170 ~ 240 dBµV) - FM/BI (40~108 dBµV)	
Selectivity	40 @ 1Mhz	
Maximum gain	UHF / BIII / DAB 35 ~ 80 dB - FM / BI 30dB	
Output level	1x 120 dBµV (IM3 DIN 45004B-60dBc) - 95 ~ 115 dB adjustable	
Gain adjustment	UHF CAG (50 dB) - FM adjustable (30 dB)	
Equalization margin	UHF 0 ~ 10 dB	
Noise figure	< 6 dB	
SATELITE		
number of inputs	-	1
Frequency range	-	950 ~ 2150 Mhz
Input level	-	47 ~ 83 dB
Maximum gain	-	45 dB
Output level	-	118 dBµV (IMD3 a -35 dB)
Gain adjustment	-	adjustable (20 dB)
Noise figure	-	< 7 dB
LNB power supply	-	0 / 13 18 / Bypass 350 mA 0 / 22 Khz
GENERAL		
Mains voltage	100 ~ 240Vac - 11W	100 ~ 240Vac - 13W
External voltage	9 Vdc - 1 A	9 Vdc - 1,2 A + LNB
Operating temperature	-10° ~ +60° C	
Dimensions	215 x 218.4 x 45 mm	
Protection index	IP31	

CA-662 (Z19040132), CA-663 (Z19040149) - Multiband amplifiers

CA-662

CA-663

SPECIFICA	CA662 (Z19040132) / CA-663 (Z19040149)			
Inputs Outputs	4 / 1 / 1		5 / 1 / 1 (CA-663)	
Frequency range	UHF 1 470 ~ 694 Mhz	UHF 2 470 ~ 694 Mhz	BIII / DAB 160 ~ 260 Mhz	BI / FM 47 ~ 108 Mhz
LTE Filter	LTE700		-	
Gain (± 2dB)	45/30 db ± 1dB 45 / 30 dB ± 1dB (CA-663)		30 db ± 1 dB 32 db ± 1 dB (CA-663)	32 db ± 2dB
Gain adjustment	16 dB		20 dB	
Output level	117 dBµV DIN 45004B 114 dBµV (IMD3 -60dB) 107 dBµV (IMD2 -60 dB)			
Noise figure	9 db ± 1dB		7 db ± 1dB	8 db ± 1dB
Output voltage	24 V - 60 mA			
Mains voltage	99 ~ 264 Vac - 8,8 W 99 ~ 264 Vac - 11,7 W (CA-663)			
ExternaL VOLTAGE	24 Vdc - 300mA 24 Vdc - 410mA (CA-663)			
Operating temperature	- 10 ~ +65° C			
Protection index	IP20			

5G LTE

CA-672 (Z19040144) - Multiband amplifiers

CA-672

5G LTE

SPECIFICA	CA672 (Z19040144)			
Inputs Outputs	5 / 1 / 1			
Frequency range	SAT 950 ~ 2150 Mhz	UHF 1/2 470 ~ 694 Mhz	BIII / DAB 160 ~ 260 Mhz	BI / FM 47 ~ 108 Mhz
LTE Filter	-	LTE700	-	
Gain (± 2dB)	43 db ± 1dB	45-30 dB ± 1dB	30 db ± 1dB	
Gain adjustment	20 dB	16 dB	20 dB	
Adjust. equalization range	0/8	-		
Output level	118,5 dBµV (IMD3 -35dB) 112 dBµV (IMD2 -35 dB)	117 dBµV DIN 45004B 114 dBµV (IMD3 -60dB) 107 dBµV (IMD2 -60 dB)		
Noise figure	7 db ± 1dB	8 db ± 1dB	7 db ± 1dB	
Output voltage	0 / 13 / 18 V 350 mA 0 / 22 Khz	24 V - 60 mA	-	
Potection index	24 Vdc - 700mA			
Operating temperature	-10° ~ +65° C			
Protection index	IP50			

CA-662 (Z19040132), CA-663 (Z19040149), CA-672 (Z19040144)
Broadband amplifier for head-end, with four inputs and different frequency configurations, compatible with the transmission of LTE700 and LTE800 mobile telephone signals. The built-in power supply unit can feed a preamplifiers by means of a switch. Optional external power supply for redundant power. Output test-point to adjust the installation without having to disconnect the TV signal.
Large-scale digital and analogue MATV installations which are affected by the transmission of LTE700 and LTE800 mobile telephone signals. Suitable for installations where the channels of each band are received at similar levels. Adjustment by means of switches and regulators which control the gain at each input.
Made from zamak and galvanised steel plate to provide maximum shielding. Input and output connectors in the opposite sides to facilitate installation. F-type connectors.

DA-601 (Z19040155), DA-611 (Z19040157) - Distribution amplifiers

DA-601

SPECIFICA	DA-601 (Z19040155)	
Inputs	1 + test	
Outputs	1 + test	
Frequency range	5-30 Mhz (Band RETURN)	47-862 Mhz (Band TV)
Gain	20 db ± 1dB	34 dB ± 1dB
Gain adjustment		20 dB
Adjust. equalization range		18 dB
Output level	114 dBµV DIN 45004B 111 dBµV (IMD3 -60dB) 105 dBµV (IMD2 -60 dB)	
Input / output test point	-30 dB	
Return loss i/O	≥ 10 dB	
Noise figure	8,5 db ± 1dB	
Power supply	24 V - 200 mA	
Operating temperature	-10° ~ +65° C	
Protection index	IP50	
Dimensions	245 x 160 x 60 mm	

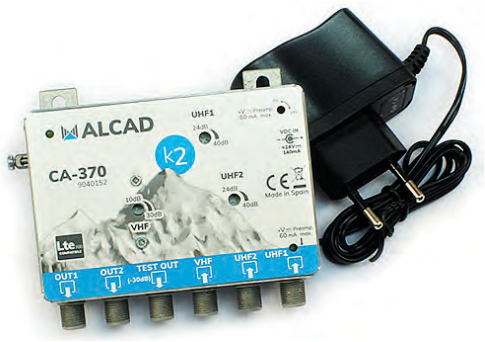
5G LTE

DA-611

SPECIFICA	DA-611 (Z19040157)		
Inputs	1 + test		
Outputs	1 + test		
Frequency range	5-30 Mhz (Band return)	47-862 Mhz (Band TV)	950 - 2150 Mhz (Band SAT)
Gain	20 db ± 1dB	34 dB ± 1dB	42 dB ± 1dB
Gain adjustment	-	20 dB	
Fixed equalization	-		4 dB
Adjust. equalization range	-	18 dB	0/7 dB
Output level	114 dBµV (DIN 45004b 111 dBµV (IMD3 -60dB) 105 dBµV (IMD2 -60 dB)	117 dBµV DIN 45004B 114 dBµV (IMD3 -60dB) 107 dBµV (IMD2 -60 dB)	118,5 dBµV (IMD3 -35dB) 112 dBµV (IMD2 -350 dB)
Input / output test point	-30 dB		
Return loss i/O	≥ 10 dB	≥ 10 dB	≥ 5 dB
Noise figure	8,5 db ± 1dB	8,5 db ± 1dB	8,0 db ± 1dB
Power supply	24 V - 200 mA		
Operating temperature	-10° ~ +65° C		
Protection index	IP50		
Dimensions	245 x 160 x 60 mm		

CAD-804 (Z19040256) - CAD-814 (Z19040257)
Broadband distribution amplifier for terrestrial TV (117 dBuV). It has a gain control and variable slope control. It amplifies the return path from 5 to 30 MHz. Fed by a external power supply model FF-200 (included with the amplifier). The input and output test points permit checking and adjusting the installation with no need to disconnect the TV signal.
It can be used as a distribution amplifier in large installations or cable networks. It can also be used as a line amplifier in small cable networks. These installations usually have long runs of cable that attenuate and unbalance the signal, with higher frequency channels being more attenuated. Distribution amplifiers compensate this loss by mens of the slope control, while amplifying the signal and adding as little noise as possible.
Made from zamak and galvanised steel plates to provide maximum shielding. Input and output connectors on opposite sides to facilitate installation. F-type connectors.

CA-370 (Z19040152) - Multiband amplifiers



CA-370

SPECIFICA	CA-370 (Z19040152)				
Inputs / Outputs	3 / 2				
Frequency range	BI (40 ~ 70 Mhz)	FM (88 ~ 108 M)hz	BIII/DAB (160 ~ 260 Mhz)	UHF 1 (470 ~ 694 Mhz)	UHF 2 (470 ~ 694 Mhz)
Gain (± 2dB)	28 dB	18 dB	28 dB	38dB	
Adjustable gain range	20 dB			16 dB	
Output test point	- 30 dB ±2 dB				
Output level	2x 110 dBµV (DIN 45004b 2x 107 dBµV (IMD3 -66dB) 2x 100 dBµV (IMD2 -60 dB)				
Noise figure	5 dB ±1.5 dB			6 dB ±1.5 dB	
Isolation	≥ 13 dB				
Output voltage	-			24 V - 50 mA	-
Operating temperature	-10° ~ +65° C				
Protection index	IP20				

CA-370 (Z19040152)
Head-end broadband amplifier with three inputs and two outputs. It has two UHF inputs with LTE700 rejection filters and another input for BI/FM/BIII/DAB. The two outputs have the same output level, with a maximum of 110 dBµV, and facilitate the creation of star-shaped distributions using splitters. UHF1 input can power 24V preamplifiers with up to 60 mA. The installer can easilly switch the preamplifier power on and off. The amplifier is powered with an external power supply, included with the product. It is also sold sepparately as FF-300 as a spare part, to be used for maintainance or repairs. Its zamak chassis provides the amplifier with maximum shielding, while also making it very robust. The F-type connections also allow for minimum load mismatch and maximum shielding.

AI-271 (Z19040255) - Multiband amplifiers

AI-271

SPECIFICA	AI-271 (Z19040255)	
Inputs / Outputs	1 / 2	
Frequency range	VHF (40 ~ 318 Mhz)	UHF (470 ~ 696 Mhz)
Gain	14 dB ±2.0 dB	24 dB ±2.0 dB
Adjust. gain range	16 dB	12 dB
Output level	102 dBµV DIN 45004B 99 dBµV (IMD3 -60dB) 88 dBµV (IMD2 -60 dB) 86 dBµV (CTB -60 dB) 82 dBµV (CSO -60 dB) 89 dBµV (XMOD -60 dB)	
Noise figure	< 4 dB dB	< 5 dB
Return loss	≥ 10 dB	
LTE band rejection	≥ 35 dB	
Mains voltage	90 - 264 Vac - 1,5 W	
Operating temperature	-5° ~ +60° C	
Protection index	IP30	

AI-271 (Z19040255)
Broadband apartment amplifier for terrestrial TV, LTE700 compatible, with built-in power supply unit. It amplifies the VHF and UHF bands separately and has an independent gain control for each band. It includes two outputs to make the distribution to two or more televisions.
Designed to enlarge analogue and digital terrestrial TV installations within an apartment or house. It amplifies the TV signal so a distribution with several new outlets can be made from the signal of one TV outlet or from the coaxial cable entering the house. The levels are easily adjusted by means of the two gain controls.
Fresh look, with a case made of ABS plastic for better impact resistance, with an internal zamak chassis which gives maximum shielding and extended range power supply. Easy wall fixing thanks to the supplied screwsand wall-plug or, alternatively, DIN rail installation by means of an adapter (not supplied). F type connectors.

CA-360 (Z19040141) - Multiband amplifiers

CA-360

SPECIFICA	CA-360 (Z19040141)				
Inputs / Outputs	3 / 2				
Frequency range	BI (40 ~ 70 Mhz)	FM (88 ~ 108 M)hz	BIII/DAB (160 ~ 260 Mhz)	UHF 1 (470 ~ 694 Mhz)	UHF 2 (470 ~ 694 Mhz)
Gain	32 dB (± 1 dB)	22 dB (± 1 dB)	32 dB (± 1 dB)	42dB (± 2 dB)	
Adjust. gain range	20 dB			16 dB	
Output test point	- 30 dB ±0,5 dB				
Output level	2x 110 dBµV DIN 45004B 2x 107 dBµV (IMD3 -66dB) 2x 100 dBµV (IMD2 -60 dB)				
Noise figure	5 dB ±1.5 dB			6 dB ±1.5 dB	
Isolation	≥ 13 dB				
Output voltage	-			24 V - 50 mA	-
Mains voltage	230 Vac - 7VA				
Operating temperature	-10° ~ +65° C				
Protection index	IP20				

CA-360 (Z19040141)
Broadband amplifiers for head-end, compatible with transmission of LTE700 and LTE800 mobile telephone signals. Includes a rejection filter for LTE700/800 signals. Equipped with three inputs to amplify and combine the signals coming from the antennas. Power supplied automatically to preamplifier. Available on request in 125 and 240 Vac.
Medium-sized individual digital and analogue terrestrial TV installations which are affected by the transmission of LTE700 and LTE800 mobile telephone signals. It is used as the head-end amplifier of the installation. The two outputs facilitate star-shaped distributions from the head-end through the use of splitters.
Made from ABS plastic, with an internal zamak chassis of which provides maximum shielding. F-type connectors which affords a connection with minimum mismatching and high shielding. Power supply unit insulated from the rest of the high frequency circuit, complying with all safety standards. F-type connectors for screwing on or crimping.

CA-460 (Z19049903), CA-461 (Z190401xx) - Multiband amplifiers

CA-460

SPECIFICA	CA-460 (Z19049903)		
Inputs	3		
Frequency range	BIII / DAB 160 ~ 260 Mhz	UHF 1 470 ~ 694 Mhz	UHF 1 470 ~ 694 Mhz
Gain	35 db ± 1,5 dB		
Adjust. gain range	20 dB	16 dB	
Output level	114 dBµV DIN 45004B 111 dBµV (IMD3 -66dB) AM-TV 123,5 dBµV (IMD3 -66dB) DVB-TV 104 dBµV (IMD2 -60 dB)		
Noise figure	4 db ± 1,5 dB	8 db ± 1,5 dB	
Return losses	≥ 10 dB		
Output voltage	12 Vdc - 50 mA		
Mains voltage	230 Vac - 4 W		
Operating temperature	-10° ~ +65° C		
Protection index	IP20		

CA-460 (Z19049903)
Broadband head-end amplifiers with three inputs. Built on a compact chassis, they are capable of supplying a signal to a large number of outlets.
Designed for analogue and digital terrestrial TV installations in medium-sized MATV networks or individual installations. They are used as the head-end amplifier of the installation.
Made from ABS plastic, with an internal zamak chassis of which provides maximum shielding. F type connectors which affords a connection with minimum mismatching and high shielding. Power supply unit insulated from the rest of the high frequency circuit, complying with all safety standards.

CA-461 (Z190401xx)
Like **CA-460** but with 4 inputs BIII/BIV/BV/UHF. Channel cuts on request (to be specified when ordering).

AM-183 (Z19030185), AM-187 (Z19030186) - Mast Broadband ampli

AM-183

SPECIFICA	AM-183 (Z19030185)		
Inputs	2		
Frequency range	FM 88 ~ 108 Mhz	BIII / DAB 160 ~ 260 Mhz	UHF 470 ~ 694 Mhz
Gain	16 dB		24 dB
Flatness response	± 1,0 dB		± 2,0 dB
Adjust. gain range	20 dB		16 dB
Output level	108 dBµV DIN 45004B 105 dBµV (IMD3 -66dB) 105 dBµV (IMD3 -60dB)		
Return loss	≥ 10 dB		
Noise figure	5 db ± 1,0 dB		3,5 db ± 1,0 dB
Rejection between inputs	> 30 dB		
Output voltage	12 Vdc - 45 mA		
Operating temperature	-20° ~ +65° C		
Protection index	IP53		

5G LTE

AM-187

SPECIFICA	AM-187 (Z190430186)		
Inputs	2		
Frequency range	FM 88 ~ 108 Mhz	BIII / DAB 160 ~ 260 Mhz	UHF 470 ~ 694 Mhz
Gain	20 dB		34 dB
Flatness response	± 1,0 dB		± 2,0 dB
Adjust. gain range	20 dB		16 dB
Output level	108 dBµV DIN 45004B 105 dBµV (IMD3 -66dB) 105 dBµV (IMD3 -60dB)		
Return loss	≥ 10 dB		
Noise figure	5 db ± 1,0 dB		3,5 db ± 1,0 dB
Rejection between inputs	> 30 dB		
Output voltage	12 Vdc - 45 mA		
Operating temperature	- 20° ~ +65° C		
Protection index	IP53		

AM-183 (Z19030185) - AM-187 (Z19030186)
Broadband amplifiers for masts, compatible with LTE mobile telephone signals with amplification band in UHF 470-694 MHz, also **AM-487 (Z19030205)** have four inputs and **AM-916 (Z19990099)** have three inputs to amplify and combine the signals from the antennas. They have one input to amplify and combine the signals from the antennas. The inputs can be configured as a single input for the combined bands or two inputs for separate bands. They are fed through the coaxial cable from a power supply unit installed inside the building.

Individual digital and analogue terrestrial TV installations which are affected by the transmission of LTE mobile phone signals and which require low gain. They amplify and mix the signals from several antennas. The signal obtained can be distributed to a large number of TV outlets by means of a single coaxial cable.

Shielded zamak chassis, covered by a weather-resistant plastic casing. Easy to open and close, the chassis can be tilted to facilitate manipulation. It can be installed either on a mast, by mean s of a polyamide clamp, or on a wall. Resistant to sun and water (IP53). Greater insulation between inputs and outputs. F-type connectors for screwing or crimping.

AM-487, AM-916 - Amplifiers for Mast

AM-487

SPECIFICA	AM-487 (Z19030205)			
Inputs	4			
Frequency range	FM (88 ~ 108 M)hz	BIII/DAB (160 ~ 260 Mhz)	UHF 1 (470 ~ 694 Mhz)	UHF 2 (470 ~ 694 Mhz)
Gain	20 dB		32 dB	
Adjust. gain range	20 dB		16 dB	
Output level	108 dBµV DIN 45004B 105 dBµV (IMD3 -66dB) 93 dBµV (IMD2 -60 dB)			
Noise figure	5 dB ±1.0 dB		6 dB ±1.0 dB	
Rejection between inputs	≥ 30 dB			
DC path	-		12 V - 50 mA	
Operating temperature	-20° ~ +65° C			
Protection index	IP53			

5G
LTE

AM-916

SPECIFICA	AM-916 (Z19039910)
Inputs / Outputs	3 / 2
Frequency range	UHF 1 / 2 (470 ~ 694 Mhz)
Gain	40 dB / 32 dB (AM-386)
Adjust. gain range	16 dB
Output level	2x 108 dBµV DIN 45004B 2x 105 dBµV (IMD3 -66dB) 2x 93 dBµV (IMD2 -60 dB)
Noise figure	3,5 dB ±1.0 dB
Rejection between inputs	≥ 30 dB
Power supply	12 Vdc - 80 mA
DC path	12 V - 50 mA
Operating temperature	-10° ~ +65° C
Protection index	IP53

PR-202 (Z19090103) - Multiband amplifiers

PR-202

SPECIFICA	PR-202 (Z19090103)
Inputs / Outputs	3 / 2
Frequency range	UHF (470 ~ 862 Mhz)
Gain	14 dB
Flatness response	0,6 dB ±0.1 dB (8Mhz)
Output level	-100 dBµV DIN 45004B 97 dBµV (IMD2 -60 dB)
Return loss I/O	> 10 dB
Noise figure	< 1 dB
Power supply	12 Vdc - 16 mA
Dimensions	15 x 80 x 100 mm
Operating temperature	-10° ~ +65° C
Protection index	IP20

PR-202 (Z19090103)
14dB UHF preamplifier, remote-fed at 12Vdc with F type connectors

MM-200, MM-207, MM-307 - Multiplexers and filters

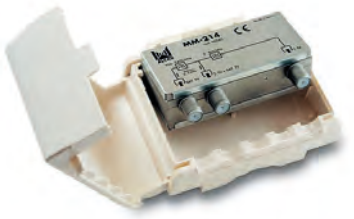
MM-200

MM-307

SPECIFICA	MM-200 (Z19020041)	MM-207 (Z19020040)		MM-307 (Z19020042)		
Inputs	2	2		3		
Frequency range	FM/TV (40 ~ 862 Mhz)	VHF (40 ~ 260 Mhz)	UHF (470 ~ 862 Mhz)	VHF (40 ~ 260 Mhz)	UHF 1 (470 ~ 862 Mhz)	UHF 2 (470 ~ 862 Mhz)
Insertion loss	4,5 dB ±0,7 dB	0,5 dB ±0,4 dB	0,6 dB ±0,2 dB	0,5 dB ±0,4 dB	4,0 dB ±0,5 dB	
Isolation between inputs	20 dB	-		-	≥ 15 dB	
Rejection between inputs	-	≥ 30 dB		≥ 30 dB		
Fixed DC path	-	-		-	200 mA	
Switchable DC path	60 mA	-		-		
Operating temperature	-10° ~ +65° C					
Protection index	IP53					

Multiplexers for masts, universal or by bands, of two inputs. They mix the signals from several antennas in a single coaxial cable. They incorporate switchable DC paths to permit the feeding of a preamplifier.
Individual digital and analogue terrestrial TV installations. In installations where the reception levels are adequate (60 to 75 dBµV) the signals of all the antennas can be combined to distribute them in the building with a single coaxial cable.

MM-214 (Z19020045) - Multiplexers and filters



MM-214

SPECIFICA	MM-214 (Z19020045)	
Inputs	2	
Frequency range	FM/TV (5 ~ 862 Mhz)	SAT (850 ~ 2400 Mhz)
Insertion loss	1,0 dB ±0,5 dB	
Flatness response	±0,1 dB	±0,3 dB
Channel flatness response	±0,1 dB	
Rejection between inputs	≥ 35 dB	
Return loss I/O	≥ 10 dB	
Fixed DC path	-	0 ~ 500 mA / 0 ~ 3 Mhz
Pass 22Khz / DiSEqC	-	Yes
Chroma-luminance delay	< 1 nS	-
Operating temperature	-10° ~ +65° C	
Protection index	IP53	

Multiplexers for masts which combine the signals of terrestrial TV and FM radio with the IF satellite signal from the LNB. The resulting signal is distributed by a single coaxial cable.
Individual or SMATV installations. The mast multiplexer enables the distribution of the satellite signal to the interior of the building when it is not possible to add a new cable for the satellite.

All products are shielded zamak chassis, covered by an ABS plastic box for outdoor use. Fixed to the mast by means of a polyamide clamp. F-type connectors. Supplied in individual or multiple packs.

FR-900 (Z19020052) - Antenna multiplexers and filters

FR-900

SPECIFICA	FR-900 (Z19020052)
Inputs	1
Frequency range	0-694 Mhz
Insertion loss	1 db ± 0,2 dB
LTE Band rejection 703-862 Mhz	60 dB
GSM-TETRA band rejection 870-960 Mhz	60 dB
DC path	24 V - 300 mA (max)
Operating temperature	-10° ~ +65° C
Protection index	IP53

FR-900 (Z19020052)
Rejection filter for mast, cutting out interference from LTE700, LTE800, GSM and TETRA mobile phone signals. It incorporates a DC path to allow power to be supplied to a preamplifier. Suitable for individual and collective terrestrial TV installation.

AV-315 (Z19090033) - Variable attenuator

AV-315

SPECIFICA	FR-900 (Z19020052)
Frequency range	5-2400 Mhz
Fixed attenuation	3 db ± 0,5dB TV - 4 db ± 1,0dB SAT
Variable attenuation	1,8 db ± 2,0 dB
Flatness response	± 1,0 dB (± 0,1 dB)
Return loss	> 10 dB
DC path	500 mA - DiSEqC 22 Khz
Chroma-luminance delay	< 1 nS
Operating temperature	-10° ~ +65° C
Protection index	IP20

AV-315 (Z19090033)
Variable attenuators for terrestrial and satellite TV. The variable attenuators are equipped with an attenuation control.

FI-xxx, FR-xxx - Divisori e derivatori verticali > 2400 Mhz

Codice	Modello	Foto	Descrizione prodotto
Z19060078	**FI-374**		Splitter, 3 outputs, 7 dB, 5 to 2400 MHz, DC path 400mA, shielded, with F-type connector
Z19060056	**FI-474**		Splitter, 4 outputs, 9,0 dB, 5 to 2400 MHz, DC path 400mA, shielded, with F-type connector
Z19060079	**FI-594**		Splitter, 5 outputs, 10,5 dB, 5 to 2400 MHz, DC path 400mA, shielded, with F-type connector
Z19060053	**FD-210**		Tap-off, 2 outputs at 10 dB, 5 to 2400 MHz, equalised, shielded, with F-type connector
Z19060033	**FD-213**		Tap-off, 2 outputs at 13 dB, 5 to 2400 MHz, equalised, shielded, with F-type connector
Z19060034	**FD-219**		Tap-off, 2 outputs at 19 dB, 5 to 2400 MHz, equalised, shielded, with F-type connector
Z19060035	**FD-225**		Tap-off, 2 outputs at 26 dB, 5 to 2400 MHz, equalised, shielded, with F-type connector
Z19060054	**FD-410**		Tap-off, 4 outputs at 10 dB, 5 to 2400 MHz, equalised, shielded, with F-type connector
Z19060038	**FD-413**		Tap-off, 4 outputs at 13.5 dB, 5 to 2400 MHz, equalised, shielded, with F-type connector
Z19060039	**FD-419**		Tap-off, 4 outputs at 19 dB, 5 to 2400 MHz, equalised, shielded, with F-type connector
Z19060040	**FD-425**		Tap-off, 4 outputs at 26 dB, 5 to 2400 MHz, equalised, shielded, with F-type connector

TX323170 - GPV 950 amplifier w/active RC, 85 ~ 1006 MHz

Main Features:

- One-board technology: all functionalities on one board implemented
- Rotary switches in 1 dB steps for settings of attenuation and equalization
- Downstream: 85...1006 MHz by max output level 113 dBµV
- Upstream: 5-65 MHz, max. output 120 dBµV (high load performance for DOCSIS 3.x, KDG-Class D)
- Basic gain selectable via jumpers
- Return path mode selectable: active / passive / off
- Integrated cablesimulator
- State of the art 1 GHz technology
- Excellent and stable amplifier characteristics
- Low power consumption because of high efficient switching PSUs

TX323170 are high output Distribution Amplifiers for use in CATV distribution networks in multi-dwelling premises primarily. Switching of the basic gains enables to configure the amplifiers as line extender or as cascade amplifier in trunk position.
All functional parts and setting elements are implemented on the printed board. Thus you do not need external accessories for configuration and operation of the amplifier in generally. That basic type is mains fed via Euro-plug.

SPECIFICHE	TX323170
Generals	
Return Path	5 ~ 65 MHz
Type	Amplifier - Indoor
Output level CSO @ 60 dB IMD (42 ch) flat	114/116 dBµV
Output level return path	120 dBµV
Frequency	
Frequency range - Forward	87 ~ 1006 MHz
Gain	
Gain - Return path	32 / 26 / -2 dB
Noise figure - Forward (VHF I “off”)	6,0 dB
Slope - Interstage	DS 0/3/7/10, US 0/3/6/9 dB
Gain forward - Interstage	41 dB / 33 dB
Loss	
Equalization	0 ~ 15 dB, 1 dB steps by rotary switches
Attenuation forward - line equalizer at input	41 dB
Electrical	
Impendance	75 Ω
Operational	
Reference standards	EN 50083-2, EN 60065, EN 60728-11, EN 60728-3
AC Supply voltage	190 ~ 264 VAC
Power Consumption (typ.)	15 W
IP Housing protection class	IP 65
Temperature - operating	-25° ~ +55 °C
Inputs / Outputs	1 / 1
RF connector - Test point input: bidirectional	-20 dB
RF connector - Test point output: directional	-20 dB
Connector Type	F-female
Mechanical	
Main material	Zinc diecast
Product Dimensions	180 x 145 x 70 mm
Net Weight	1.6 kg

WSS8221G - Broadband building amplifiers

WSS8221G

SPECIFICA	WSS8221G
Frequency range	87 ~ 1002 Mhz
Gain	34,0 dB ±1,0 dB
Flatness	±0.75 dB
Max output level	104 dBµV
Input attenuator	0 ~ 20 dB
Input equalizer	0 ~ 20 dB
Noise figure	< 7 dB
Return loss	18 dB (5 ~ 40 Mhz)
Power supply	187 ~ 250 Vac - 6 W
Dimensions	155 x 80 x 56 mm
Operating temperature	-20° ~ +55° C
Protection index	IP41

WSS8221G amplifiers were designed, considering the requirements of CATV operators looking for a good quality of transmitted signal at a reasonable cost of investment. In addition, the possibility of local or remote power supply ensures wide range of its applications. **WSS8221G** wideband amplifiers series is designed for indoor installation only.
It is highly recommended solution for household installations ensuring noise-free amplification, with no affection on signal quality.

Prese Demix TV-SAT - Frontali compatibili

CODICE	DESCRIZIONE
MPD800	**Presa Demiscelata 0 dB CC sui SAT**
MFC830	Frontalino Demix Compatibile Serie BTicino MAGIC
MFC832	Frontalino Demix Compatibile Serie BTicino LIVING INTERNATIONAL
MFC834	Frontalino Demix Compatibile Serie BTicino LIGHT
MFC835	Frontalino Demix Compatibile Serie VIMAR IDEA
MFC836	Frontalino Demix Compatibile Serie VIMAR IDEA BIANCA
MFC837	Frontalino Demix Compatibile Serie GEWISS PLAYBUS NERA
MFC838	Frontalino Demix Compatibile Serie AVE 45 BIANCA
MFC839	Frontalino Demix Compatibile Serie AVE 45 NERA
MFC840	Frontalino Demix Compatibile Serie GEWISS SYSTEM BIANCA
MFC841	Frontalino Demix Compatibile Serie BTicino LIVING
MFC842	Frontalino Demix Compatibile Serie BTicino LUNA
MFC843	Frontalino Demix Compatibile Serie VIMAR PLANA
MFC844	Frontalino Demix Compatibile Serie VIMAR 8000
MFC845	Frontalino Demix Compatibile Serie AVE RAL
MFC846	Frontalino Demix Compatibile Serie AVE BANQUISE
MFC847	Frontalino Demix Compatibile Serie BTicino LIGHT TECH
MFC848	Frontalino Demix Compatibile Serie GEWISS SYSTEM NERA
MFC849	Frontalino Demix Compatibile Serie BTicino MATIX
MFC850	Frontalino Demix Compatibile Serie BTicino MAGIC TT
MFC851	Frontalino Demix Compatibile Serie LEGRAND CROSS
MFC852	Frontalino Demix Compatibile Serie LEGRAND VELA
MFC853	Frontalino Demix Compatibile Serie LEGRAND VELA NERA
MFC854	Frontalino Demix Compatibile Serie LEGRAND MOSAIC
MFC855	Frontalino Demix Compatibile Serie VIMAR EIKON
MFC856	Frontalino Demix Compatibile Serie VIMAR EIKON NEXT
MFC857	Frontalino Demix Compatibile Serie BTicino AXOLUTE Alluminio
MFC858	Frontalino Demix Compatibile Serie BTicino AXOLUTE Antracite
MFC859	Frontalino Demix Compatibile Serie GEWISS CHORUS BIANCA
MFC860	Frontalino Demix Compatibile Serie GEWISS CHORUS NERA
MFC861	Frontalino Demix Compatibile Serie GEWISS CHORUS TITANIO
MFC862	Frontalino Demix Compatibile Serie VIMAR PLANA SILVER
MFC863	Frontalino Demix Compatibile Serie VIMAR EIKON BIANCA
MFC864	Frontalino Demix Compatibile Serie BTicino AXOLUTE "HD" bianca
MFC865	Frontalino Demix Compatibile Serie ABB Elos
MFC866	Frontalino Demix Compatibile Serie ABB Chiara
MFC867	Frontalino Demix Compatibile Serie AVE Domus 100
MFC868	Frontalino Demix Compatibile Serie AVE Life 44
MFC869	Frontalino Demix Compatibile Serie ABB MYLOS Bianca
MFC870	Frontalino Demix Compatibile Serie VIMAR ARCHE' Bianca
MFC871	Frontalino Demix Compatibile Serie VIMAR ARCHE' Nera
MFC872	Frontalino Demix Compatibile Serie AVE ALLUMIA
MFC873	Frontalino Demix Compatibile Serie ABB MYLOS Nera
MFC874	Frontalino Demix Compatibile Serie TICINO LIVING NOW
MFC875	Frontalino Demix Compatibile Serie AVE TEKLA
MFC876	Frontalino Demix Compatibile Serie AVE CLASS
MFC877	Frontalino Demix Compatibile Serie S.V. ARKE' METAL

Tutti i marchi, registrati e non, non sono di nostra proprietà e sono riportati unicamente per indicare la destinazione compatibile dei nostri prodotti con i prodotti delle case titolari dei marchi presenti.

Prese TV-SAT - Frontali compatibili

CODICE	DESCRIZIONE
MPF700	**Presa F Femmina Terminale 0 dB Passante CC**
MPM700	**Presa IEC MASCHIO Terminale 0 dB Passante CC**
MFC730	Frontalino 1 Foro Compatibile Serie BTicino MAGIC
MFC732	Frontalino 1 Foro Compatibile Serie BTicino LIVING INTERNATIONAL
MFC734	Frontalino 1 Foro Compatibile Serie BTicino LIGHT
MFC735	Frontalino 1 Foro Compatibile Serie VIMAR IDEA
MFC736	Frontalino 1 Foro Compatibile Serie VIMAR IDEA BIANCA
MFC737	Frontalino 1 Foro Compatibile Serie GEWISS PLAYBUS NERA
MFC738	Frontalino 1 Foro Compatibile Serie AVE 45 BIANCA
MFC739	Frontalino 1 Foro Compatibile Serie AVE 45 NERA
MFC740	Frontalino 1 Foro Compatibile Serie GEWISS SYSTEM BIANCA
MFC741	Frontalino 1 Foro Compatibile Serie BTicino LIVING
MFC742	Frontalino 1 Foro Compatibile Serie BTicino LUNA
MFC743	Frontalino 1 Foro Compatibile Serie VIMAR PLANA
MFC744	Frontalino 1 Foro Compatibile Serie VIMAR 8000
MFC745	Frontalino 1 Foro Compatibile Serie AVE RAL
MFC746	Frontalino 1 Foro Compatibile Serie AVE BANQUISE
MFC747	Frontalino 1 Foro Compatibile Serie BTicino LIGHT TECH
MFC748	Frontalino 1 Foro Compatibile Serie GEWISS SYSTEM NERA
MFC749	Frontalino 1 Foro Compatibile Serie BTicino MATIX
MFC750	Frontalino 1 Foro Compatibile Serie BTicino MAGIC TT
MFC751	Frontalino 1 Foro Compatibile Serie LEGRAND CROSS
MFC752	Frontalino 1 Foro Compatibile Serie LEGRAND VELA
MFC753	Frontalino 1 Foro Compatibile Serie LEGRAND VELA NERA
MFC754	Frontalino 1 Foro Compatibile Serie LEGRAND MOSAIC
MFC755	Frontalino 1 Foro Compatibile Serie VIMAR EIKON
MFC756	Frontalino 1 Foro Compatibile Serie VIMAR EIKON NEXT
MFC757	Frontalino 1 Foro Compatibile Serie BTicino AXOLUTE Alluminio
MFC758	Frontalino 1 Foro Compatibile Serie BTicino AXOLUTE Antracite
MFC759	Frontalino 1 Foro Compatibile Serie GEWISS CHORUS BIANCA
MFC760	Frontalino 1 Foro Compatibile Serie GEWISS CHORUS NERA
MFC761	Frontalino 1 Foro Compatibile Serie GEWISS CHORUS TITANIO
MFC762	Frontalino 1 Foro Compatibile Serie VIMAR PLANA SILVER
MFC763	Frontalino 1 Foro Compatibile Serie VIMAR EIKON BIANCA
MFC764	Frontalino 1 Foro Compatibile Serie BTicino AXOLUTE "HD" bianca
MFC765	Frontalino 1 Foro Compatibile Serie ABB Elos
MFC766	Frontalino 1 Foro Compatibile Serie ABB Chiara
MFC767	Frontalino 1 Foro Compatibile Serie AVE Domus 100
MFC768	Frontalino 1 Foro Compatibile Serie AVE Life 44
MFC769	Frontalino 1 Foro Compatibile Serie ABB MYLOS Bianca
MFC770	Frontalino 1 Foro Compatibile Serie VIMAR ARCHE' Bianca
MFC771	Frontalino 1 Foro Compatibile Serie VIMAR ARCHE' Nera
MFC772	Frontalino 1 Foro Compatibile Serie AVE ALLUMIA
MFC773	Frontalino 1 Foro Compatibile Serie ABB MYLOS Nera
MFC774	Frontalino 1 Foro Compatibile Serie TICINO LIVING NOW
MFC775	Frontalino 1 Foro Compatibile Serie AVE TEKLA
MFC776	Frontalino 1 Foro Compatibile Serie AVE CLASS
MFC777	Frontalino 1 Foro Compatibile Serie S.V. ARKE' METAL

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Parabole in acciaio

Q9P160ACG

Q9P178ACB

Q9P493ACB

50 PEZZI

30 PEZZI

SPECIFICA	Q9P160ACB	Q9P178ACB/G/M - Q9P178SKY B/G/M	Q9P493ACB/G/M
Caratteristiche elettriche			
Gamma di frequenze	10,7 - 12,75 GHz	10,7 - 12,75 GHz	10,7 - 12,75 GHz
Guadagno a 11,7 GHz	34,3 dBi	37,2 dBi	18,6 dBi
Caratteristiche meccaniche			
Multifeed	Multifeed	Dual feed 6° - Multifeed	
Elevazione gamma	0-90°		
Elevazione con palo passante	0-41°	0-40°	3-44°
Carico vento a 50 Km/h	4 Kg	7 Kg	10 Kg
Carico vento a 100 Km/h	15 Kg	28 Kg	40 Kg
Carico vento a 150 Km/h	34 Kg	62 Kg	90 Kg
Dimensioni (A x L)	550 x 510 mm	750 x 690 mm	900 x 830 mm
Materiale Parabola / Supporto	Acciaio zincato di alta qualità / Metallo (Q9P160ACB-Q9P493ACx)- Plastica (Q9P178xxx)		
Finitura	Rivestimento verniciato a polvere		
Colore	Bianco	Bianco / Grigio / Mattone	
Staffe			
Supporto LNB	Ø 23-40 mm		
Diametro palo	Ø 32-60 mm		
Fissaggio a palo	Doppio		
Imballo			
Quantità	Bulk 50 pezzi (Q9P178SKY 200 pezzi)		Bulk 30 pezzi

ACCESSORI PARABOLE	
Q9SLF	Supporto LNB singolo in pressofusione, adatto per parabole serie Q9P493ACx/Q9P566ALx/Q9P573ALx
Q9DF6	Supporto Dual Feed 6° in plastica, adatto per parabole serie Q9P178ACx / Q9P366Axx / Q9P378Axx / Q9P493ACx / Q9P566ALx / Q9P573ALx
Q9DFR	Supporto Dual Feed regolabile in plastica, adatto per parabole serie Q9P366Axx / Q9P378Axx / Q9P493ACx / Q9P566ALx / Q9P573ALx

Parabole in acciao / alluminio

Q9P366ALB

Q9P378ALB

Q9P566ALM

50 PEZZI

30 PEZZI

SPECIFICA	Q9P366ACB/G/M Q9P366ALB/G/M	Q9P378ACB/G/M Q9P378ALB/G/M	Q9P566ALB/G/M
Caratteristiche elettriche			
Gamma di frequenze	10,7 - 12,75 GHz	10,7 - 12,75 GHz	10,7 - 12,75 GHz
Guadagno a 11,7 GHz	35,9 dBi	37,2 dBi	35,9 dBi
Caratteristiche meccaniche			
Multifeed	Dual feed 6° - Multifeed	Dual feed - Multifeed	Dual feed 6° - Multifeed
Elevazione gamma	0-90°		
Elevazione con palo passante	0-41°	0-43°	3-44°
Carico vento a 50 Km/h	6 Kg	7 Kg	6 Kg
Carico vento a 100 Km/h	21 Kg	28 Kg	21 Kg
Carico vento a 150 Km/h	47 Kg	62 Kg	47 Kg
Dimensioni (A x L)	650 x 600 mm	750 x 690 mm	650 x 600 mm
Materiale Parabola / Supporto	Acciaio zincato di alta qualità - Alluminio / Metallo		Alluminio / Metallo
Finitura	Rivestimento verniciato a polvere		
Colore	Bianco / Grigio / Mattone		
Staffe			
Supporto LNB	Ø 23-40 mm		
Diametro palo	Ø 32-60 mm		
Fissaggio a palo	Singolo / Doppio	Doppio	
Imballo			
Quantità	Bulk 50 pezzi		Bulk 30 pezzi

ACCESSORI PARABOLE	
Q9SLF	Supporto LNB singolo in pressofusione, adatto per parabole serie Q9P493ACx/Q9P566ALx/Q9P573ALx
Q9DF6	Supporto Dual Feed 6° in plastica, adatto per parabole serie Q9P366Axx / Q9P378Axx / Q9P493ACx / Q9P566ALx / Q9P573ALx
Q9DFR	Supporto Dual Feed regolabile in plastica, adatto per parabole serie Q9P366Axx / Q9P378Axx / Q9P493ACx / Q9P566ALx / Q9P573ALx

Parabole in alluminio

Q9P573ALB

Q9P577ALB

Q9P593ALG

30 PEZZI

SPECIFICA	Q9P573ALB/G/M	Q9P577ALB/G/M	Q9P593ALB/G/M
Caratteristiche elettriche			
Gamma di frequenze	10,7 - 12,75 GHz	10,7 - 12,75 GHz	10,7 - 12,75 GHz
Guadagno a 11,7 GHz	37,2 dBi	37,2 dBi	38,7 dBi
Caratteristiche meccaniche			
Multifeed	Dual feed 6° - Multifeed		
Elevazione gamma	0-90°		
Elevazione con palo passante	1-43°	1-43°	3-44°
Carico vento a 50 Km/h	7 Kg	7 Kg	10 Kg
Carico vento a 100 Km/h	28 Kg	28 Kg	40 Kg
Carico vento a 150 Km/h	62 Kg	62 Kg	90 Kg
Dimensioni (A x L)	750 x 690 mm	750 x 690 mm	900 x 830 mm
Materiale Parabola / Supporto	Alluminio / Metallo		
Finitura	Rivestimento verniciato a polvere		
Colore	Bianco / Grigio / Mattone		
Staffe			
Supporto LNB	Ø 23-40 mm		
Diametro palo	Ø 32-60 mm		
Fissaggio a palo	Doppio		
Imballo			
Quantità	Bulk 30 pezzi		

ACCESSORI PARABOLE	
Q9SLF	Supporto LNB singolo in pressofusione, adatto per parabole serie Q9P493ACx/Q9P566ALx/Q9P573ALx
Q9DF6	Supporto Dual Feed 6° in plastica, adatto per parabole serie Q9P366Axx / Q9P378Axx / Q9P493ACx / Q9P566ALx / Q9P573ALx
Q9DFR	Supporto Dual Feed regolabile in plastica, adatto per parabole serie Q9P366Axx / Q9P378Axx / Q9P493ACx / Q9P566ALx / Q9P573ALx
Q9DF93	Supporto Dual Feed regolabile in pressofusione, adatto per parabole serie Q9P593ALx
Q9DF577	Supporto Dual Feed regolabile in pressofusione, adatto per parabole serie Q9P577ALx

IV5278 - IV5687 dCSS LNB Straightfeed 40mm

Main Features:

- Low Phase Noise, DVB-S2 (HDTV/UHD) compliant
- Low Noise Figure
- Low power consumption
- Very High Cross Polarization Isolation
- Programmable Static frequency mapping mode
- Dish alignment mode

SPECIFICA	IV5278	IV5687
Input Frequency Range	10.7 ~ 12.75 GHz	
LO Frequency	10.4 GHz	
Noise figure	1 dB max	
LO temperature drift @ 25°C	± 2.5 MHz max	
LO initial accuracy	± 1.0 MHz max	
LO phase noise @ 10 kHz	- 80 dBc/Hz max	
Conversion Gain	55 dB min	
Gain variation (over full band)	± 0.75 dB/UB max	
Image rejection	40 dB min	
1 dB compression point (@output)	0 dB min	
Cross polarization isolation	22 dB min	
Output VSWR	2.5 : 1	
Current consumption	400 mA max. @ 13.5 V	
Operating temperature	-30° ~ +60° C	
Output Impedance	75 Ω	
Output connector type	F-type (female)	
Weight	220 g	
Bandwidth User Band	Configurable, 10 MHz ~ 64 MHz (default 30 MHz)	
Number of User Bands	Up to 32	

PRODOTTO CORRELATO IV5393

PRODOTTO CORRELATO SAT PAL

IV5278 Standard Configuration
32 UBs in dynamic mode

Channel	Unicable I	Unicable II	Frequency	Channel	Unicable I	Unicable II	Frequency
1	UB 1		1210.0 MHz	21	UB 21		1716.0 MHz
2	UB 2		1420.0 MHz	22	UB 22		1752.0 MHz
3	UB 3		1680.0 MHz	23	UB 23		1788.0 MHz
4	UB 4		2040.0 MHz	24	UB 24		1824.0 MHz
5	UB 5		984.0 MHz	25		UB 25	1860.0 MHz
6	UB 6		1020.0 MHz	26		UB 26	1896.0 MHz
7	UB 7		1056.0 MHz	27		UB 27	1932.0 MHz
8	UB 8		1092.0 MHz	28		UB 28	1968.0 MHz
9	UB 9		1128.0 MHz	29		UB 29	2004.0 MHz
10	UB 10		1164.0 MHz	30		UB 30	2076.0 MHz
11	UB 11		1256.0 MHz	31		UB 31	2112.0 MHz
12	UB 12		1292.0 MHz	32		UB 32	2148.0 MHz
13	UB 13		1328.0 MHz				
14	UB 14		1364.0 MHz				
15	UB 15		1458.0 MHz				
16	UB 16		1494.0 MHz				
17	UB 17		1530.0 MHz				
18	UB 18		1566.0 MHz				
19	UB 19		1602.0 MHz				
20	UB 20		1638.0 MHz				

IV5687 Standard Configuration
20 UBs in dynamic mode

Channel	Unicable I	Unicable II	Frequency
1	UB 1		1210.0 MHz
2	UB 2		1420.0 MHz
3	UB 3		1680.0 MHz
4	UB 4		2040.0 MHz
5		UB 5	985.0 MHz
6		UB 6	1050.0 MHz
7		UB 7	1115.0 MHz
8		UB 8	1275.0 MHz
9		UB 9	1340.0 MHz
10		UB 10	1485.0 MHz
11		UB 11	1550.0 MHz
12		UB 12	1615.0 MHz
13		UB 13	1745.0 MHz
14		UB 14	1810.0 MHz
15		UB 15	1875.0 MHz
16		UB 16	1940.0 MHz
17	UB 17		1160.0 MHz
18	UB 18		1990.0 MHz
19	UB 19		2086.0 MHz
20	UB 20		2130.0 MHz

IV5441 - IV5442 Universal 40mm PLL LNB Home Pro

IV5441
Single Universal
40mm PLL LNB
Home Pro

IV5442
Twin Universal
40mm PLL LNB
Home Pro

Main Features:
- Low Phase Noise, DVB-S2 (HDTV/UHD) compliant
- Low Noise Figure
- Low power consumption
- High Cross Polarization Isolation
- High Frequency stability

SPECIFICA	IV5441, IV5442
Input Frequency Range	10.7 ~ 12.75 GHz
Output Frequency Range	950 ~ 1950 MHz
Low band LO frequency	9.75 GHz
High band LO frequency	10.6 GHz
Noise Figure	0.3 dB typ. (0.7 dB max.)
LO frequency accuracy @ 25°C	± 500 kHz max.
LO temperature drift @ 25°C	± 1.0 MHz max.
LO phase noise @ 10 kHz	- 80 dBc/Hz max.
Conversion Gain	55 dB min.
Gain ripple (over 26 MHz bandwidth)	± 0.75 dB/27MHz
Gain Variation (over full band)	± 4 dB
Image Rejection	40 dB (min)
3th order intermodulation - ICP3	10dBm min.
1 dB compression point (@output)	0 dB min.
Cross polarization isolation	20 dB min.
Control signal Ca (V)	11.0 V ~ 14.0 V
Control signal Cb (H)	16.0 V ~ 20.0 V
Control signal Cc (band switching)	22 kHz ± 4 kHz 0.4 V – 0.8 V pp
Output VSWR	2.5 : 1
In band spurious level	- 55 dBm max.
Current consumption	**IV5441**: 85 mA max. @ 11 VDC ~ 20 VDC **IV5442**: 120 mA max. @ 11 VDC ~ 20 VDC
Operating temperature	-30° ~ +60° C
Output impedance (LNB2)	75 Ω - Connector F-type (female)
Dish F/D ratio	0.6
Weight	**5441**: 127 g / **IV5442**: 174 g

IV5443, IV5444, IV5479 Quad/Quattro/8 Universal 40mm PLL LNB

IV5443
Quad Universal
40mm PLL LNB
Home Pro

IV5444
Quattro Universal
40mm PLL LNB
Home Pro

IV5479
Octa Universal
40mm PLL LNB
Home Pro

Main Features:
- Low Phase Noise, DVB-S2 (HDTV/UHD) compliant
- Low Noise Figure
- Low power consumption
- High Cross Polarization Isolation
- High Frequency stability

SPECIFICA	IV5443 / IV5444 / IV5479
Input Frequency Range	10.7 ~ 12.75 GHz
Output Frequency Range	950 ~ 1950 MHz
Low band LO frequency	9.75 GHz
High band LO frequency	10.6 GHz
Noise Figure	0.3 dB typ. (0.7 dB max.)
LO frequency accuracy @ 25°C	± 500 kHz max.
LO temperature drift @ 25°C	± 1.0 MHz max.
LO phase noise @ 10 kHz	- 80 dBc/Hz max.
Conversion Gain	55 dB min.
Gain ripple (over 26 MHz bandwidth)	± 0.75 dB/27MHz
Gain Variation (over full band)	± 4 dB
Image Rejection	40 dB (min)
3th order intermodulation - ICP3	10dBm min.
1 dB compression point (@output)	0 dB min.
Cross polarization isolation	20 dB min.
Control signal Ca (V)	11.0 V ~ 14.0 V
Control signal Cb (H)	16.0 V ~ 20.0 V
Control signal Cc (band switching)	22 kHz ± 4 kHz 0.4 V – 0.8 V pp
Output VSWR	2.5 : 1
In band spurious level	- 55 dBm max.
Current consumption	120 mA max. @ 11 VDC ~ 20 VDC
Operating temperature	-30° ~ +60° C
Output impedance (LNB2)	75 Ω - Connector F-type (female)
Dish F/D ratio	0.6
Weight	174 g

IV5928, IV5929 - Single/Twin HGLN 40mm PLL LNB

IV5928 - Single HGLN 40mm LNB
IV5929 - Twin HGLN 40mm LNB

Main Features
- Novel feed horn design
- Superior Phase Noise performance, DVB-S2X compliant supporting Ultra HD (4K and 8K) TV
- Excellent Cross Polarization Isolation
- Very Low Spurious Levels
- Superior Noise Figure with high Conversion Gain
- High 4G Immunity
- Ultimate Reliability

SPECIFICATION	IV5928 / IV5929
Low band input frequency range	10.7 GHz ~ 11.7 GHz
Low band output frequency range	950 MHz ~ 1950 MHz
Low band LO frequency	9.75 GHz
High band input frequency range	11.7 GHz ~ 12.75 GHz
High band output frequency range	1100 ~ 2150 MHz
High band LO frequency	10.6 GHz
Noise figure	0.2 dB typ. (0.7 dB Max.)
LO temperature drift	± 2.0 MHz max.
LO accuracy @ 25 °C	± 1.0 MHz max.
LO phase noise @ 10 kHz	-80 dBc/Hz
Conversion gain	60 ~ 70 dB min.
Gain ripple (over 26 MHz bandwidth)	± 1.0 dB
Gain variation (over full band)	± 4.0 dB max.
Image rejection	50 dB min.
1 dB compression point (@ output)	0.0 dBm min.
Cross polarization isolation	22 dB min.
Control signal Ca (V)	10.0 V ~ 14.0 V
Control signal Cb (H)	16.0 V ~ 20.0 V
Control signal Cc (band switching)	22 kHz ± 4 kHz, 0.4V – 0.8V pp
Output VSWR	2.0 : 1
In band spurious level	-65 dBm max.
Current consumption	100 mA max. (10 VDC ~ 20 VDC)
Operating temperature	-30° ~ +60 °C
Output impedance	75 Ω (F-type)
Output connector type	F-Type (female)
Weight	111.2 g

IV5930, IV5931 - Quad/Quattro HGLN 40mm LNB

IV5930 - Quad HGLN 40mm LNB
IV5931 - Quattro HGLN 40mm LNB

Main Features
- Novel feed horn design
- Superior Phase Noise performance, DVB-S2X compliant supporting Ultra HD (4K and 8K) TV
- Excellent Cross Polarization Isolation
- Very Low Spurious Levels
- Superior Noise Figure with high Conversion Gain
- High 4G Immunity
- Ultimate Reliability

SPECIFICATION	IV5930 / IV5931
Low band input frequency range	10.7 GHz ~ 11.7 GHz
Low band output frequency range	950 MHz ~ 1950 MHz
Low band LO frequency	9.75 GHz
High band input frequency range	11.7 GHz ~ 12.75 GHz
High band output frequency range	1100 ~ 2150 MHz
High band LO frequency	10.6 GHz
Noise figure	0.2 dB typ. (0.7 dB Max.)
LO temperature drift	± 2.0 MHz max.
LO accuracy @ 25 °C	± 1.0 MHz max.
LO phase noise @ 10 kHz	-80 dBc/Hz
Conversion gain	60 ~ 70 dB min.
Gain ripple (over 26 MHz bandwidth)	± 1.0 dB
Gain variation (over full band)	± 4.0 dB max.
Image rejection	50 dB min.
1 dB compression point (@ output)	0.0 dBm min.
Cross polarization isolation	22 dB min.
Output VSWR	2.0 : 1
In band spurious level	-65 dBm max.
Current consumption	230 mA max. (10 VDC ~ 20 VDC)
Operating temperature	-30° ~ +60° C
Output impedance	75 Ω (F-type)
Output connector type	F-Type (female)
Weight	177 g

MLSCR4 - LNB SCR + Legacy 5G Filter

5G LTE

MLSCR4 Standard Configuration - 16 UBs in dynamic mode			
Channel	Unicable I	Unicable II	Frequency
1	UB 1		1210.0 MHz
2	UB 2		1420.0 MHz
3	UB 3		1680.0 MHz
4	UB 4		2040.0 MHz
5		UB 5	985.0 MHz
6		UB 6	1050.0 MHz
7		UB 7	1115.0 MHz
8		UB 8	1275.0 MHz
9		UB 9	1340.0 MHz
10		UB 10	1485.0 MHz
11		UB 11	1550.0 MHz
12		UB 12	1615.0 MHz
13		UB 13	1745.0 MHz
14		UB 14	1810.0 MHz
15		UB 15	1875.0 MHz
16		UB 16	1940.0 MHz

SPECIFICA	MLSCR4
Input Frequency Range	10.7 ~ 11.7 Ghz- 11.7 ~ 12.75 Ghz
Output Frequency Range	950 ~ 1950 Mhz - 1100 ~ 2150 Mhz
LO frequency	9.75 - 10.6 GHz
Noise Figure	0.3 dB typ. (0.7 dB max.)
LO frequency stability @ 25 °C	±1 Mhz
LO frequency stability @ -30° ~ +70° C	±2.5 Mhz
Fixed IF channels bands	Channel 1 - 1210 Mhz Channel 2 - 1420 Mhz Channel 3 - 1680Mhz Channel - 2040 Mhz
Phase noise @ 1 Khz offset	- 70 dBc/Hz
Phase noise @ 10 Khz offset	- 83 dBc/Hz
Phase noise @ 100 Khz offset	- 93 dBc/Hz
Phase noise @ 1 Mhz offset	- 97 dBc/Hz
Phase noise @ 10 Mhz offset	- 106 dBc/Hz
Conversion Gain	55 dB min.
Gain ripple (over 26 MHz bandwidth)	±0.55 dB/29MHz / ±0.75 dB/58MHz
Gain ripple in Low band	± 3 dB
Gain ripple in High band	± 3 dB
Noise figure full band	0.7 ~ 0.8 dB
Image Rejection	42 dB
Output impedance	75 Ω - Connector F-type (female)
VSWR	2.0 : 1
Cross polarization rejection	21 dB
LNB supply voltage V polarization	11 ~ 14 V
LNB supply voltage H polarization	16 ~ 20 V
High band selection frequency	22 kHz ± 4 kHz
Current consumption	250 mA max
Operating temperature	-30° ~ +70° C

MLWB21 - LNB Wideband LNB SKY LO 10.41GHZ 5G filter

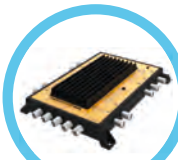
5G LTE

Main Features:

- Low Phase Noise, DVB-S2 (HD/UHD) compliant
- Very low Noise Figure
- Low power consumption
- High Cross Polarization Isolation
- High Frequency stability

SPECIFICA	MLWB21
Low Band Input Frequency Range	10.7 GHz ~ 12.75 GHz
IF Frequency Range	300 MHz ~ 2350 MHz
Noise figure	0.7 dB typ. (1 dB max.)
LO phase noise @ 10 kHz	- 80 dBc/Hz max.
Conversion gain	50 dB ~ 60 dB min.
Gain variation (over full band)	± 0.5 dB @ 27 MHz
Image rejection	40 dB min. (8.05 GHz ~ 10.1 GHz)
1 dB compression point (@ output)	0.0 dBm min.
Cross polarization isolation	25 dB min.
Polarization selection - Vertical	10.0 V ~ 14.0 V
Polarization selection - Horizontal	16.0 V ~ 20.0 V
Output VSWR	2.5 : 1
In band spurious level	- 60 dBm max.
Current Consumption	150 mA max. @ 11 V ~ 20 V
Operating Temperature	-30° ~ +60° C
Output Impedance	75 Ω
Output Connector	F-Type (Female)

PRODOTTO CORRELATO IV5413



PRODOTTO CORRELATO IV5458

MLQ4WB2 - LNB Wideband + HVHV LO 10.41GHZ 5G filter

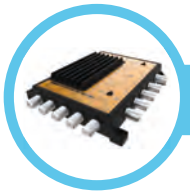
5G LTE

HVHV + WIDEBAND

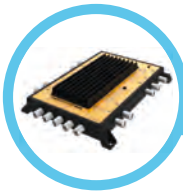
Main Features:

- Low Phase Noise, DVB-S2 (HD/UHD) compliant
- Very low Noise Figure
- Low power consumption
- High Cross Polarization Isolation
- High Frequency stability

SPECIFICA	MLQ4WB2	
Low band Input Frequency Range	10.7 ~ 11.7 GHz	10.7 ~ 12.75 GHz
Output Frequency Range	950 ~ 1950 MHz	290 ~ 2340 MHz
LO frequency	9.75 GHz	10.41 GHz
Noise Figure	1.0 dB (max)	
Control signals	Ca or Cb	
High band input Frequency Range	11.7 ~ 12.75 GHz	10.7 ~ 12.75 GHz
Output Frequency Range	1100 ~ 2150 Mhz	290 ~ 2340 Mhz
LO frequency	10.6 Ghz	10.41 Ghz
Noise Figure	1.0 dB (max)	
LO initial accuracy	± 1.0 MHz	
LO phase noise @ 1 kHz	55 dBc/Hz	
LO phase noise @ 10 kHz	75 dBc/Hz	
LO phase noise @ 100 kHz	92 dBc/Hz	
Conversion Gain	55 ~ 65 dB	50 ~ 60 dB
Image Rejection	40 dB (min)	
Crosstalk isolation	20 dB (min)	
Control signal Ca (V)	11.0 ~ 14.5 V	9.0 V ~ 20.0 V
Control signal Cb (H)	16.0 ~ 20.0 V	
Control signal Cc	22 kHz ± 4 kHz	
DC power	180 mA (max) @ 12 ~ 20 VDC	
Operating temperature	-30° ~ +70° C	



PRODOTTO CORRELATO IV5413



PRODOTTO CORRELATO IV5458

MLQUADWB2 - LNB Wideband + QUAD LO 10.41GHZ 5G filter

5G LTE

QUAD + WIDEBAND

Main Features:

- Low Phase Noise, DVB-S2 (HD/UHD) compliant
- Very low Noise Figure
- Low power consumption
- High Cross Polarization Isolation
- High Frequency stability

SPECIFICA	MLQUADWB2	
Low band Input Frequency Range	10.7 ~ 11.7 GHz	10.7 ~ 12.75 GHz
Output Frequency Range	950 ~ 1950 MHz	290 ~ 2340 MHz
LO frequency	9.75 GHz	10.41 GHz
Noise Figure	1.0 dB (max)	
Control signals	Ca or Cb	
High band input Frequency Range	11.7 ~ 12.75 GHz	10.7 ~ 12.75 GHz
Output Frequency Range	1100 ~ 2150 Mhz	290 ~ 2340 Mhz
LO frequency	10.6 Ghz	10.41 Ghz
Noise Figure	1.0 dB (max)	
LO initial accuracy	± 1.0 MHz	
LO phase noise @ 1 kHz	55 dBc/Hz	
LO phase noise @ 10 kHz	75 dBc/Hz	
LO phase noise @ 100 kHz	92 dBc/Hz	
Conversion Gain	55 ~ 65 dB	50 ~ 60 dB
Image Rejection	40 dB (min)	
Crosstalk isolation	20 dB (min)	
Control signal Ca (V)	11.0 V ~ 14.5 V	9.0 V ~ 20.0 V
Control signal Cb (H)	16.0 V ~ 20.0 V	
Control signal Cc	22 kHz ± 4 kHz	
DC power	180 mA (max) @ 12 ~ 20 VDC	
Operating temperature	- 30° ~ +70° C	

J9725 - Multiswitch Wideband 2xdCSS/SCR/Legacy + DTT

NEW ITEM

SPECIFICA	J9725	
Trunk inputs	2 SAT + 1 TERR/FM/DAB	
Trunk outputs	2 (TERR. + Legacy + SCR)	
Input Frequency	Terr. 5 ~ 862 MHz / SAT: 290 ~ 2340 MHz	
Output Frequency	5 ~ 862 MHz / 950 ~ 2150 MHz	
Input/output connector	75 Ω F-type (Female)	
dCSS/dSCR UBs	16 + 16	
dCSS/dSCR output level	85 dBµV	
Return loss	≥ 8 dB (typ. 12)	
Satellite loss	Not applicable, AGC (automatic Gain control)	
Terrestrial/CABLE LOSS	-4 dB	
Band and polarity selection	Universal LNB voltage & Tone DiSEqC 1.0 (unidirectional) DiSEqC 2.0 (bidirectional) Standard EN50494 (SCD) EN50607 (SCD2) I SKY UK standard	
Max DC current consumption	< 350 mA @13 V	< 320 mA @13 V
Power supply	From STB to LNB	
Operating temperature	-20° ~ +50° C	
Dimensions	65 x 100 x 30 mm Indoor unit 120 x 115 x 50 mm Outdoor unit	

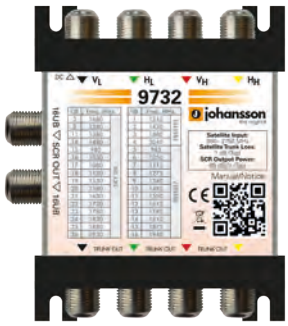
Main Features:

- designed for Pre-Wired dwellings with Wideband LNBs and Terrestrial and Radio antennas
- 3 inputs: 2 Satellite cables (Wideband LNB) + 1 Terrestrial cable
- 2 outputs with 16 user bands each
- multistandard: EN50494 - EN50607 - SKY - Legacy - Terr.
- supporting New Build Developers and also for Retro-Fitting
- makes all digital platforms available to residents
- upgrade to Sky Q without changing your existing quadplex wall socket
- for indoor use and outdoor use

2 SATELLITE INPUTS, SKY Q COMPATIBLE , 2 OUTPUTS WITH EACH 16 USER BANDS

Upgrade to Sky Q without changing your existing quadplex wall socket. The 9725 SFU dCSS Switch converts a wideband signal to dCSS so you can connect any digital Set-Top box – such as Sky Q, Sky+, FreeSat or Freeview - without changing your in-home wall socket.

J9731 - J9732 Digital SCR Solutions Multiswitch



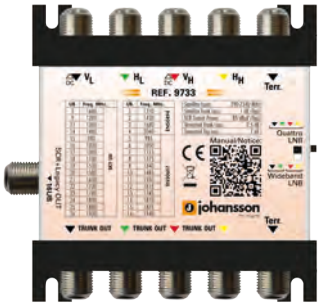
SPECIFICA	J9731	J9732
Trunk inputs	4	
Trunk outputs	4	
Frequency	950 ~ 2150 Mhz	
Trunk loss	3 dB	
dCSS/dSCR outputs	1	2
dCSS/dSCR output connector	75 Ω F-type (Female)	
dCSS/dSCR UBs	16	16 + 16
dCSS/dSCR output level	85 dBµV	
Return loss	≥ 8 dB (typ. 12)	
Tap loss	Not applicable, AGC (automatic Gain control)	
Band and polarity selection	DiSEqC 1.0 (unidirectional) DiSEqC 2.0 (bidirectional) Standard EN 50494 (SCD) Standard EN 50607 (SCD2) SKY UK standard	
Max DC current consumption	< 300 mA @13 V	< 320 mA @13 V
Power supply	From STB, power inserter or trunk (VL)	
Power inserter (2460 + 9669 available separately)	3A, 20 V	
Dimensions	90 x 80 x 40 mm	

Main Features:

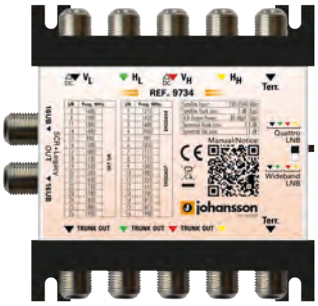
- up to 16 UBs per SCR Output
- supports all SCR standards
- ultra compact housing
- trunk output for cascading multiple products
- available for different operator user bands
- J9731: SKY Approved
- J9732: SKY Compatible

Unitron offers a wide range of multiswitches with integrated 'SCR' technology. With those multiswitches, you can connect multiple set-top boxes for multi-room applications to numerous satellites using one coaxial cable only!

J9733 - J9734 Digital SCR Solutions Multiswitch



J9733



J9734

Main Features:

- input for 1 universal LNB or 2 wideband LNBs (switchable)
- up to 16 UBs per SCR output
- auto detection for SCR and Legacy Mode
- possibility to convert wideband inputs into Legacy outputs
- support all SCR Standards
- compatible with all Legacy STBs
- passive terrestrial/cable diplexer
- low power Sleep Mode
- ultra compact housing
- trunk output for cascading multiple products
- available for different operator user bands
- see page 51 for application scheme

SPECIFICA	J9733	J9734
Trunk inputs	4 + 1	
Trunk outputs	4 + 1	
Frequency	5 ~ 862 Mhz / 290 ~ 2340 Mhz	
Trunk loss	31 dB	
dCSS/dSCR outputs	1	2
dCSS/dSCR output connector	75 Ω F-type (Female)	
dCSS/dSCR UBs	16	16 + 16
dCSS/dSCR output level	85 dBµV	
Return loss	≥ 8 dB (typ. 12)	
Tap loss	Not applicable, AGC (automatic Gain control)	
Band and polarity selection	Universal LNB voltage & Tone DiSEqC 1.0 (unidirectional) DiSEqC 2.0 (bidirectional) Standard EN50494 (SCD) EN50607 (SCD2) I SKY UK standard	
Max DC current consumption	< 350 mA @13 V	< 320 mA @13 V
Power supply	From STB, power inserter or trunk (VL&VH)	
Power inserter (2460 + 9669 available separately)	3 A max, 20 V	
Dimensions	92 x 90 x 40 mm	

The 9733/ 9734 has 4 satellite wideband input (for 1 quattro or 2 wideband LNB), passive terrestrial diplexer, 2 outputs with each 16 user bands.

J9739 - Digital SCR Solutions Multiswitch Add-on

SPECIFICA	J9739
Inputs	4 ports Terrestrial + Satellite
Input frequency	5 – 862 MHz / 950 – 2150 MHz
STB output frequency	5 – 862 MHz / 950 – 2150 MHz
dCSS/dSCR outputs	2 legacy only 2 SCR/legacy (auto detection)
dCSS/dSCR output connector	75 Ω, F type (Female)
dCSS/dSCR UBs	16 per SCR output
dCSS/dSCR output level	88 dBµV
Satellite input power level	64 ~ 94 dBµV
Return loss	≥ 8 dB (typ 12)
Tap loss	SCR: Not applicable, AGC (automatic Gain control) Legacy: 0 dB typical
Terrestrial/Cable loss	-7 dB typical
Band and polarity selection	DiSEqC 1.0 (unidirectional), DiSEqC 2.0 (bidirectional) Standard EN 50494 (SCD), Standard EN 50607 (SCD2)
Max DC current consumption	SCR/Legacy ports: < 4,2 W Legacy ports only: < 2 W
DC power pass from STB to input ports	13 - 18 V / 22 kHz 100 mA max per port
From DC power port to input ports	13 - 18 V / 22 kHz 100 mA max per port 1A max to HL port
Power supply	From STB or power inserter
Power (2460 available separately)	300 mA max, 20V
Dimensions	90 x 85 x 40 mm

Main Features:

- no need to interrupt the trunk signal during installation
- make a legacy system compatible with two times 16 user bands
- supports the following standards:
  - EN50494/SCR standard (DiSEqC 1.0)
  - EN50607/dCSS/dSCR standard (DiSEqC 2.0)
  - Simultaneous support for EN50494/EN50607 standards
  - SKY UK standard

The J9739 can be used with Quattro or Quad LNB types and will output in Legacy or SCR mode.
Use the Multiswitch Add-on to change a legacy Multiswitch to a Channel Stacking Switch (CSS) without loss of existing legacy ports. You can use the Multiswitch Add-on to upgrade your legacy Multiswitch system and make the latest generation of SCR set-top boxes (STB) available in 2 Single Family Units (SFUs) per Add-on. You can also use this Multiswitch Add-on to transform a Fiber GTU signal to a SCR GTU signal.

J9754 - J9758 Digital SCR Solutions dSCR Multiswitch

J9754

J9758

Main Features:

- 4 satellite + 1 terrestrial inputs
- multi-standard: wideband, dSCR, dCSS, legacy, terrestrial
- 4-way (9754)
- 8-way (9758)
- optimized performance and power consumption
- compact die-cast housing for easy installation

SPECIFICA	J9754	J9758
Trunk inputs	Sat: 4 I Terr: 1	
Trunk outputs	Sat: 4 I Terr: 1	
dSCR outputs	4	8
Frequency	Sat: 290 ~ 2340 MHz Terr: 88 ~ 862 MHz	
Min input level SAT	Universal LNB: 62 dBµV Wideband LNB: 67 dBµV	
Trunk return loss	> 10 dB	
Trunk insertion loss	Sat: 2 I Terr: 1.5	
Sat positions	Universal LNB: 1 Wideband LNB: 2	
dSCR channel output power	88 dBµV (AGC controlled)	
Output return loss	> 10 dB	
Terr tap loss	18 dB	22 dB
Supported standards	EN50494 (SCD) I EN50607 (SCD 2) I BskyB I Legacy Trunk termination	
Trunk termination DC blocked required	75 Ω (Sat & Terr)	
DC power via SAT trunks	20 V	
Consumption	10 W	20 W
Operating temperature	-20° ~ 50° C, indoor housing	
Dimensions	124 x 117 x 39 mm	204 x 117 x 39 mm

J9754A - J9758A Digital SCR Solutions dSCR Multiswitch

J9754A

J9758A

Main Features:

- 4 satellite + 1 terrestrial inputs
- multi-standard: wideband, dSCR, dCSS, legacy, terrestrial
- 4-way (**9754A**)
- 8-way (**9758A**)
- optimized performance and power consumption
- compact die-cast housing for easy installation

SPECIFICA	J9754A	J9758A
Trunk inputs	Sat: 4 - Terr: 1	
dSCR outputs	4	8
Frequency	Sat: 290 ~ 2340 MHz Terr: 88 ~ 862 MHz	
Min input level SAT	Universal LNB: 62 dBµV Wideband LNB: 67 dBµV	
Max input level SAT	Universal LNB: 106 dBµV Wideband LNB: 106 dBµV	
Max input level TERR	Ampli: 109 dBµV Bypass: 121 dBµV	
Trunk return loss	> 10 dB	
Trunk insertion loss	Sat: 2 dB Terr: 1.5 dB	Sat: 4 dB Terr: 3 dB
Sat positions	Universal LNB: 1 Wideband LNB: 2	
dSCR channel output power	88 dBµV (AGC controlled)	
Output return loss	> 10 dB	
TERR tap loss	Bypass: 20dB Ampli: 8 dB	Bypass: 24dB Ampli: 12 dB
Supported standards	EN50494 (SCD) - EN50607 (SCD 2) BskyB - Legacy Trunk termination	
Trunk termination DC blocked required	75 Ω (Sat & Terr)	
DC power via SAT trunks	20 V	
Consumption	10 W	20 W
Operating temperature	-20° ~ 50° C, indoor housing	
Dimensions	124 x 117 x 39 mm	204 x 117 x 39 mm

J9646 - Wideband to Quattro Converter

This wideband to quattro converter makes it possible to upgrade a complete system to a wideband application, without disabling the homes that do not have wideband tuners.

J2460/J2469 - J2499 Digital SCR Solutions Power Supply

SPECIFICA	J2460 / J2469	J2499
Input voltage	100 ~ 240 Vac	
Output voltage	20 Vdc	
Output current	3,25 A	1,2 A
Output Connector	F-type	
Dimensions	115 x 55 x 35 mm	90 x 90 x 35 mm

These power supplies are designed to power the trunk lines or the DC input connector.

Main Features:

- DC power supply with F-connector
- powers SCR products without overloading the set-top boxes.

J9669 - Digital SCR Solutions Power Inserter

The power inserter enables you to add DC-power on to a coaxial cable.
dSCR power inserter for trunk powering

SPECIFICA	J9669
Frequency range	250 ~ 2340 MHz
Insertion loss	1 dB
DC power pass	3,25 A
Dimensions	61 x 51 x 16 mm

J2461 - Digital SCR Solutions Power Supply

Main Features:

- powers SCR products without overloading the set-top boxes
- copies the set-top box voltage, tone and DiSEqC to the SCR product (EN50494 and EN50607)

SPECIFICA	J92461
Inputs	1
Outputs	2
Frequency range	950 ~ 2150 MHz
Insertion loss	6 dB
Return loss	> 10 dB
Input voltage	100 ~ 240 Vac
Output voltage	18 Vdc
Output current	500 mA
Dimensions	110 x 94 x 41 mm
Supported standards	EN50494, EN50607

J9935 - J9654 Digital SCR Solutions Satellite IF Amplifiers

J9935:
- separate adjustment for sloped gain on every line
- DC input for powering trunk line amplifiers & LNB
- works from 12 to 20 VDC

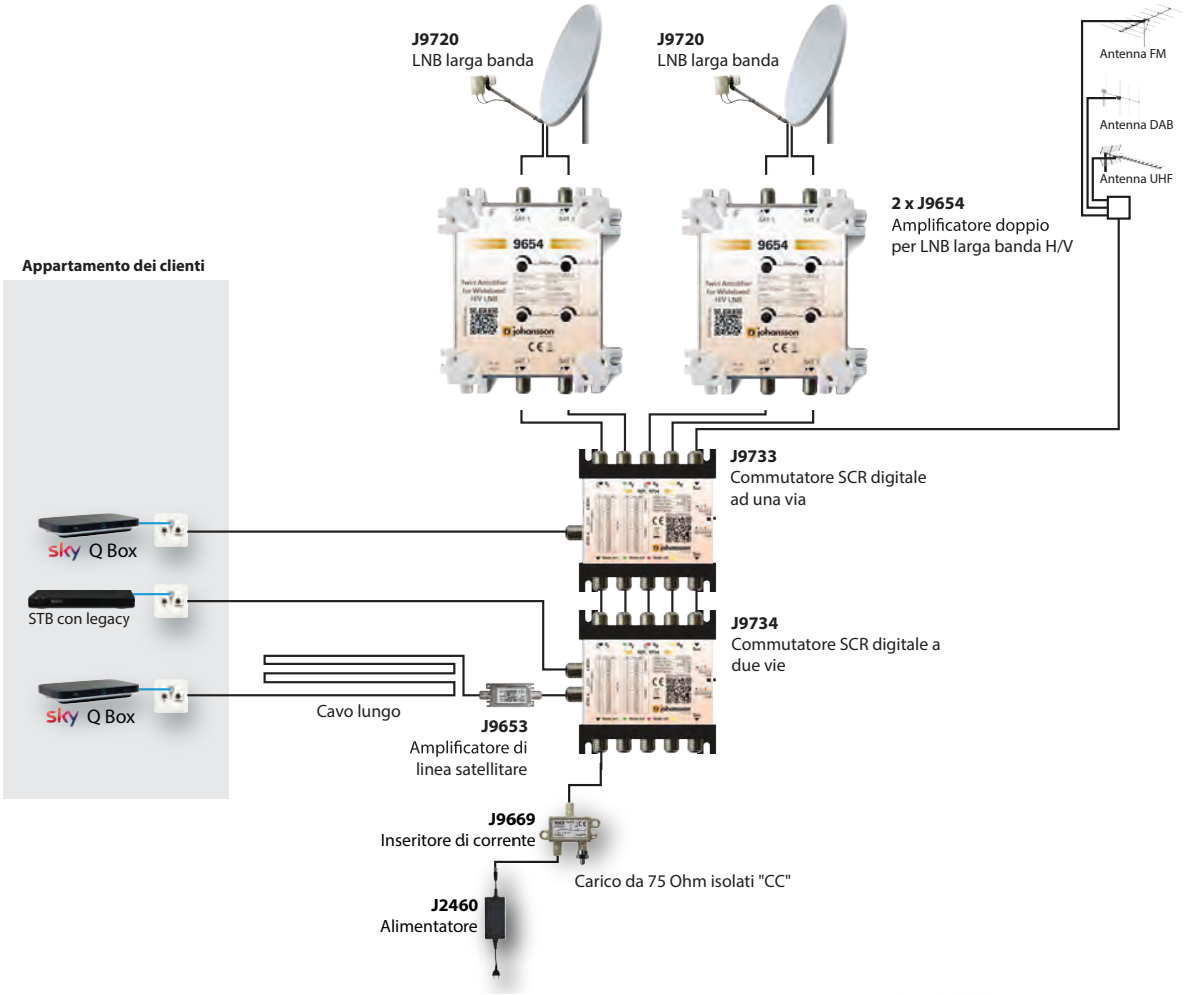
J9654:
- compatible with Wideband LNBs
- separate adjustment for sloped gain on every line
- DC input for powering trunk line amplifiers & LNB
- works from 12 to 20 VDC

J9655:
Wideband 2 Way Splitter + TER

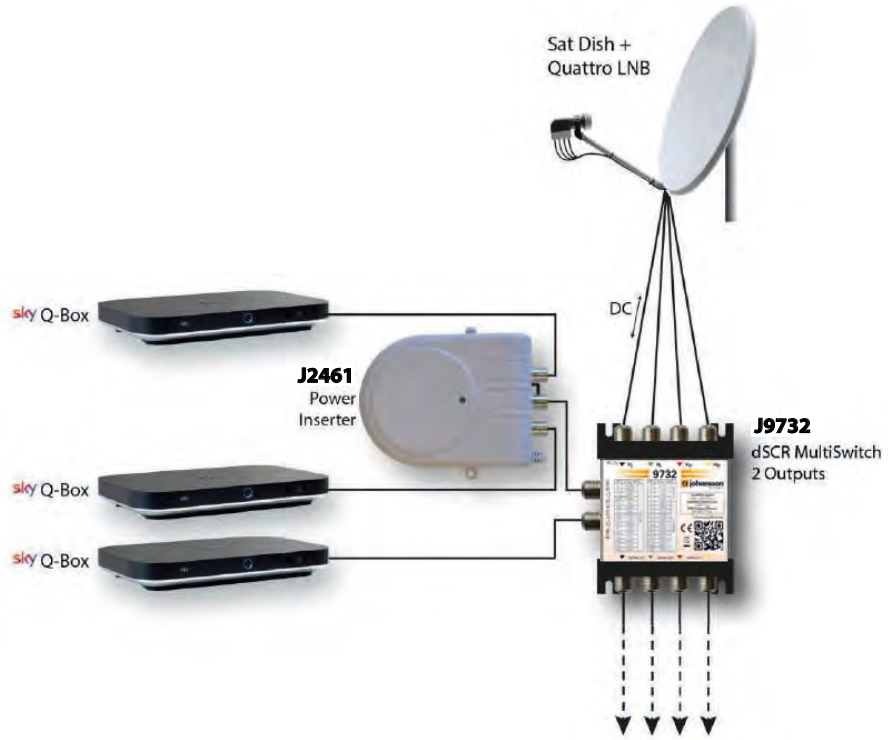
J9657, J9658:
- Automatic Gain Control and Automatic Slope Control on both satellite lines (V/H)
- DC input for powering amplifier and LNB
- selectable between Wideband LNB (290 - 2400 MHz)
- output level selectable for up to 16 splits or 64 splits
- In/Out Terrestrial (**J9658**)
- optional power supply (ref. 9933)

SPECIFICA	J9935	J9654	J9655	J9657	J9658
Inputs	4 SAT + 1 TERR	2 SAT	TERR + H + V	2 SAT (V/H)	2 SAT (V/H) + Terr.
Outputs	5	2	2	2 SAT (V/H)	2 SAT (V/H) + Terr.
Frequency range	Sat.: 950 ~ 2300 MHz Terr.: 5 ~ 65 MHz + 87 ~ 862 MHz	290 ~ 2340 Mhz	Sat.: 290 ~ 2400 Mhz Terr.: 5 ~ 862 Mhz	290 ~ 2400 Mhz (Wideband)	Sat.: 290 ~ 2400 Mhz Terr.: 87 ~ 862 Mhz
Gain	Sat.: 20-25 dB (sloped) Terr.: 87-862 MHz - 20-27 dB (sloped) return path: - 1 dB	30 dB	-	20 dB	Sat.: 10 - 30 dB Terr.: 5 -25 dB Return path: 5 - 65 Mhz
Noise figure	Sat.: 5 dB ǀ Terr.: 6 dB	5 dB	Sat.: 5 dB ǀ Terr.: 4 dB	5 dB	
Gain adjustment	Sat.: 20 dB ǀ Terr.: 20 dB	15 dB	-	20 dB (Automatic Gain Control)	
Slope adjustment	-	15 dB	-	15 dB (Automatic Slope Control)	
Max. Output level	Sat.:110 dBµV (-35 dB/IM3) Terr.: RP: passive 87-862 MHz: 114 dBµV (-54 dB/IM3)	110 dBµV (-35 dB/IM3)	-	70 or 80 dBµV per transponder (selectable)	Sat.: 113 dBµV Terr.: 105 dBµV
Consumption	200 mA from 12-20 Vdc external power supply or input/output	150 mA from 12-20 Vdc external power supply or input/output	-	150 mA from 20 Vdc external power supply or input/output	400 mA from 12-20 Vdc external power supply or input/output
Dimensions	158 x 102 x 51 mm	129 x 114 x 51 mm	130 x130 x 50 mm	129 x 114 x 51 mm	129 x 140 x 51 mm

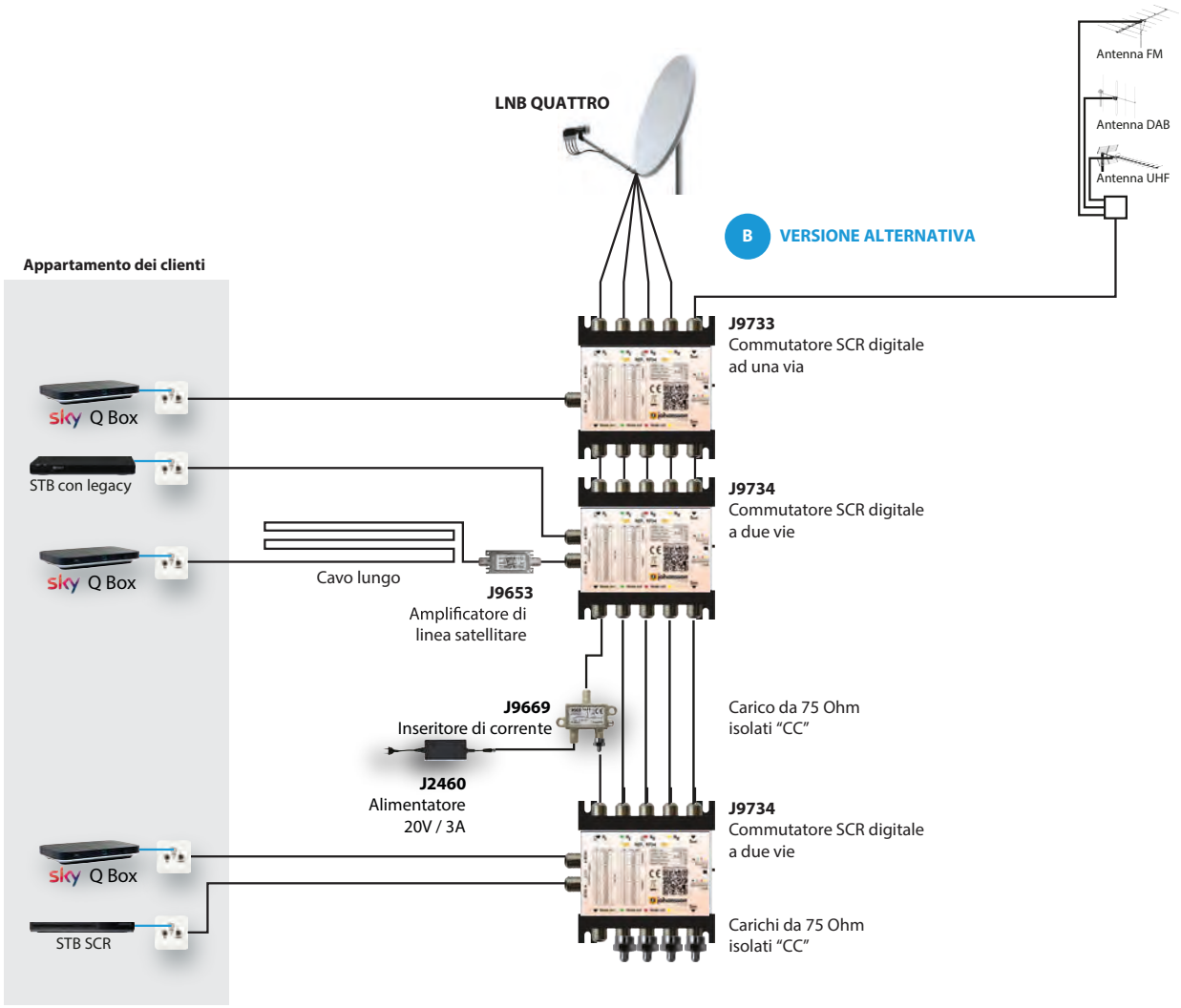
Installazione LNB banda larga

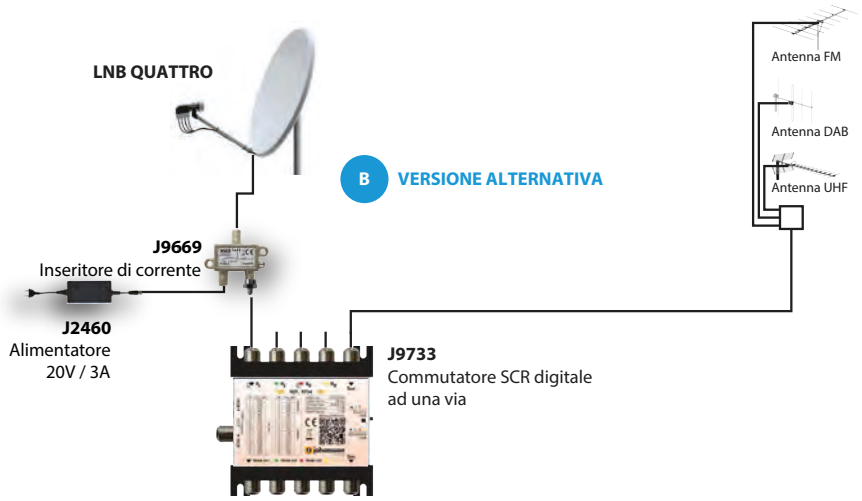


Installazione inseritore di corrente



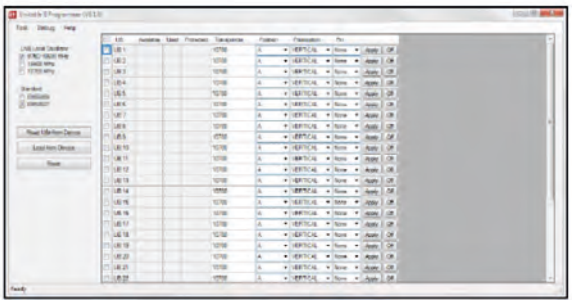
Installazione LNB Quattro

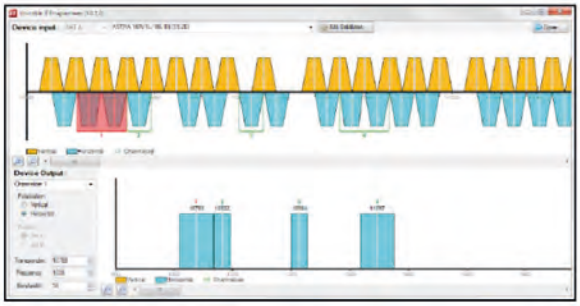


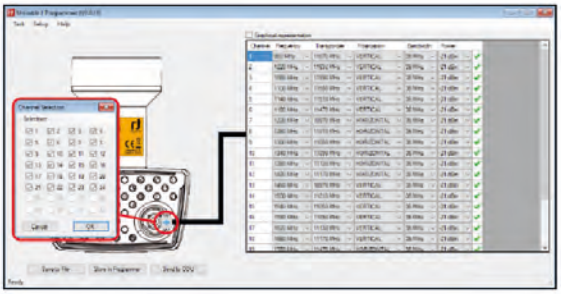


IV5393 - Unicable II Programmer

SPECIFICA	IV5393
Display and keys:	
Activity LED	- Yellow blinking: Communication activity between ODU and Programmer - Green: Configuration files in ODU and Programmer are identical
Power LED	Red: The Programmer is powered over the USB connection Orange: The Programmer is powered over the 12V DC input
Button	Short press: Transmit a configuration file stored in the Programmer to the ODU device Long press: Download the configuration file of the ODU and compare to a file stored in the Programme
Power consumption	
Programmer only	5Vdc, 50mA (can be powered over the USB interface)
ODU power	13-18V, 600mA max. - powering and programming of an ODU device requires use of the supplied AC/DC adapter
AC/DC adapter	
Input voltage	100-240Vac, 50/60Hz, 0.8A max.
Output voltage	12Vdc
Output current	2A
Short circuit protection	Yes
Low Voltage Directive	2014/35/EU
Electromagnetic Compatibility Directive	2014/30/EU
Eco-Design Directive	2009/125/EC
Others	
Interfaces	1x Satellite IF, F-type 1x Satellite IF loop-through out, F-type 1x USB (Type-B)
Loop-through loss	1dB max.
Control protocols	DiSEqC™ commands extension according to CENELEC EN50494 and/or EN50607, DiSEqC2.0.

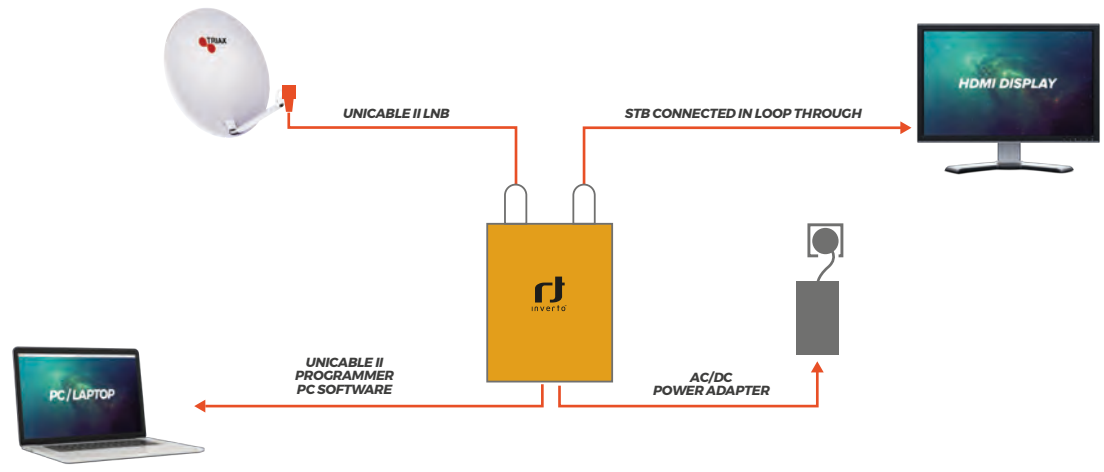






IV5393

SCHEMA COLLEGAMENTO



IV5413 - IV5458 Unicable II multiswitch with 4/8/12 auto-detect output ports

IV5413

IV5458

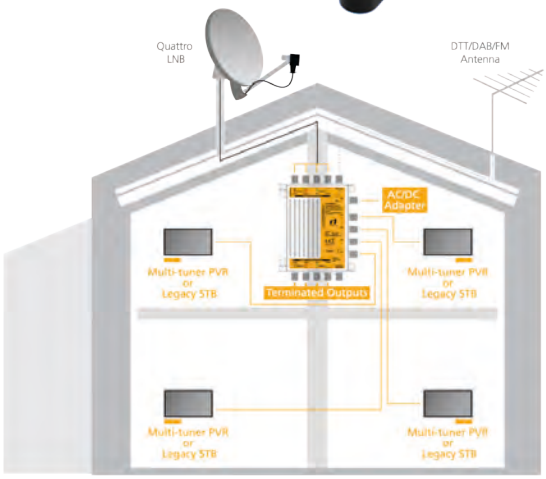
IV6208

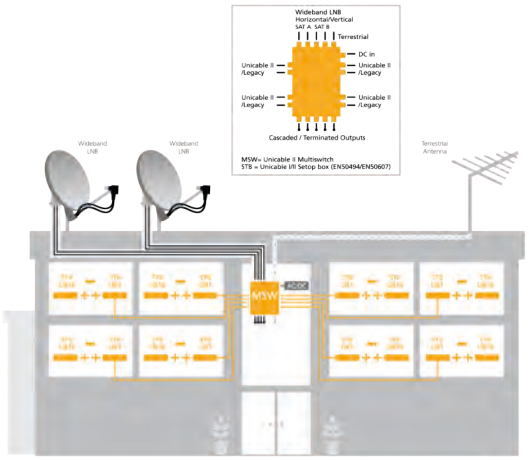
SPECIFICA	IV5413	iV5458 / IV6208
Frequency range: satellite	Quattro LNB: 950 ~ 2150MHz (Standard) Wideband LNB: 300 ~ 2350Mhz	
Frequency range: terrestrial	47 ~ 862 Mhz	
Inputs	4x IF inputs: From 1x Quattro LNB (default) From 2x Wideband LNBs 1 x UHF/VHF input from Terrestrial antenna	
Outputs	4x Loopthrough satellite IF outputs* 1x Loopthrough terrestrial output 4x auto-detect Unicable II / Legacy output ports with combined terrestrial signal.	4x Loopthrough satellite IF outputs* 1x Loopthrough terrestrial output 8x (**12x IV6208**) auto-detect Unicable II / Legacy output ports with combined terrestrial signal.
Input power range	-50 ~ -5 dBm	
Output signal level (AGC)	-25 dBm (83 dBuV)	
RF isolation: satellite/terretsrial (input)	25 dB min.	30 dB min.
RF isolation: satellite/satellite (input)	25 dB min.	30 dB min.
RF isolation: satellite ch/ch (UBs, output)	28 dB min.	30 dB min.
Loop-through loss: satellite	4dB max. (loss)	
Loop-through loss: terrestrial	8 dB max. (loss) [amplification=OFF] 8 dB min. (gain) [amplification=ON]	8 dB @ 400~600 MHz (12 dB max.) (loss) [amplification=OFF] +11 dB @400~600 MHz (+7 dB min.) (gain) [amplification=ON)
Gain: Unicable II™ (dCSS) output (out of AGC)	25 dB min.	
Gain: terrestrial signal	-27 dB [amplification = OFF] 9 dB [amplification = ON]	-19 dB @ port 4 over 400~600Mhz (-25 dB min.) [amplification = OFF] +1 dB @ port 4 over 400~600Mhz (-9 dB min.) [amplification = ON] * 1dB difference between adjacent ports, -1 dB from port 1 through to port 8
Integrated phase noise	1.5° max.	
Control protocols	EN50494 (SatCR), EN50607 (dCSS), DiSEqC1.0/2.0, 13 - 18 V + 0 / 22 Khz	
Legacy port switching	V/L => 13 V/0 kHz , V/H => 13 V/22 kHz H/L => 18 V/0 kHz , H/H => 18 V/22 kHz	
Input/Output impedance	75 Ω (F-type)	
LNB power supply	500 mA max. @ 18 Vdc	
Power consumption	600 ~ 900 mA @ 10 ~ 20 Vdc max.	1200 mA @ 19 Vdc (no load) / 365 mA @ 11-20 Vdc (no load)
Working temperature	-20° ~ +50° C	
IP protection	IP54	
Product dimensions (W x D x H)	15.2 cm x 11 cm x 2.6 cm	210 mm x 146 mm x 3.7 mm / 30.2 x 15.3 x 3.8 cm
Weight	280 g	500 g / 765 g

PRODOTTO CORRELATO IV5393

PRODOTTO CORRELATO SAT PAL

IV5294 - Multiswitch Unicable II dCSS Cascade Wideband





SPECIFICA	IV5294
Frequency range: satellite	- Quattro LNB: 950 MHz ~ 2150 MHz (default) - Wideband LNB: 300 MHz ~2350 MHz
Frequency range: terrestrial Inputs	47 MHz ~ 862 MHz 4x IF inputs: - for 1x Quattro LNB (default) - or 2x Wideband LNBs 1x UHF/VHF input for terrestrial antenna
Outputs	4x Loopthrough satellite IF outputs 1x Loopthrough terrestrial output 1x Unicable II (dCSS/EN50607) output, dynamic (default) or statis mode, supporting up to 32 UBs. With combined terrestrial signal. 1x Universal (Legacy) by default upon power up, auto switch to Unicable II™ upon receiving EN50494/EN50607 command. With combined terrestrial signal.
Output signal level (AGC)	Configurable (default -25 dBm)
RF isolation: satellite/terrestrial (input)	25 dB min.
RF isolation: satellite ch/ch (UBs, output)	28 dB min.
Loop-through loss: satellite	3 dB max.
Gain: Unicable II™ (dCSS) output (out of AGC)	25 dB min.
LO phase noise @ 1 kHz	-80 dBc/Hz max.
Integrated phase noise	1.5° max.
Control protocols	DiSEqC1.x/DiSEqC2.0, EN50494/EN506
Legacy port switching	V/L => 13 V/0 Khz , V/H =>13 V/22 Khz H/L => 18 V/0 Khz , H/H => 18 V/22 Khz
Input/Output impedance	75 Ω (F-type)
LNB power supply	300 mA max. @ 13 ~ 18 Vdc
Power consumption	500 mA @ 13 Vdc max.
Working temperature	-20° ~ +60° C
IP protection	IP54
Product dimensions (W x D x H)	11.35 cm x 11.05 cm x 20.8 cm
Weight	165 g

PRODOTTO CORRELATO
IV5393

IV5346 - IV5582 Power supply

IV5346

IV5582

SPECIFICATION	IV5346	IV5582
Input voltage	100 ~ 240 Vac	
Input frequency	50 - 60 Hz	
Output voltage	19 Vdc	20 Vdc
Output current	0.94 A max.	3.25 A
Output connector	F-type (male)	
Cable length	DC: 1.5 m	AC: 1.8 m, DC: 1.5 m
Product dimensions	7 cm x 4.8 cm x 6 cm	12.1 cm x 5.35 cm x 3.2 cm
Working temperature	0° ~ +40° C	-5° ~ +45° C
Weight	150 g	250 g

J8203 - HDMI Modulator

SPECIFICA	UNITA'	J8203
INGRESSO HDMI		
RISOLUZIONE VIDEO	-	576i fino a 1080p
CODIFICA VIDEO	-	H264/AVC
CODIFICA AUDIO	-	MPEG1 Layer II / AAC
TIPO DI CONNETTORE	-	HDMI Tipo A
INGRESSO RF		
FREQUENZA	MHz	174-790
PERDITA ALL'USCITA RF	dB	2
USCITA RF (= SEGNALE RF IN INGRESSO + TRANSPONDER HDMI MODULATO)		
FREQUENZA DEL CANALE MODULATO	MHz	790
LIVELLO DI USCITA	dBµV	49-79 (regolabile)
MER	dB	Tip. 38

Main Features:

- Converte il vostro segnale locale HDMI in un segnale RF, pronto per la distribuzione su cavi coassiali
- 1 ingresso HDMI, capace di ricevere tutte le risoluzioni fino a 1080p60
- 1 ingresso RF, per by-pass dei segnali terrestri o via cavo
- 1 uscita RF DVB-T
- Immagine perfetta grazie al MER, paragonabile alla dotazione delle altre centrali Johansson
- Ottimizzato per l'utilizzo di più modulatori a cascata sulla vostra rete coassiale.

J8600 - Digital Compact Headend Universe

Main Features:

- receives 1 transponder from any DVB source (satellite, terrestrial or cable)
- decrypts the PayTV channels, when a professional CAM is inserted
- puts the demodulated transponder on your private coaxial and IP network
- can work standalone to insert channels in your existing network
- more products can be combined to a make a complete headend:
  - cascadable inputs and outputs
  - remote powering capabilities
- compatible with SD and HD, with MPEG2 and MPEG4
- perfect picture quality thanks to a MER, comparable to premium headend equipment
- Plug&Play thanks to a built-in WebGUI

This Universal Compact Headend enables you to receive any transponder from satellite, terrestrial or cable and put it on your coaxial and IP network.

SPECIFICA	J8600
Input	
Number of inputs	1 with passive loop-through (-2 dB)
Tuners	1
Frequency Range	42 Mhz ~ 2150 Mhz
Input Level	44 ~ 89 dBµV
Standard	DVB-S/S2 I DVB-T/T2 I DVB-C
DC remote power for LNB or LNA	0 - 13 - 18 V / 22 kHz / DiSEqC, EN50494, EN50607 350 mA
Output: RF	
Number of outputs	1 RF with passive loop-through (-2 dB)
Multiplex	1
Frequency range	174 Mhz ~ 862 Mhz
Output level	57 ~ 102 (adjustable)
Standard	DVB-T I ISDB-T
Modulation error rate (MER)	40 dB
Output: Ethernet	
Number of outputs	1 GB Ethernet
Standard	IEEE 802.3ab 10/100/1000 Base-T
Protocol	Multicast IP / UDP
General	
CI slot	1
Input voltage	12 ~ 20 Vdc
Power consumption	7 W (without CAM and without remote power)
DC jack	Ø 2.1 mm
Powering remote units	Yes, 1 unit can power other units
Operating temperature	0° ~ +50° C
Dimensions	222 x 142 x 50 mm
Weight	1,1 kg
Accessories	15 Vdc power adapter, 1 Ethernet cable

LOHDSTR3 - Strimmy

4K | UHD | 1080p | 1080i | H.264 | HDMI

Il dispositivo permette la visione dei contenuti provenienti dall'ingresso HDMI o dalla porta USB con la possibilità di sovrapporre immagini (ad esempio loghi), scritte colorate (scorrevoli e non), cornici e figure geometriche colorate per fare pubblicità o altro, avvalendosi di un'interfaccia web per configurare ogni opzione disponibile.
Viene fornito in kit, comprendente un LOHDSTR3 (***Strimmy***) e un WLAERIALD4X già configurati e pronti all'uso. Il WLAERIALD4X è un *Access Point Wi-Fi 6* che permette di collegare fino a 40 dispositivi mobili ed è compatibile con prodotti che usano sia iOS che Android (***occorre supporto API Google***). Utilizzando l'uscita HDMI collegata ad un monitor, è possibile vedere in tempo reale cosa sarà visualizzato dai dispositivi connessi in Wi-Fi, compreso gli oggetti in sovraimpressione (loghi, scritte, etc.).
Compatibile tivùsat.

Scarica manuale operativo

Visualizza sito e video demo

LOHDSTR3 - Strimmy

4K UHD 1080p 1080i H.264 HDMI

SPECIFICA	LOHDSTR3
Segnale	
HDMI	HDMI 1.4a / HDCP 1.4
Risoluzione	1080p/1080i/720p/480p/576p/480i/576i (max 60Hz), compatibile con risoluzione VESA
Audio analogico	Line in (1.5Vp-p)
Codifica	
Video	H.265/H.264 high profile (@level 4.1)
Audio	MP3, AAC-LC, G.711 (u-Law/a-Law)
Ritardo	≤70 ms
Video bitrate	512 Kbps ~ 15 Mbps
Audio bitrate	AAC: 16 ~ 256Kbps // G.711: 64Kbps
Trasmissione	
Protocolli	RTP/RTSP, RTMP, HLS, MPEG-TS Push and HTTP
Protocollo controllo	TCP
Protocollo network	HTTP / Onvif
Protocollo PTZ	Pelco-D / Sony Visca (through RS485 extend adapter)
Generico	
Ingresso/uscita video	1x HDMI / 1x HDMI loop out
Video source	HDMI
Ingresso/uscita audio	2x 3,5mm jack
Network	1x RJ-45, 10/100/1000Mbps self-adaptive Ethernet
USB	1x usb (2.0), usb supporta l'alimentazione
Alimentazione	12 Vdc, 2 A
Consumo	≤3W
Temperatura operativa	-20° ~ +75° C

LOHDSRT3 provides fully functional second development package, which can be applied to education, health care, IPTV, conference, remote education, news interview, court, public security, banking, transportation and other industry application.

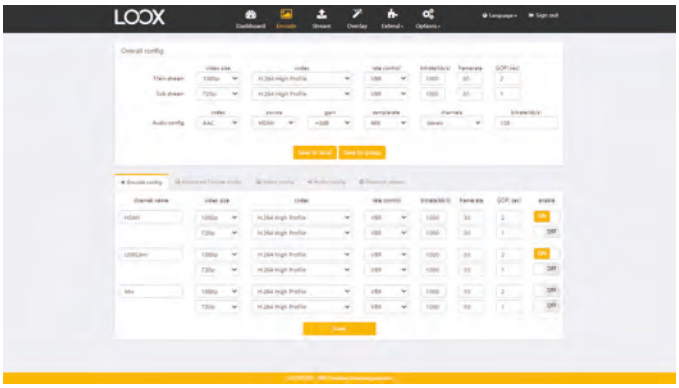
LOHDSTR3

- Video Input: one channel HDMI/SDI for option
- Video compression up to Full HD 1080P@60fps
- Support up to 4 groups TS over IP stream out
- Support H.265/H.264 Main Profile/High Profile and MP3 & AAC audio compression
- Bitrate mode: CBR/VBR 16Kbit/s~12Mbit/s
- Support streaming resolution settings
- GOP frame rate settings supported
- Capable of image parameter settings
- Insertable of logo and Scroll Caption; Adjustable of audio gain
- Video Output: Multiple output streams per input service to support Broadcast, VOD, IPTV and OTT, Mobile/ web, Set top box app
- Switchable of audio output mode: Left, right and Stereo
- Configurable of Multi-bitrate, Multi-resolution, Multi-protocol
- Providing HLS, RTSP, HTTP, UDP and RTMP protocol
- Compatible with HDCP, ONVIF Network Video Protocol
- Any IOS browsers (iphone, ipad, MacBook etc) are able to have streams from IPTV Streaming Encoder in Anytime, Anywhere by HLS protocol without install any software players
- Any terminal devices/decoders are able to have streams from IPTV Streaming Encoder directly by RTMP protocol with software players (such as VLC)
- System supports WINDOWS, WINDOWS SERVER, LINUX
- Support Microsoft standard flow driven architecture (WDM architecture), support Microsoft WMENCODER, compatible with Windows VFW software architecture and WDM mode
- Web-based management
- Full-duplex mode 1000M

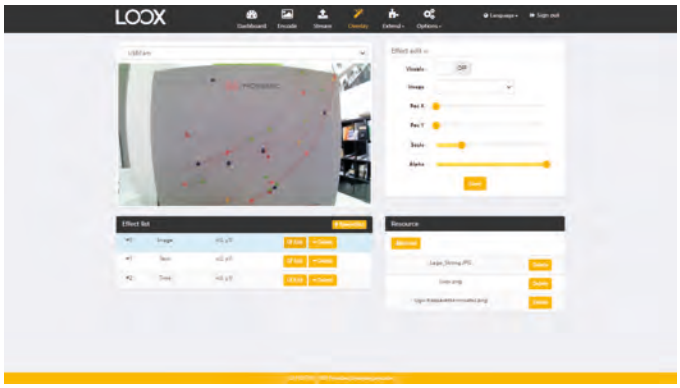
Supplied in kit including LOHDSTR3 and WLAERIALD4X already configured and ready to use.

LOHDSTR3 - Strimmy

4K | UHD | 1080p | 1080i | H.264 | HDMI

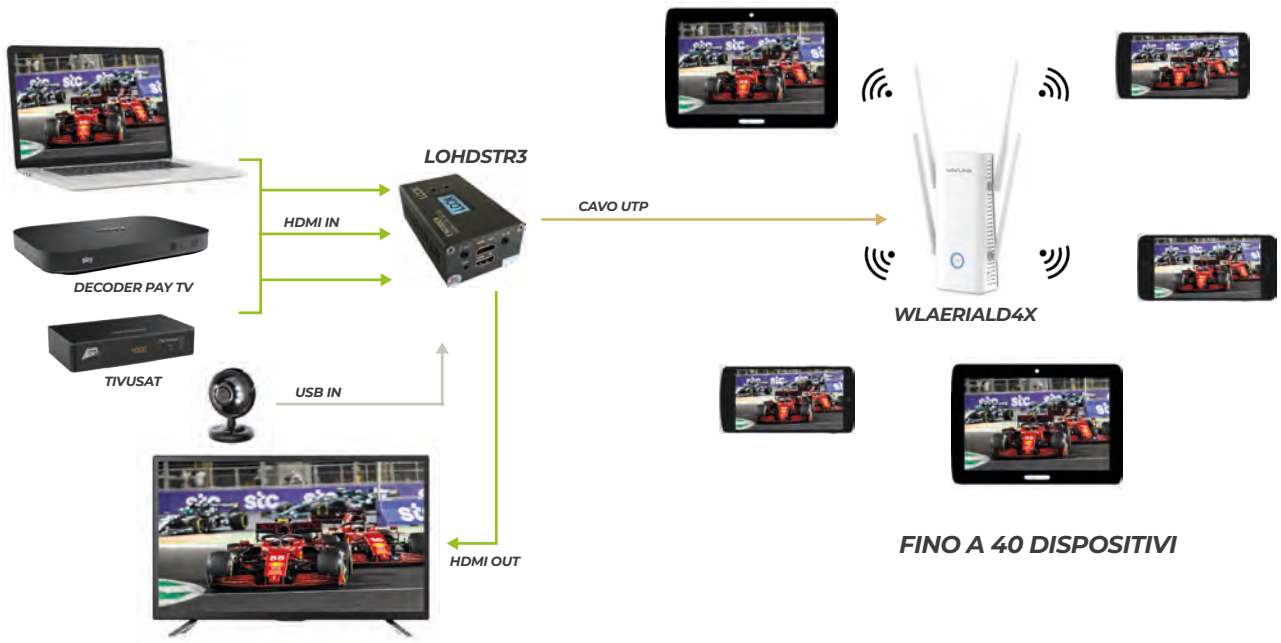


LOHDSRT3
Web interface for configuring all the settings and checking the many options available, in order to customize the HDMI output available in Wi-Fi with the WLAERIALD4X access point supplied in the kit with logos, writing (even scrolling and coloured) or other figures.



LOHDSTR3 (STRIMMY)

SCHEMA COLLEGAMENTO



IKUSI Serie Modulare HTI424

SMARCAM53 + TIVUSCPRO

IK3866 - Telaio supporto moduli BACK-500
IK3865 - Alimentatore moduli PSU-150
IK3864 - Transmodulatore HT-404 FTA
IK3863 - Transmodulatore HT-424 2xCI
IK3868 - Amplificatore HTA-125

Centrali Ikusi Serie HTI 424
Il transmodulatore serie HTI424 dispone di 4 ingressi a larga banda DVB-S/S2 e DVB-T/T2 ed è configurabile anche da remoto, tramite interfaccia WEB SERVER residente nel modulo stesso. Grazie alla sua struttura modulare ed alla gestione "MULTI" della CAM PRO, consente di condividere le CAM su più moduli HTI e quindi di distribuire segnali SAT e TV (sia in chiaro che codificati), con una propria numerazione LCN ed è quindi adatto all'installazione in strutture ricettive di qualsiasi dimensione e condomini.
I moduli HTI424 accettano in ingresso 4 tipi di segnali: DVB-T2, DVB-S2, DVB-C o IPTV.
Controllo totale del multiswitch tramite protocollo DiSEqC. Le 4 uscite IPTV MPTS, in combinazione con gli ingressi IPTV, consentono di configurare i collegamenti di scambio del servizio. I 4 Mux di uscita DVB-T / DVB-C sono configurabili singolarmente su tutta la banda, inoltre possono generare 64 streaming in uscita formato STPS e 4 in formato MPTS. Ciò consente di prevedere un futuro incremento dei servizi in modo che i televisori li abbiano già nelle loro liste, evitando la necessità di risintonizzazione. Ogni modulo della serie HTI è in grado di decodificare circa 20 canali SD/HD della piattaforma **tivùsat** tramite l'utilizzo delle CAM PRO.

SPECIFICA	*HTI424*
Ingressi	**DVB-S/S2 - DVB-T/T2 - DVB-C - IPTV**
Numero di ingressi RF	4
Common Interface (CI)	2
Frequenza di ingresso	DVB-T/T2 47÷862 Mhz - DVB-S/S2 950÷2150 MHz - DVB-C 47÷862 Mhz
Livello di ingresso	40 ÷ 92 dBuV
Massima corrente d'ingresso	100mA ingresso 2/4 - 250mA ingresso 1/3
Supporto DiSEqC	Fino a 16 polarità con DiSEqC 1.0
Ingressi IPTV	
Interfaccia di ingresso	RJ-45 Gigabit
N. ingressi	4 (SPTS o MPTS)
Incapsulamento IP	UDP: UDP+RTP
Modalità ricezione IPv4	Multicast
Supporto IGMP	Si, IGMP v2
Bitrate in ingresso	216 Mbps (per ingresso) / 850 Mbps (totale)
Uscite RF	
Numero di uscite	4 canali DVB-T DVB-C (47-863 Mhz)
MER	> 40 dB
Livello d'uscita	85 dBuV
Velocità di trasmissione	31.7 Mbps (max)
Modalità funzionamento DVB-T	2K / 8K
Larghezza di banda in uscita DVB-T	6 / 7 / 8 Mhz
Formati modulazione DVB-C	16QAM / 32QAM / 64QAM / 128QAM / 256QAM
Uscita IPTV	
Uscite STPS / MPTS	64 / 4
Protocolli trasmissione	STPS: UDP e RTP / MTPS: UDP
Uscitab bitrate	850 Mbps (max)
Altre specifiche	
Alimentazione / Assorbimento	24 Vdc / 20 W
Temperatura funzionamento	0° ÷ 45° C
Dimensioni / Peso	230 x 195 x 32 mm / 1.165 Kg

ALCAD Serie Modulare Himalaya

TM-202

TMS-214

tivùsat HOTEL

SMARCAM53 + TIVUSCPRO

Transmodulator Series TM-102 / TM-111 / TM-112
Himalaya transmodulator of DVB-S/S2 satellite digital television services or DVB-T/T2 terrestrial digital television to DVB-T or DVB-C. Each module selects services from two DVB-S/S2 satellite transponders or DVB-T/T2 terrestrial channels and includes them in a DVB-T or DVB-C channel.

Transmodulator Series TM-202 / TMS-204 / TMS-214
Himalaya transmodulator of DVB-S/S2 satellite digital television services to DVB-T or DVB-C. Each module selects services from four DVB-S/S2 satellite transponders and includes them in two DVB-T or DVB-C channels. The demodulators are Multistream compatible.

Transmodulators can be configured using a web browser in a computer connected via ethernet cable.
Modules TM-111, TM-112 e TMS-214 are able to decode SD/HD channels of the **tivùsat** platform through the use of the CAM PROs.

SPECIFICS	*TM-1XX*	*TMS-2XX*
Inputs	**DVB-S/S2 - DVB-T/T2**	**DBV-S/S2**
RF in	1x (TM-111 model) / 1 with duplexing or 2x independent	
Demodulators	1x (TM-111 model) / 2	4
Input frequency	DVB-T/T2 47÷862 Mhz - DVB-S/S2 950÷2150 Mhz	DVB-S/S2 950÷2150 Mhz
Input level	40 ÷ 95 dBuV	45 ÷ 95 dBuV
Symbol rate	DVB-S/S2: 1 ÷ 45 Mb	
DVB-T bandwidth	DVB-T: Auto, 8, 7, 6 / DVB-T2: Auto, 8, 7, 6, 5, 1.7	
LNB power supply	DiSEqC 2.0 13-18 Vdc - 350 mA	
Common Interface (CI)	1x (TM-111 and TM-112 model)	1x (TMS-214 model)
RF outputs	**DVB-T - DVB-C**	
Channels number	1 / 2x (TM-202 model) DVB-T DVB-C (47-862 Mhz)	2x DVB-T DVB-C (47-862 Mhz)
Output level	80 dBuV	
Output level adjustement	20 dB	
MER	39 dB	
DVB-C symbol rate	8 Mbps (max)	
DVB-T modes	2K / 8K	
DVB-T bandwith	6 / 7 / 8 Mhz	
Modulation	DVB-T: QSPK, 16QAM, 64QAM / DVB-C: 16QAM / 32QAM / 64QAM / 128QAM / 256QAM	
Altre specifiche		
Alimentazione / Assorbimento	12 Vdc / 730mA max	12 Vdc - 1030 mA max
Temperatura funzionamento	-10° ÷ +50° C	
Dimensioni	256 x 138 x 29 mm	

TM-102 (Z19120254) - Transmodulator DTT FTA 2x In - 1x Out
TM-111 (Z19120252) - Transmodulator DTT 1x In/Out - 1x CI
TM-112 (Z19120253) - Transmodulator DTT 2x In - 1x Out - 1x CI
TM- 202 (Z19120259) - Transmodulator DTT FTA 2x In/Out
TMS-204 (Z19120260) - Transmodulator Sat FTA 2x In/Out
TMS-214 (Z19120261) - Transmodulator Sat 2x In - 2x In/Out - 1x CI
FA-512 (Z19120255) - Power supply for TMX-XXX transmodulators
SP-743 (Z19120237) - Frame D47 19" rack for FA-512 + 7 modules
SP-244 (Z19120233) - Frame D47 for FA-512 + 9 modules

J8701, J8703, J8713 - Digital Compact Headends Titanium

Main Features:

- standalone frame with built-in power supply
- J8701: 8 tuners, 2 CAMs, 4 MUXs
- J8703: 8 tuners, 4 CAMs, 8 MUXs
- J8713: 8 tuners, 4CAMs, 1 Gigabit ethernet
- **tivùsat compatible**

Compact headend with 8 tuners and 8 output MUXs (DVT-B/C) / up to 4CI slots the Titanium is newest compact headend solution that is suitable for small to medium-sized budget-friendly projects.
The transmodulator with 8 tuners allows for very fast installation.

SPECIFICA	J8701	J8703	J8713
Input			
Inputs	4 satellite bands 1 x RF in		
Tuners	8 tuners (8 transponders)		
Frequency Range	950 MHz ~ 2150 MHz		
Level	44 ~ 84 dBµV		
Bandwidth	36 MHz		
Modulation	DVB-S2: QPSK, 8PSK / DVB-S: QPSK		
DC Remote Power at RF Input	13 - 18 V / 22 kHz		
Integrated Multiswitch	Yes, allows flexible routing of satellite proframs to multiplexes (QAM or COFDM)		Yes, allows flexible routing of satellite programs to streams
Configuration	Built-in webserver accessible via management port		
Encoded Programs	From all 8 tuners. Can be routed through 1 or 2 CAMs and can be decoded using multi-service CAMs	From all 8 tuners. Can be routed through 1, 2, 3 or 4 CAMs and can be decoded using multi-service CAMs	From all 8 tuners. Can be routed through 1 or 4 CAMs and can be decoded using multi-service CAMs
Output			
Outputs	1 with 4 MUXs (DVB-T or DVB-C) + 1 loop-through	1 with 8 MUXs (DVB-T or DVB-C) + 1 loop-through	IPTV: Up to 64 SPTS streams in Multicast (VBR) Protocols: ARP, ICMP, DHCP, UDP/RTP, IGMPv2/v3 Streaming mode: STPS VBR
DVB-T Output	Up to 31.7 Mbps / MUX		
DVB-C Output	Up to 51.3 Mbps / MUX		
General			
Power Consumption	22 W (excl. external LNBs)		
Dimensions	345 x 70 x 182 mm		
Operating Temperature	0° ~ +50° C		

PRODOTTO CORRELATO
SMARCAM53 + TIVUSCPRO
DECODIFICA 8 CANALI HD

tivùsat HOTEL

DDM4CI, DDSX8CI - SAT-IP Server

DDM4CI

DDSX8CI

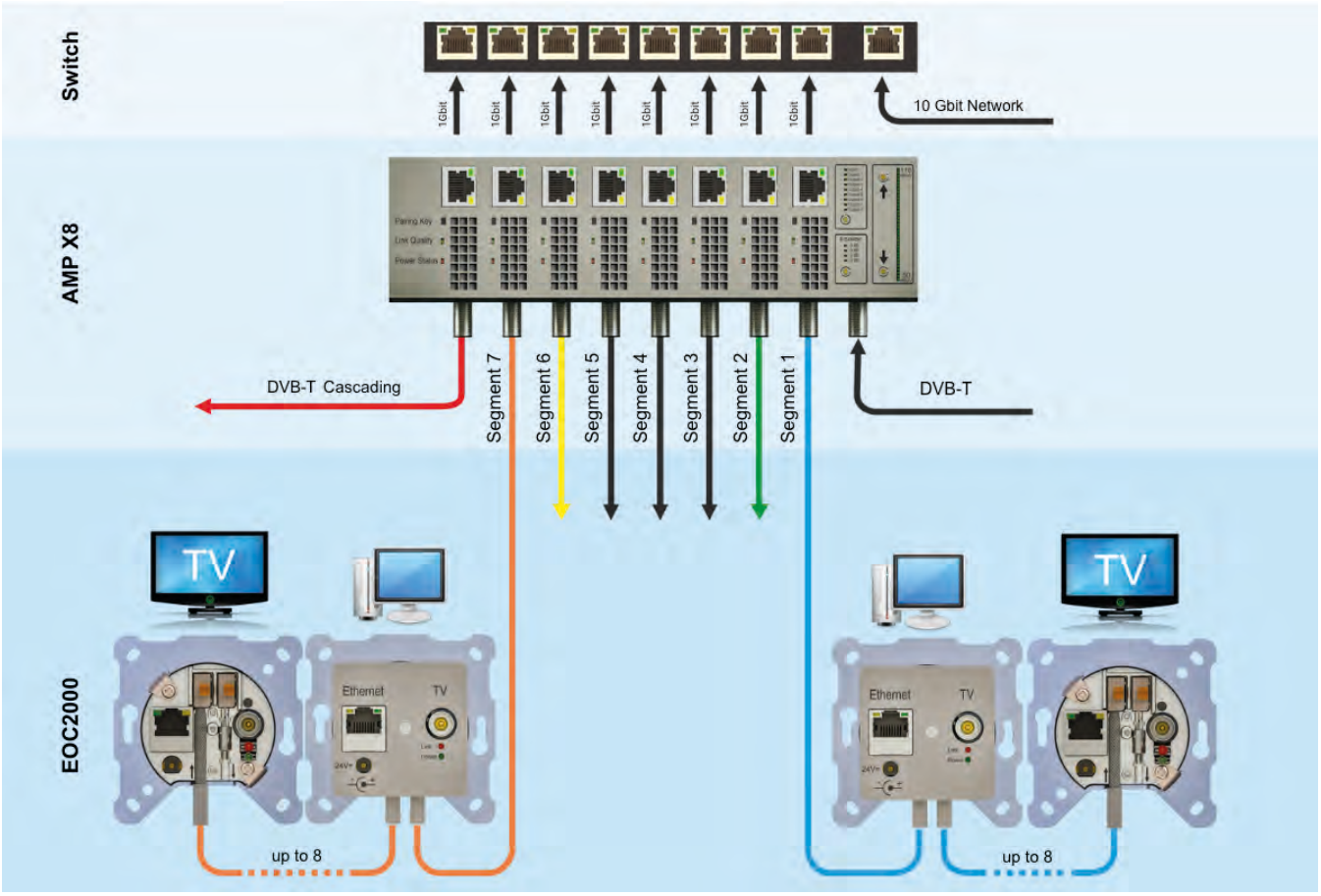
SMARCAM53 + TIVUSCPRO

DDM4CI - DDSX8CI

The IP Server converts one or more DVB input sources into IP signals according to the SAT>IP standard, so that numerous clients in the LAN or WLAN can be supplied with TV signals.
It has tuners with the reception types DVB-S/S2,DVB-C/C2, DVB-T/T2 and ISDB-T, which can be combined. For example, a fallback solution with DVB-T can be provided in addition to SAT reception. In this case, the IP server automatically switches the requested tuner to the correct mode. A 5 port Gigabit switch is available for each server, so that additional devices can be added to your network. In addition, this switch can be used in multicast mode for controlled broadcasting of the streams (Stream on LAN Output), so that only certain ports let out certain streams.
With RTSP (Real Time Streaming Protocol), you can distribute the LiveTV signal in your local home network at home or, for example, in smaller hotels simply via LAN or WLAN, regardless of whether SD, HD or UHD. As a multicast streaming server via the RTP or UDP protocol, IP Server distributes the streams with MPTS technology. This makes it possible to stream one or more channels or even whole transponders with only one stream and tuner. MPTS compatible clients such as Panasonic® TVs can be supplied with a large number of channels in this way.

SPECIFICA	DDSX8CI	DDM4CI
Main Feature		
Tuner	8x DVB-S/S2/S2X	4x DVB-S/S2 - DVB-C/C2 - DVB-T/T2 - ISDB-T/T2
CI Module	2 slot	
LNB power	4x max 19 V - 1 A pulse corrent, 500 mA continuos current	
DVB-S/S2 modulation	QPSK / 8PSK up to 46 MSym with up to 120 Mbit / s (for new UltraHD transponders)	
DVB-S/S2 L-band	950 ÷ 2.150 Mhz	
DVB-S/S2 DiSeqC	2.x fully supported	
DVB-T/T2 frequency range	-	49 ÷ 861 Mhz, 2K & 8K OFDM
DVB-C/C2	C frequency range: 51-858MHz - C2 demodulation 16, 64, 256, 1024, 4096 QAM	
ISDB-T	Conforms to ARIB STD-B31 - 6 MHz,7 MHz and 8 MHz BW support	
ISDB-C	TSMF support	
Ethernet port	5x RJ45 Managed Gigabit-Switch	
MAC address	8192	
Streaming Engine		
Unicast	Up to 12 clients (depending on the number of tuners installed)	
Streaming	Up to 12 full transponders (depending on the number of tuners installed)	
Streams	Up to 12 streams for Unicast or Mulitcast, also in mix-operation	
Features	RTP/UDP streaming with very low latency and jitter	
General		
Power / Consumption	15 Vdc / 18 W (max) - External power supply	
Dimensions	240 x 136 x 42 mm	
Temperature range	-10° ÷ +50° C	

Ethernet over Coax



Multi gigabit over coaxial cable
The distribution amplifier AMP X8 is a highly integrated solution to provide a Gigabit network to 8 coaxial lines.
Up to 8 G.hn modems deliver either 750 Mbit or 1700 Mbit net per coaxial line depending on the model.
If compatibility with a cable network operator is required, then 750 Mbit are available. Without the compatibility to a cable network operator even up to 1700 Mbit are available.
The AMP X8 takes over all tasks like filtering, amplifying and splitting of TV signals as well as the insertion of G.hn network data.

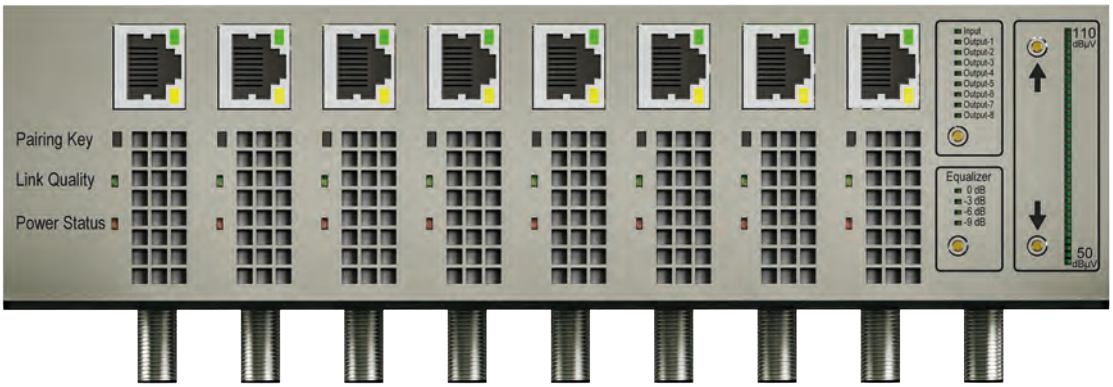
Complex mounting boards / installations are not necessary.

Signal strength and skew can be adjusted digitally.

A built-in power meter simplifies service during and after installation.

Specifications:
- It inserts up to 8 separate Gigabit networks onto the existing coaxial segments.
- The pluggable G.hn modules deliver 750 Mbit or 1700 Mbit net per coaxial segment, depending on the AMP X8 model.
- The network data of each coaxial segment is isolated from that of the other segments.
- The privacy can and must be set in an Ethernet switch.
- The required compatibility of the used frequencies to a cable network operator limits the bandwidth to 750 Mbit.
- Without this limitation (coaxial cable without broadband TV) even up to 1.5 Gbit net per segment is available.
- Signal strength and skew can be adjusted digitally.
- The AMP X8 takes care of all tasks like filtering, amplifying and splitting the TV signals as well as inserting the G.hn network data.
- A built-in power meter simplifies service during and after installation.
- Elaborate mounting boards/installations are not required.
- For large numbers of users, additional AMP X8s can be connected in series.
- With the 24 Vdc / 120 W power supply (Meanwell GST120A24-P1M) 40 of the EOC1000 or EOC1700 can be powered via the AMP X8.

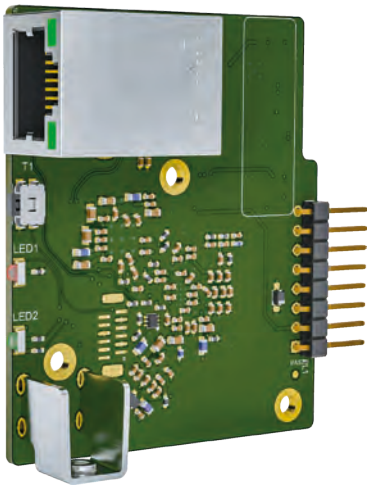
Ethernet over Coax



The **AMP X8** is a highly integrated distribution amplifier that distributes a DVB-C signal and network data to 8 coaxial segments.

Specifications:
- Gain 33 dB (internal 48 dB)
- Bandwidth 1.5 Ghz
- Ripple 1.5 dB
- Integrated amplifier 125 dBµV
- Noise figure 4 dB
- Noiseflor -170 dBm/Hz
- Integrated 8-fold splitter
- 8 outputs with max. 108 dBµV
- Return channel lock
- High pass and low pass filter
- Up to 8 G.hn modules
- Internal performance meter 50 dbµV to 110 dbµV
- Up to 64 participants/EOC1700
- Remote power supply 24 V up to 40 EOC1700
- Digitally adjustable: 8x 31dB attenuator (0.5 dB steps) - skew correction (0-3-6-9 dB)

Important: setting the output power
The total band power (approx. 90 transponders) is 19.5 dB higher compared to the output power of a single transponder determined with a measuring device!
You must take this into account when adjusting the total band power.



A **G.Hn module** inserts the network data in the lower frequency range of the TV spectrum.
Up to 8 G.hn modules can be plugged into one AMP X8.
The network data of each coaxial segment is isolated from that of the other segments.
Privacy can and must be set in an Ethernet switch.

Specifications:
- Frequency range: 2 - 199 MHz
- Network standard: G.hn
- Hardware encryption: AES 128-bit
- Quality of Service: VLAN/TOS/Packet Classifier
- Data rate gross: 2000 Mbps
- Net data rate: 1700 Mbps

The **EOC 2000** is an in-wall socket which supports the simultaneous transmission of Internet and Cable TV on an existing coax cable network.

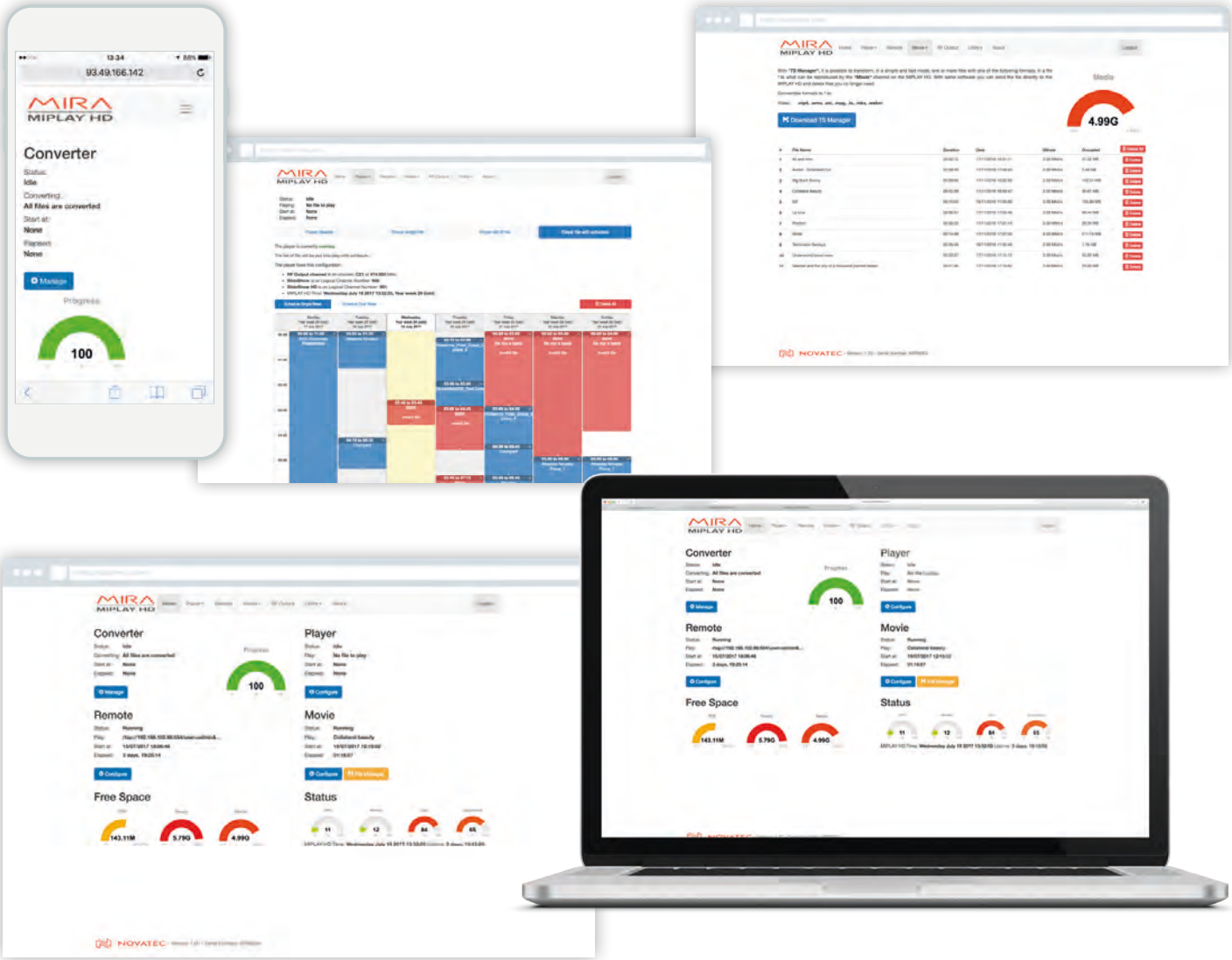
Specifications:
- Gbit LAN interface and a C-throughput in-wall socket
- Can be integrated into single outlets and multiple outlets
- Frequency range 2 – 199 Mhz
- Network standard: G.Hn
- Data rate Gross: 2000 Mbps
- Data rate Net: 1700 Mbps
- Attenuation 300 – 860 MHz: -2 dB (16 db coupling)
- Attenuation 300 – 860 MHz: -3 dB (10 db coupling)
- Coupling: 16 dB (other values on request)
- Hardware encryption : AES 128-bit
- Quality of Service: VLAN/TOS/Packet Classifier/Virtually perfect transmission with IPTV.

MIPLAY HD

MYPLAY HD è un server multimediale, potente ed economico, che converte file PDF, File multimediali, indirizzi WEB o RTSP in canali Digitali Terrestri ed è adatto a tutti i televisori.

MIPLAY HD è stato appositamente studiato per condomini, hotel, supermercati, palestre: tutte strutture che spesso hanno bisogno di comunicare diversi contenuti, contemporaneamente e in modo rapido, ai loro clienti/abitanti.

MYPLAY HD - Dashboard Web facile da usare



MYPLAY HD - Applicazioni

PLAYER

- Fino a 40 file PDF che saranno convertiti in filmati su canali TV
- Tempo di visualizzazione regolabile
- I PDF possono avere un massimo di 15 pagine
- I PDF possono essere gestiti con funzione palinsesto (minuti, ore, giorno, settimana, 2 settimane)
- I files possono essere trasferiti via rete locale o internet
- È possibile usare il nostro server 4ddns.eu per caricare i files e identificare ogni singolo box nella rete
- I PDF sono salvati all'interno di ogni singola unità ottenendo in tal modo un risparmio di banda e di dati

VIDEO

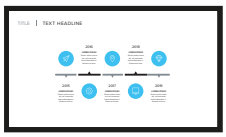
- La sezione video supporta gli indirizzi WEB o RTSP real time streaming protocol
- Si possono visualizzare contenuti WEB o RTSP in risoluzione FULL HD
- L'indirizzo WEB può SOLO essere visualizzato direttamente sul TV
- La stringa RTSP può essere una telecamera IP o l'uscita di un NVR / TVCC
- Le immagini di questa sezione non possono essere registrate in accordo con la legge sulla privacy
- Real Time Streaming Protocol è il formato standard dei contenuti WEB

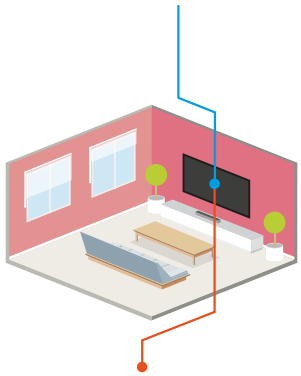
MOVIE

- Myplay gestisce, come formato standard, i file Transport Stream .TS
- Si possono salvare file fino a 6Gb in formato 1080P
- I file .TS salvati possono essere letti in modalità continua e sequenziale
- I file .TS File possono essere caricati direttamente dalla porta USB del MIPLAY HD o via internet da remoto con un indirizzo IP dinamico tramite il nostro server 4ddns.eu
- I file .TS sono trasferibili anche tramite rete locale da qualsiasi PC o tablet o smartphone
- I file possono essere schedulati e gestiti con funzione palinsesto

INFORMAZIONI DI SICUREZZA

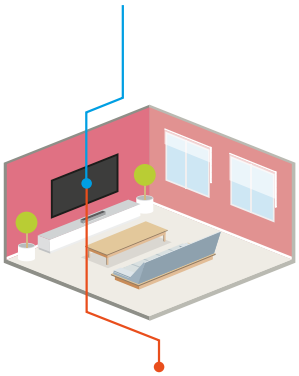
INFORMAZIONI CONDOMINIALI





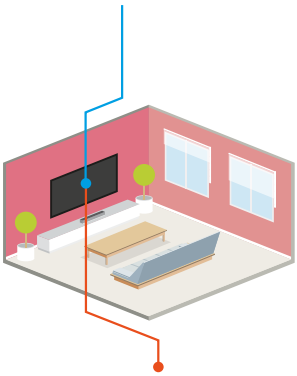
APPARTAMENTO 1 - CANALE 900
Slideshow che presenta i programmi e i lavori in programma per il condominio.

TVCC DAL PARCHEGGIO



APPARTAMENTO 1 - CANALE 915
Immagini dall'impianto TVCC del condominio

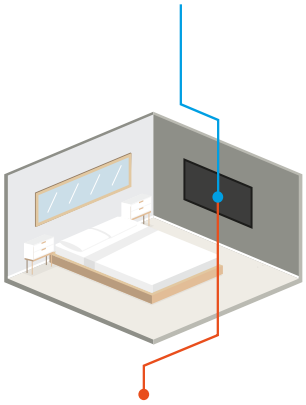
VIDEO TUTORIAL PER UTENTI



APPARTAMENTO 1 - CANALE 920
Video Tutorial

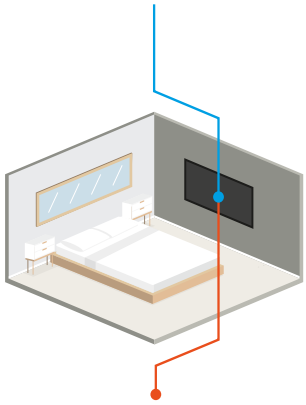
INFORMAZIONI AI CLIENTI

COSA OFFRE LA STRUTTURA



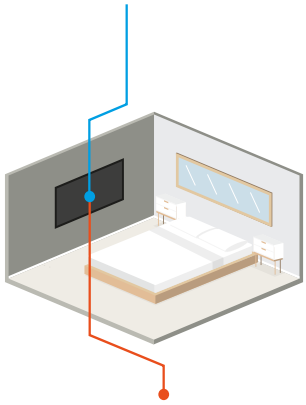
STANZA 120 - CANALE 900
Slideshow che presenta l'hotel e tutti i servizi della struttura a disposizione del cliente

COSA SI TROVA NELLE VICINANZE

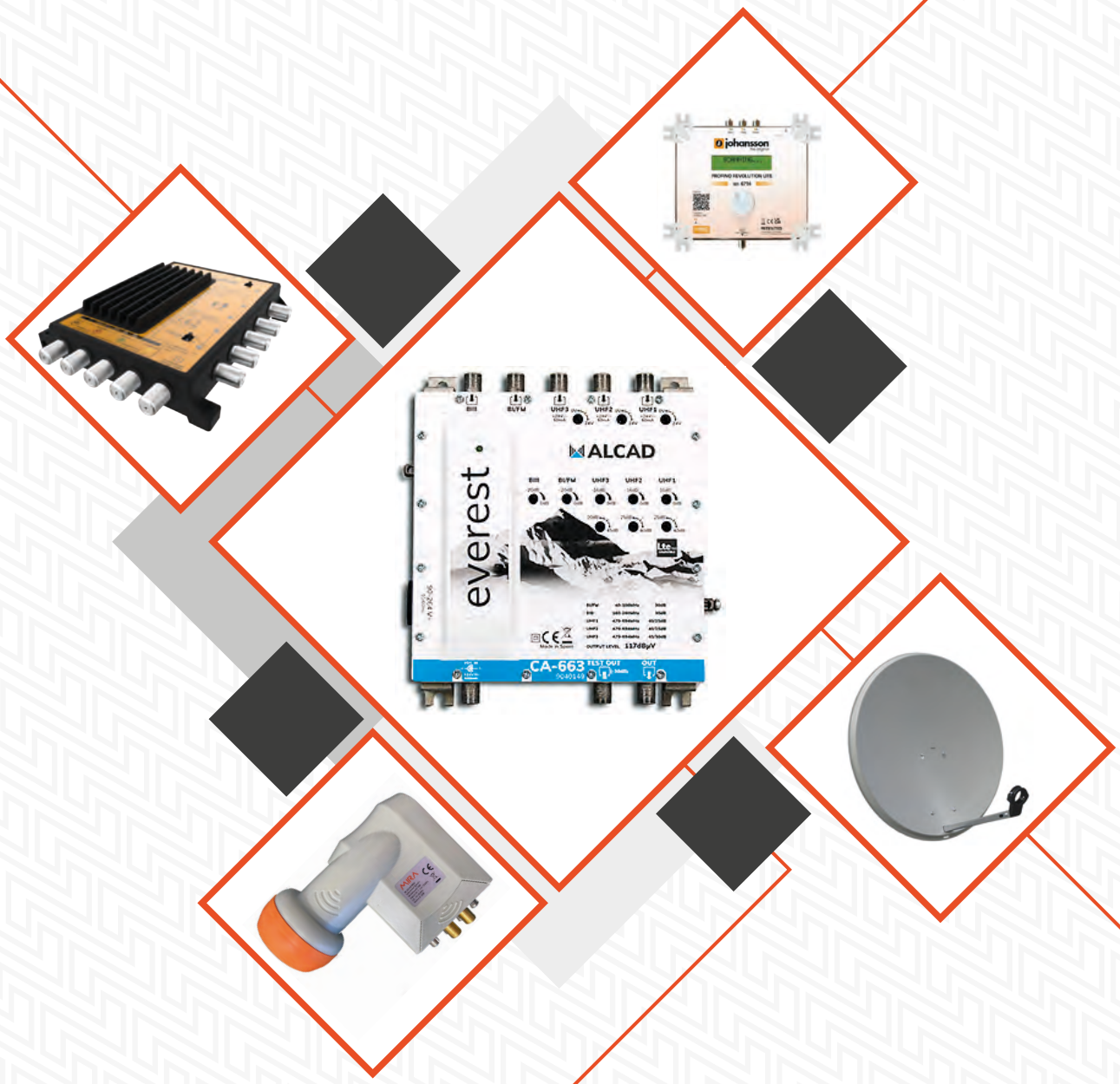


STANZA 210 - CANALE 910
Canale video / web: si proiettano video dalla rete o riguardanti anche zone di interesse prossime alla struttura

INTRATTENIMENTO



STANZA 330 - CANALE 915
Si proietta un film FULL HD caricato direttamente sul MIPLAY HD



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NOVATEC
EUROPE

LOOX

LOOX CATALOGO
UHD - EXTENDER / MATRIX
STREAMER
2023 Q3

Matrix Extender HD

2023 - Q3

INDICE

GUIDA ALLE RISOLUZIONI

- **QVGA:** 320 X 240 PIXEL
- **HVGA:** 480 X 320 PIXEL
- **WVGA:** 800 X 480 PIXEL
- **FWVGA:** 854 X 480 PIXEL
- **QHD:** 960 X 540 PIXEL (1/4 DEL FULL HD)
- **WSVGA:** 1024 X 600 PIXEL
- **XGA:** 1024 X 768 PIXEL
- **HD / WXGA:** 1280 X 720 PIXEL (HD READY)
- **WXGA:** 1280 X 800 PIXEL (16:10, PER TABLET)
- **FHD:** 1920 X 1080 PIXEL (L'ALTA DEFINIZIONE, CONOSCIUTA ANCHE COME FULLHD)
- **WUXGA:** 1920 X 1200 PIXEL (VARIANTE IN 16:10 DEL FHD, USATA SUI TABLET)
- **QHD:** 2560 X 1440 PIXEL (DOPPIO DEL FULL HD)
- **WQXGA:** 2560 X 1600 PIXEL (RISOLUZIONE IN 16:10, PER TABLET)
- **UHD:** 3840 X 2160 PIXEL (ULTRA HD CIOÈ 4K)
- **WQUXGA:** 3840 X 2400 PIXEL (4K IN 16:10 PER TABLET)
- **4K CINEMA:** 4096 X 2560 PIXEL (4K PER PROIETTORI)
- **UHD+:** 5120×2880 PIXEL (IL FAMOSO 5K DEL NUOVO APPLE IMAC)
- **FUHD:** 7680 X 4320 PIXEL (IL FUTURO 8K)
- **QUHD:** 15360 X 8640 PIXEL (LA RISOLUZIONE PIÙ ALTA FINORA TESTATA, IDENTIFICATA COME 16K)

LOHDSTR3

1080p | H.265 | H.264 | USB | WIFI

SPECIFICA	LOHDSTR3
Segnale	
HDMI	HDMI 1.4a / HDCP 1.4
Risoluzione	1080p/720p/480p/576p/480i/576i (max 60 Hz), compatibile con risoluzione VESA
Audio analogico	Line in (1.5 Vpp)
Codifica	
Video	H.265/H.264 high profile (@level 4.1)
Audio	MP3, AAC-LC, G.711 (u-Law/a-Law)
Ritardo	≤70 ms
Video bitrate	512 Kbps ~ 15 Mbps
Audio bitrate	AAC: 16~256 Kbps // G.711: 64 Kbps
Trasmissione	
Protocolli	RTP/RTSP, RTMP, HLS, MPEG-TS Push and HTTP
Protocollo controllo	TCP
Protocollo network	HTTP / Onvif
Protocollo PTZ	Pelco-D / Sony Visca (through RS485 extend adapter)
Generico	
Ingresso/uscita video	1x HDMI / 1x HDMI loop out
Video source	HDMI
Ingresso/uscita audio	2x 3,5mm jack
Network	1x RJ-45, 10/100/1000 Mbps self-adaptive Ethernet network
USB	1x usb (2.0), usb supporta l'alimentazione
Alimentazione	12 Vdc - 2 A
Consumo	≤3W
Temperatura operativa	-20° ~ +75° C

LOHDSRT3 provides fully functional second development package, which can be applied to education, health care, IPTV, conference, remote education, news interview, court, public security, banking, transportation and other industry application.

HDMI IN-OUT | TCP/IP | USB

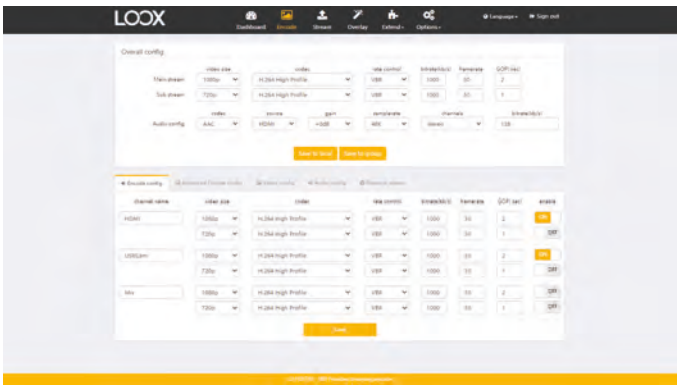
LOHDSTR3

- Video Input: one channel HDMI/SDI for option
- Video compression up to Full HD 1080P@60fps
- Support up to 4 groups TS over IP stream out
- Support H.265/H.264 Main Profile/High Profile and MP3 & AAC audio compression
- Bitrate mode: CBR/VBR 16Kbit/s~12Mbit/s
- Support streaming resolution settings
- GOP frame rate settings supported
- Capable of image parameter settings
- Insertable of logo and Scroll Caption; Adjustable of audio gain
- Video Output: Multiple output streams per input service to support Broadcast, VOD, IPTV and OTT, Mobile/ web, Set top box app
- Switchable of audio output mode: Left, right and Stereo
- Configurable of Multi-bitrate, Multi-resolution, Multi-protocol
- Providing HLS, RTSP, HTTP, UDP and RTMP protocol
- Compatible with HDCP, ONVIF Network Video Protocol
- Any IOS browsers (iphone, ipad, MacBook etc) are able to have streams from IPTV Streaming Encoder in Anytime, Anywhere by HLS protocol without install any software players
- Any terminal devices/decoders are able to have streams from IPTV Streaming Encoder directly by RTMP protocol with software players (such as VLC)
- System supports WINDOWS, WINDOWS SERVER, LINUX
- Support Microsoft standard flow driven architecture (WDM architecture), support Microsoft WMENCODER, compatible with Windows VFW software architecture and WDM mode
- Web-based management
- Full-duplex mode 1000M

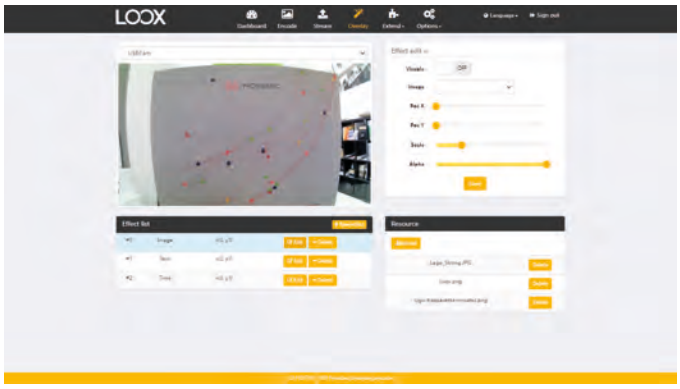
Supplied in kit including LOHDSTR3 and WLAERIALD4X already configured and ready to use.

LOHDSTR3

1080p | H.265 | H.264 | USB | WIFI

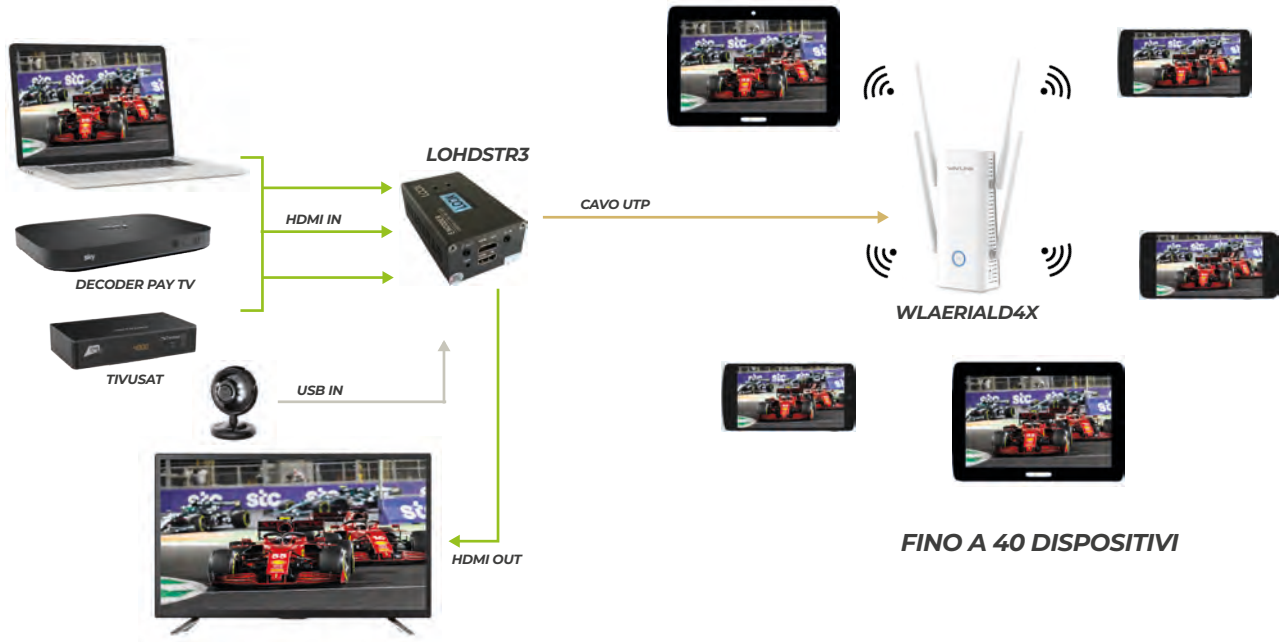


LOHDSRT3
Web interface for configuring all the settings and checking the many options available, in order to customize the HDMI output available in Wi-Fi with the WLAERIALD4X access point supplied in the kit with logos, writing (even scrolling and coloured) or other figures.



LOHDSTR3 (STRIMMY)

SCHEMA COLLEGAMENTO



LOHD11W

1080p Wi-Fi HDCP

SPECIFICA	LOHD11W
Connector	HDMI-A
Supported video format	1080p / 720p (50Hz)
Output Video	HDMI 1.3 + HDCP 1.2
Max pixel clock	165 Mhz
Max data rate	6.75 Gbps
Wi-Fi dual band	2.4 / 5.0 Ghz
Maximum Transmission Distance	30 m max, 10 m raccomended
Power Supply	5 Vdc - 0.5 A max
Power dissipation	2.0 W max
Dimensions (L×W×H)	65 x 41 x 19 mm
Operating Humidity Range	5 ~ 90 % RH (no condensation)
Operating Temperature Range	-10 ~ +70° C
Weight	200 g (Pairs)

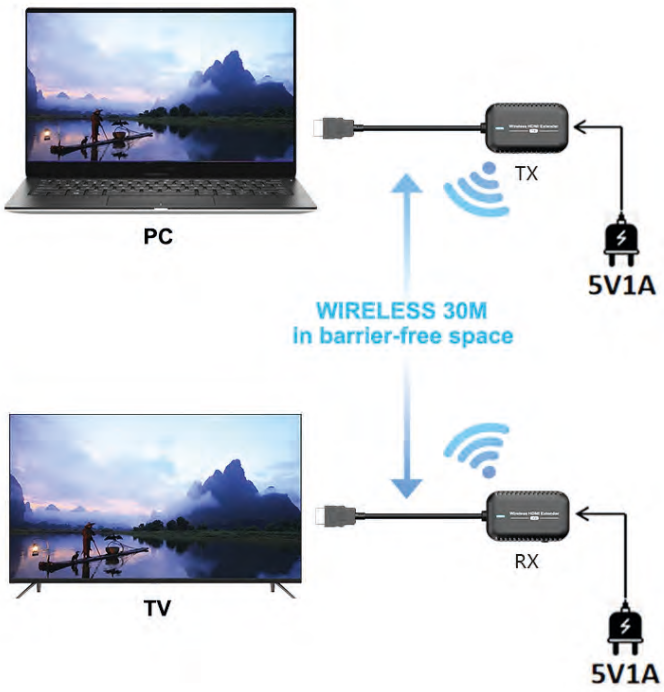
Main characters:

- Bandwidth up to 6.75 Gbps, resolution up to 1920x1080@60 Hz
- Transmit up to 30 m under 1080p
- HDMI 1.3 / HDCP 1.2 Compliant
- With 1x HDMI in at Transmitter and 1 x HDMI out at Receiver
- Powered by USB
- Built-in automatic balance system, the picture is fluent, clear and stable
- Simple and convenient installation, plug and play, do not need to set up or install apps or use internet
- Note: the TX cannot be used alone, it must be used with a RX !

WI-FI HDMI

LOHD11W

This HDMI extender built-in wireless transmission protocol, it can wireless transmit HD audio and video signal, at the same time. The equipment has an excellent image processing and transmission capacity, makes signal transmission more smooth and steady; is a kind of economic and efficient way of HDMI signal extension. Support 1080p@60 Hz mirror mode and extended mode.



LOHD95UHD

HDBT | 4K | 3D | IR | HDCP

SAT
DTT
TVCC

4K UHD

SPECIFICA	LOHD95UHD
Connectors on Transmitter	HDMI Receptacle x 2 (1x HDMI input, 1x HDMI loop output) 1x Power DC Receptacle 1x IR Receptacle (for TX)
Connectors on Receiver	1x HDMI Receptacle 1x IR Receptacle (for RX)
Resolution outputs	4k@60 Hz YUV4:4:4 / 4k@30 Hz / 1080p / 1080i 720p / 576p / 480p
Audio format supported	DTS-HD Master Audio, Dolby True HD, LPCM7.1, PCM etc.
Output Video Signal	HDMI
Transmission Distance	Up to 50 m under 4K@60 Hz YUV4:4:4, 60 m under 4K@30 Hz / 1080p
Power supply	12 Vdc - 1.0 A
Power consumption	3.6 W max
Dimension (L×W×H)	82 × 46 × 24 mm
Operating Temperature Range	-5 ~ +70° C
Operating Humidity Range	5 ~ 90% RH (No Condensation)
Net Weight	~ 300 g

LOHD95UHD

- HDMI 2.0 Extender, HDR10, POC, HDCP 2.2 / 1.4 Compliant
- Bandwidth 18Gbps
- Transmit up to 50 m under 4K@60Hz YUV4:4:4, 60m under 4K@30Hz/1080p over single Cat. 5e/6 cable
- 1x HDMI loop out on transmitter
- Support EDID management
- Support wide band IR Pass through (20 ~ 60 Khz)
- HDMI audio sampling rate up to 192 Khz, max LPCM 7.1 channel
- Max pixel clock 600 Mhz
- Support Dolby True HD, PCM and DTS-HD master audio

TCP/IP | HDMI IN-OUT | IR

LOHD95UHD

ESTENSIONE 4K (60M) + IR TELECOMANDO

LOHD75UX4K

4K POC USB HDCP

SPECIFICA	LOHD75UX4K
Video	
Standards	HDMI 2.0, HDCP 2.2
Pixel clock (max)	600 Mhz
Data rate (max)	18 Gbps
Risoluzione	3840x2160@60 Hz
Connettore	HDMI A
Impedenza	100 Ω
KVM	
Interfaccia	TX: USB B RX: USB A (USB 1.1)
Ethernet	
Interfaccia	RJ45
Distanza trasmissione	Cat. 5e/6 fino a 60 m
Generale	
Alimentazione	12 Vdc - 1.0 A
Dissipazione	5.16 W max
Temperatura operativa	-5° ~ +70° C
Dimensioni	94 x 70 x 26 mm

SAT
DTT
TVCC

4K UHD

LOHD75UX4K

- Supporta risoluzione video fino a 4K@60 Hz
- Compatibile con HDMI 2.0 e HDCP 2.2
- Tecnologia HDBaseT
- Trasmette il segnale HDMI fino a 60 metri su cavo Cat. 5e/6
- Il trasmettitore ha ingresso/uscita HDMI per monitor locale
- Supporta EDID pass-through
- Supporta tastiera e mouse USB
- Si interfaccia automaticamente con la sorgente e i display
- Sistema aggiustamento automatico del segnale che rende le immagini stabili e più nitide
- Sistema di protezione ESD
- Semplice installazione: plug and play
- Fornito con cavo USB A-B

HDMI IN-OUT
USB
M&K

LOHD75UX4K

SCHEMA COLLEGAMENTO

LOHD73XS

1080p POC IR HDCP

SAT
DTT
TVCC

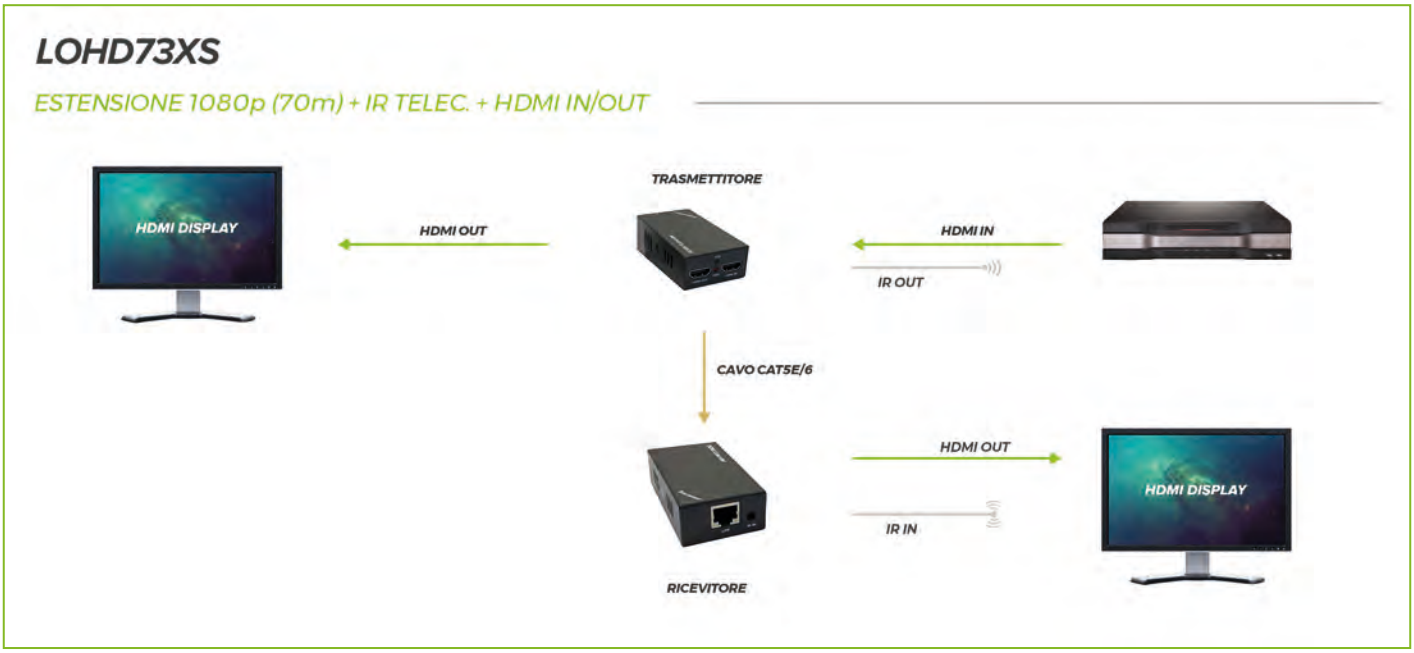
SPECIFICA	LOHD73XS
Video	
Standards	HDMI 1.3
Pixel clock (max)	165 Mhz
Data rate (max)	6.75 Gbps
Risoluzione	1920x1080@60 Hz
Connettore	HDMI A
Impedenza	100 Ω
IR	
Interfaccia	3.5 mm jack
Segnale	Monodirezionale
Frequenza IR	20 ~ 60 Khz
Cavo UTP	
Interfaccia	RJ45, standard IEEE-568B
Distanza trasmissione	UTP Cat. 6/7e: 60 m UTP Cat. 5e: 40 m
Generico	
Alimentazione	5-15 Vdc - 1.0 A
Dissipazione	3 W max
Temperatura operativa	-5° ~ +70° C
Dimensioni	82 x 46 x 23 mm

LOHD73XS

- Trasmette i segnali HDMI video e audio su singolo cavo UTP Cat. 5e/6/7e fino a 60 metri
- Supporta risoluzione video fino a 1920x1080@60 Hz
- Supporta funzione copia EDID
- Supporta IR monodirezionale 20 ~ 60 Khz
- Alimentazione POE con alimentatore 12 Vdc / 1 A collegato al solo trasmettitore
- Il trasmettitore supporta un'uscita locale HDMI
- Compatibile con gli standard HDMI 1.3 e HDCP 1.2
- Standard IEEE-568B
- Si interfaccia automaticamente con la sorgente e i display
- Sistema di protezione ESD
- Semplice installazione: plug and play

HDMI IN-OUT

IR



LOHD53UX

USB 1080p

TVCC

SPECIFICA	LOHD53UX
Video	
Standard	HDMI 1.3, HDCP 1.2
Pixel clock	165 Mhz
Data rate (max)	6.75 Gbps
Risoluzione	1920x1080@60 Hz
Connettore	HDMI A
Impedenza	100 Ω
USB	
Interfaccia	PC: USB-A Tastiera/mouse: USB-A
Segnale	HID
UTP	
Interfaccia	RJ45
Distanza trasmissione	Fino a 50 m con cavo Cat. 6
Generico	
Alimentatore	12 Vdc - 1.0 A
Dissipazione	4 W (max)
Temperatura operativa	-5° ~ +70° C
Dimensioni	84,5 x 63 x 26 mm

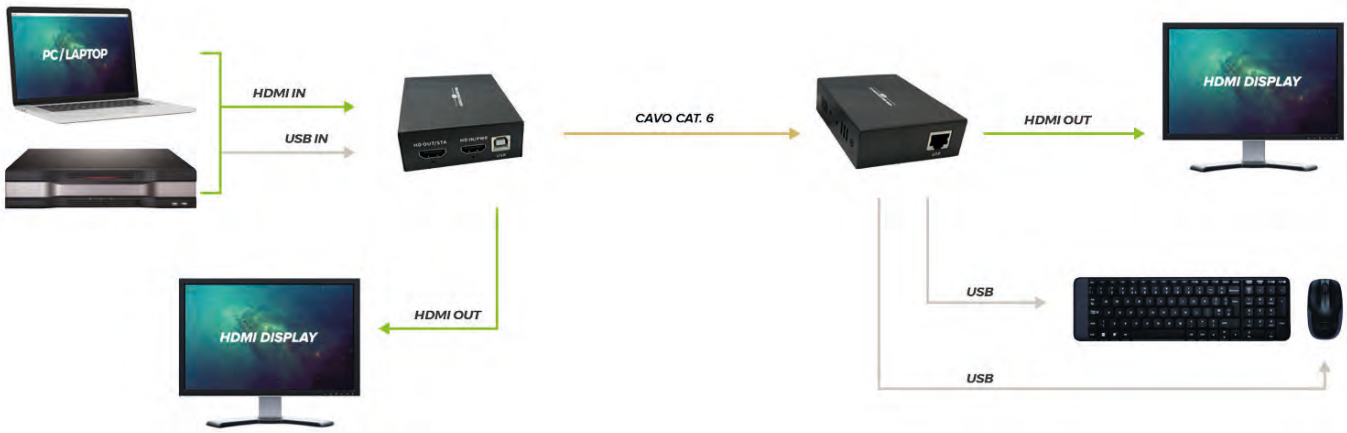
LOHD53UX

- Coppia estensori HDMI 1.3 + USB & HDCP 1.2 su cavo UTP singolo Cat. 6, portata fino a 50 m
- Supporta HDMI 1.3 / HDCP 1.1 & 1.2
- Supporta 480, 576, 720 50/60 Hz / 1080i 50/60 Hz / 1080p 25/30/50/60 Hz / 2K
- Ingresso / Uscita HDMI sul trasmettirore
- Trasmettitore 1 porta USB, ricevitore 2 porte USB
- Supporta mouse e tastiera USB
- Cavo HDMI (1 m) a corredo

TCP/IP HDMI IN-OUT USB M&K

LOHD53UX

SCHEMA COLLEGAMENTO



LOHD53VUX

1080p VGA USB

TVCC

LOHD53VUX

- Trasmette i segnali del computer, della tastiera e del mouse fino a 200 m di distanza
- Usa un singolo cavo Cat. 6
- Supporta mouse e tastiera USB
- Supporta audio stereo analogico (ingresso separato)
- Ingresso monitor VGA (trasmettitore)
- Uscita monitor VGA (ricevitore)
- Supporta risoluzione video fino a 1920x1080p@60 Hz
- Porta USB compatibile ver. 1.1
- Compatibile con Windows, Linux, Unix, DOS
- Protezione ESD integrata, facile installazione con regolazione automatica del segnale
- Funzionamento plug and play, nessun software necessario
- 1x cavo USB A-A a corredo

LOHD53VUXR

- Ricevitore supplementare con accessori

SPECIFICA	LOHD53VUX
Ingresso	1x VGA, 1x USB, 1x Audio stereo
Uscita	1x VGA, 2x USB, 1x Audio stereo
Banda	350 Mhz (100 m)
Livello ingresso	0.5 ~ 2.0 V p-p
Impedenza ingresso	75 Ω
Interfaccia KVM	USB-A tipo 1.1
Interfaccia audio	3,5 mm jack stereo
Interfaccia Ethernet	RJ45 per distanze fino a 200 m (Cat. 6)
Standard connettori	HDB15, USB, RJ45
Standard video	VGA, WVGA, XGA, SXGA, WXGA, FHD
Standard cavo	Cat. 5e/6
Risoluzione	1920 x 1080@60 Hz max
Alimentatore	5 ~ 12 Vdc - 1.0 A
Temperatura operativa	-5° ~ +70° C
Dimensioni	98 x 70 x 26 mm

TCP/IP VGA IN-OUT USB M&K

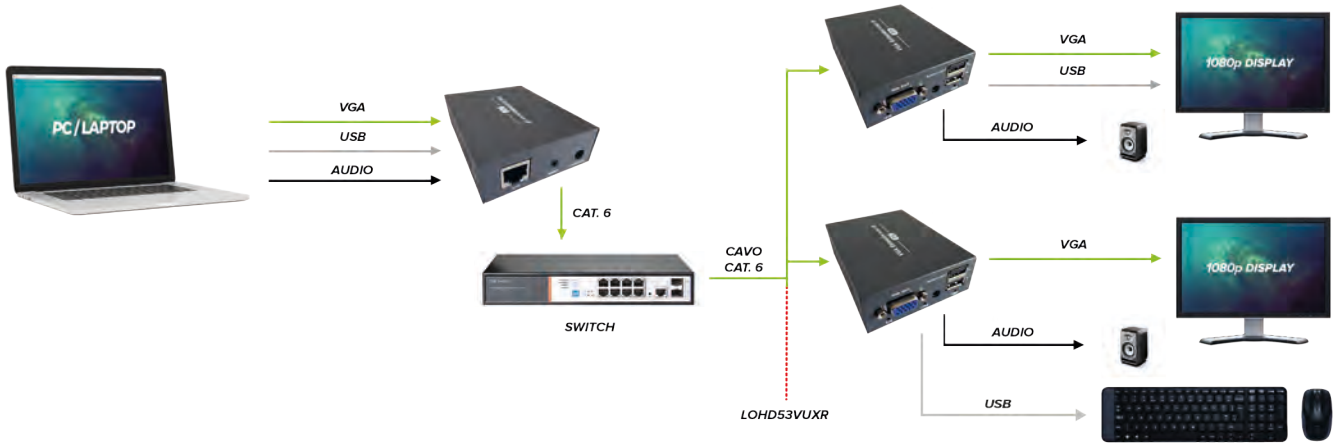
Note:

- *Si possono utilizzare le porte USB su 1 ricevitore per volta*

LOHD53VUX

CONFIGURAZIONE ONE TO ONE

CONFIGURAZIONE ONE TO MANY



LOHD367UX, LOHD367UXR

H.264 | 1080p | IP | IR | HDCP

LOHD367UX, LOHD367UXR (ricevitore supplementare)

- Fino a 120 metri su cavo Cat. 5e/6
- Risoluzione video fino a 1920*1080p @60 Hz
- Supporta “1 to many” (fino a 253 dispositivi) con switch ethernet
- Supporta segnale IR su TCP/IP
- H.264, ESD, plug and play
- Compatibile con standard HDMI 1.3 e HDCP 1.2
- 100M or 1000M Ethernet switch
- Ethernet TCP/IP, TCP/IP DID, video/audio in tempo reale, IP
- Si interfaccia automaticamente con la sorgente e il display
- Dimensioni: 110 x 100 x 18 mm

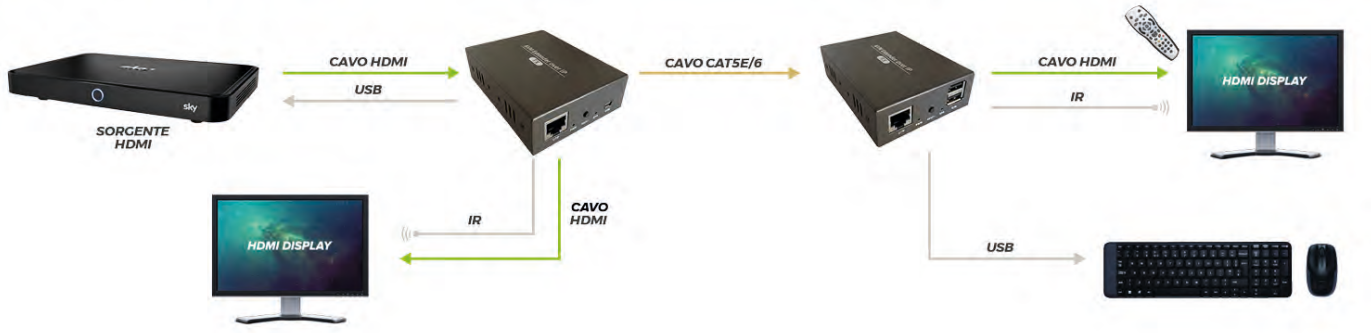
SPECIFICA	LOHD367UX
Video	
Standards	HDMI 1.3, HDCP 1.2
Pixel clock (max)	165 Mhz
Data rate (max)	6.75 Gbps
Risoluzione	1920x1080@60 Hz
Connessione	HDMI A
Impedenza	100 Ω
IR	
Interfaccia	3.5 mm jack
Segnale/ Frequenza	Digitale/ 38 Khz
Ethernet	
Interfaccia	RJ45
Distanza trasmissione	120 metri cavo Cat. 5e/6
Generico	
Alimentatore	12 Vdc - 1.0 A
Dissipazione	8 W max
Temperatura operativa	-5° ~ +70° C

Note:

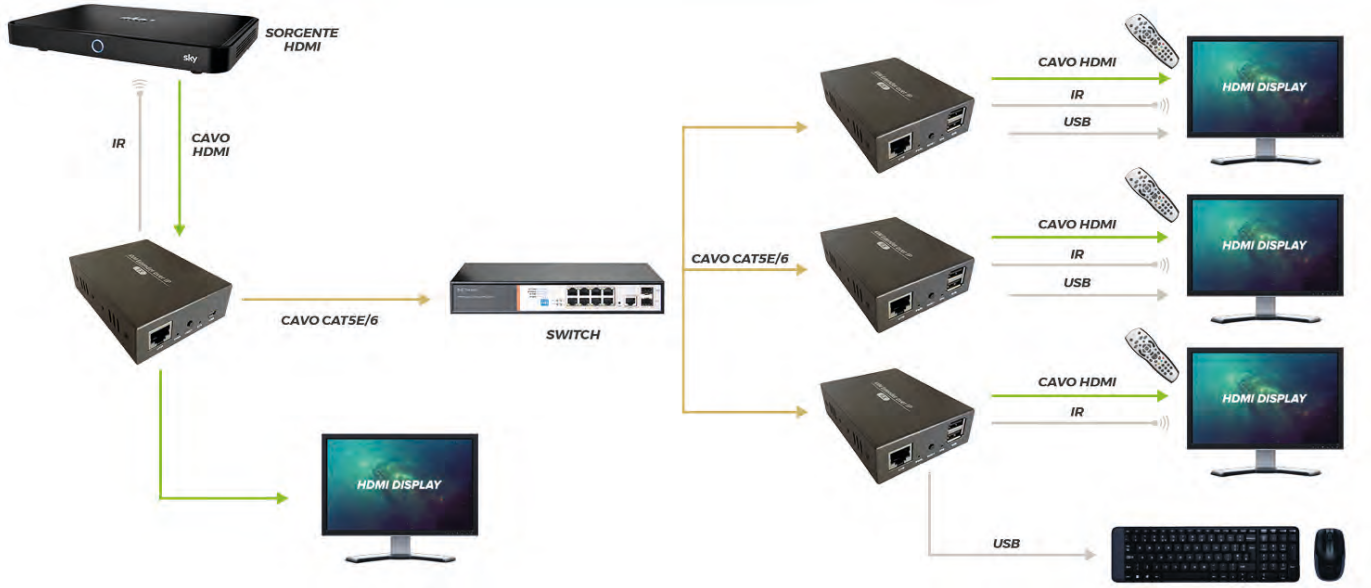
- *Si possono utilizzare le porte USB su 1 ricevitore per volta*
- Ricevitore supplementare, in confezione da 2 pezzi

LOHD367UX

CONFIGURAZIONE: ONE TO ONE



CONFIGURAZIONE ONE TO MANY



LOHD35XS, LOHD35XSR

1080p IP H.264 HDCP

SPECIFICA	LOHD35XS
Video	
Standards	HDMI 1.3, HDCP 1.2
Compressed format	H.264
Pixel clock (max)	165 Mhz
Data rate (max)	6.75 Gbps
Resolution	1920x1080 @60 Hz
Connector	HDMI A
Impedance	100Ω
Ethernet	
Interface	RJ45
Transmission Distance	Up to 150 m Cat. 6 cable
Other	
Power Supply	The power adapter: 5 Vdc
Power dissipation	5W (max)
Operating Temperature	-5° ~ +70°C
Operating Humidity	5 ~ 90%
Dimension	94 x 89 x 17 mm

LOHD35XS

- Aluminum shell, compact size and slim design, more beautiful than iron shell, strong anti-interference
- Distance up to 150 m over UTP Cat. 6 cable.
- Video resolution max up to 1920*1080@60 Hz
- Support 1 to many receivers transmit (up to 253 RX over Ethernet switch)
- Compressed format H.264
- Compliance HDMI 1.3 and HDCP 1.2 standard
- High compatibility, can auto-match source and display device
- Built-in automatic adjustment system, make the image smooth, clear and stable
- Built-in ESD protection system. Simple to install, plug and play
- TCP/IP Ethernet communication
- Real-Time Video/Audio Transmission over IP
- Pure Ethernet, Simple Cabling
- Application Fields: many solution like Shop, restaurant, kiosk, classrooms, Monitor, Speaker, Energy Saving, virtual desktop, Digital Camera, TCP/IP Network
- Ordinary 1000 Mb Ethernet switch.

LOHD35XSR

- Ricevitore supplementare con accessori

HDMI IN-OUT TCP/IP

LOHD22TX, LOHD22RX

1080p IP IR HDCP

TVCC

SPECIFICA	LOHD22TX	LOHD22RX
Ingresso segnale video	0.5 ~ 1.0 Vpp	
Ingresso segnale DDC	5 Vpp (TTL)	
Uscita video	HDMI	
Formati video supportati	DTV / HDTV: 480i, 576i, 480p, 576p, 720p, 1080i, 1080p	
Distanza trasmissione	1080p 8-bit 120 m (max) su singolo cavo Cat. 5e/6 / 24AWG Solid	
Frequenza IR	38 ~ 56 Hz	
Consumo	3 W	
Dimensioni	103.5 x 93.5 x 24.6 mm	
Peso (netto)	220 g	220 g
Indirizzo IP default	192.168.168.55	192.168.168.56

LOHD22TX, LOHD22RX

- Estende il segnale 1080p/HDMI fino a 120 metri su un singolo cavo UTP Cat. 5e/6
- Configurazioni network: Point-to-Point, Point-to-Many, Many-to-Many
- Compatibile HDCP
- Supporta TCP/IP
- Può essere installato a cascata
- Staffe di montaggio incluse

HDMI IR TCP/IP

LOHDS854KHDR, LOHDS454KHDR

4K HDR POC IR

LOHDS854KHDR, LOHDS454KHDR

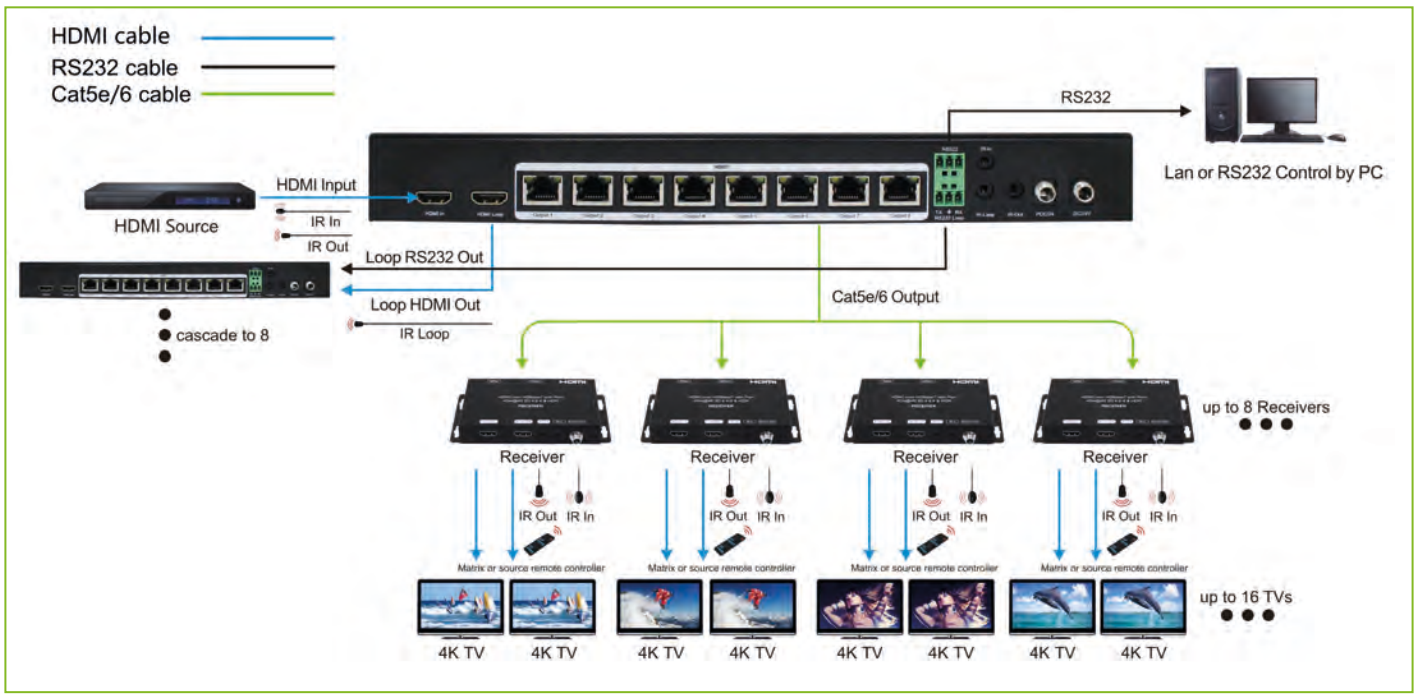
- Incorporates HD Base-T technology
- Distributes 1 HDMI source to 8 HDMI Displays simultaneously (**LOHDS454KHDR** 4xHDMI Out) with 1 x looping HDMI output
- Input HDMI resolution max up to 4K@60 Hz YUV 4:4:4
- HDBaseT output up to 4K@60 Hz YUV 4:2:0
- HDMI output up to 4K@60 Hz YUV 4:4:4
- Extends HDMI and IR up to 100 m using one CAT 5e/6 cable
- Supports high bit-rate audio formats (Dolby True-HD / DTS Master Audio)
- Support RS232, EDID
- Compliant HDCP 1.4 and 2.2
- Support Cascade to 8 layers

SPECIFICA	LOHDS854KHDR
Input Video format	720p. 1080p, 4K@60 Hz
Data transfer speed rate	18 Gbps (Max)
Input port	1 x HDMI
Output ports	8/4 x HDBaseT port, 1 x HDMI loop out
Output Video Format Supported	DTV / HDTV: 480i, 576i, 480p, 576p, 720p, 1080i, 1080p, 4K VESA resolution: 1920x1200
Transmission Distance	100 m under 1080p, 70 m under 4K
Power supply	24 Vdc
Power Consumption	36 W max
Operating Temperature Range	- 5° ~ +40° C
Operating Humidity Range	5 ~ 90% RH (No Condensation)
Dimension	311 x 172 x 39.5 mm
Net Weight	1,70 Kg

LOHDS54KRX

4K HDR POC IR

SPECIFICA	LOHDS54KHDR
Video Format Supported	DTV / HDTV: 4K, 1080p, 1080i, 720p (50Hz), 576p, 480p, 576i, 480i
Output Video	HDMI 2.0 + HDCP 1.4 / 2.2
Output Audio	Support DTS-HD, Dolby-HD
Max Transmission Distance	100 m for 1080p, 70 m for 4K
Power Supply	24 Vdc - 1.0 A
Poc	Power from TX to RX over Cat. 5e/6 cable
Power Consumption	12 W
Dimensions	139.4 x 66.8 x 20 mm



LOHD522UHD, LOHD524UHD

4K | UHD | POC | IR | RJ45 | EDID | HDCP 2.2

LOHD522UHD

SPECIFICA	LOHD522UHD / LOHD524UHD
Video	
Standards	HDMI 2.0
Pixel clock (max)	600 Mhz
Data rate (max)	18.0 Gbps
Risoluzione	3840x2160@60 Hz
Connettore	HDMI A
Impedenza	100 Ω
IR	
Interfaccia	3.5 mm jack
Segnale	Bldirezionale
Frequenza IR	20 ~ 60 Khz
Cavo UTP	
Interfaccia	RJ45, standard IEEE-568B
Distanza trasmissione	UTP Cat. 6: 60 m
Generico	
Alimentazione	12 Vdc - 1.0 A
Dissipazione	7,1 W max
Temperatura operativa	-5° ~ +70° C
Dimensioni	TX: 151 x 73 x 22 mm - RX: 81,5 x 45 x 22 mm

SAT
DTT
TVCC

4K UHD

COMPATIBILE!

LOHD522UHQ
- Suddivide il segnale HDMI in ingresso in 2 uscite
- Compatibile con standard HDMI 2.0 e HDCP 2.2
- Trasmette fino a 60 metri su cavo Cat. 6
- Risoluzione video fino a 3840x2160@60 Hz
- 2 uscite HDMI sul trasmettitore per monitor locali
- Supporta 2 ricevitori
- Supporta segnale IR su TCP/IP
- Si interfaccia automaticamente con la sorgente e il display
- Processore immagini potente, per una elevata qualità in uscita
- Supporta POC, EDID, installazione plug and play

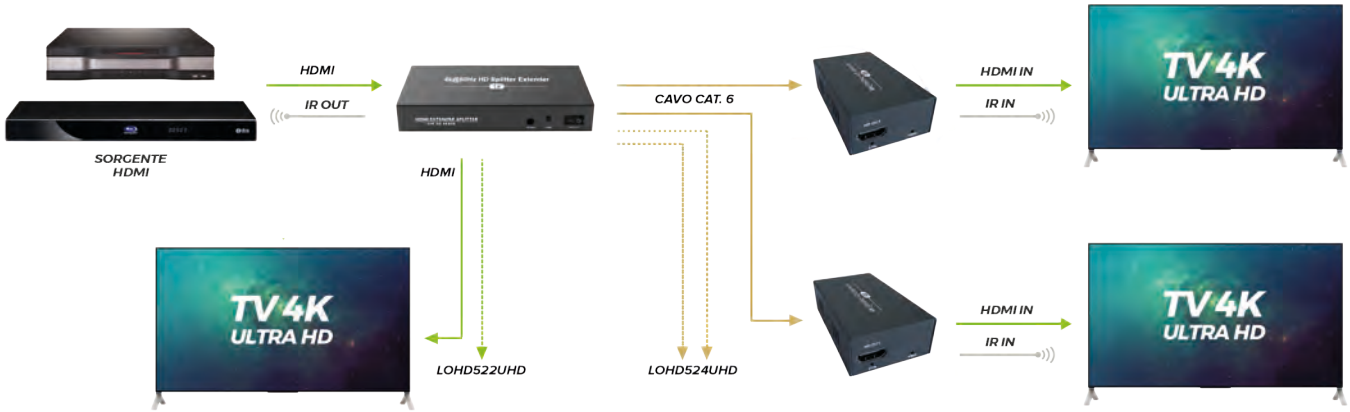
LOHD524UHQ
- Suddivide il segnale HDMI in ingresso in 4 uscite
- 1 uscita HDMI sul trasmettitore per monitor locale
- Supporta 4 ricevitori

IR | IN/OUT | HDMI IN-OUT

LOHD524UHD

LOHD522UHD, LOHD524UHD

DIVISORE 4K (60M) + IR TELECOMANDO



LOHD454KIT

1080p | 3D | RJ45 | IR | EDID

Trasmettitore

SPECIFICA	LOHDS454KIT
Ingressi	1x HDMI
Uscite	4x Cat. 6, 1x HDMI
Ingresso segnale video	0.5 ~ 1.0 Vpp
Ingresso segnale DDC	5 Vpp (TTL)
Banda amplificatore video	165 Mhz
Velocità trasferimento dati	6.75 Gbps max
Frequenza verticale	60 Hz
Distanza trasmissione	1080p 8-bit 50 metri su singolo Cat. 6 24AWG/Solid
Formati video supportati	DTV / HDTV:720p / 1080i / 1080p VESA resolution: 1920x1200 / 3D video support
Formati Audio supportati	DTS-HD Master Audio, Dolby True HD, multi canale 5.1, ecc
Alimentazione	12 Vdc - 1.0 A
Temperatura operativa	-5° ~ +70° C
Dimensioni	150 x 71 x 23 mm

LOHD454KIT

- Distribuisce 1 segnale HDMI su 4 uscite UTP in simultanea
- Trasmette fino a 50 metri su singolo cavo Cat. 6
- Switch EDID DIP sul trasmettitore per una migliore gestione
- Controllo IR monodrezionale a banda larga (da 20 a 60 Khz)
- Supporta funzione POC
- Conforme agli standard HDMI 1.3 e HDCP 1.2
- Sistema automatico di regolazione immagine
- Sistema di protezione ESD incorporata
- Supporta Full HD 1080p e risoluzione VESA 1920x1200@60 Hz
- Supporta Dolby TrueHD, DTS-HD Master Audio
- Supporta 3D
- Installazione semplice con sistema plug and play

SAT
DTT

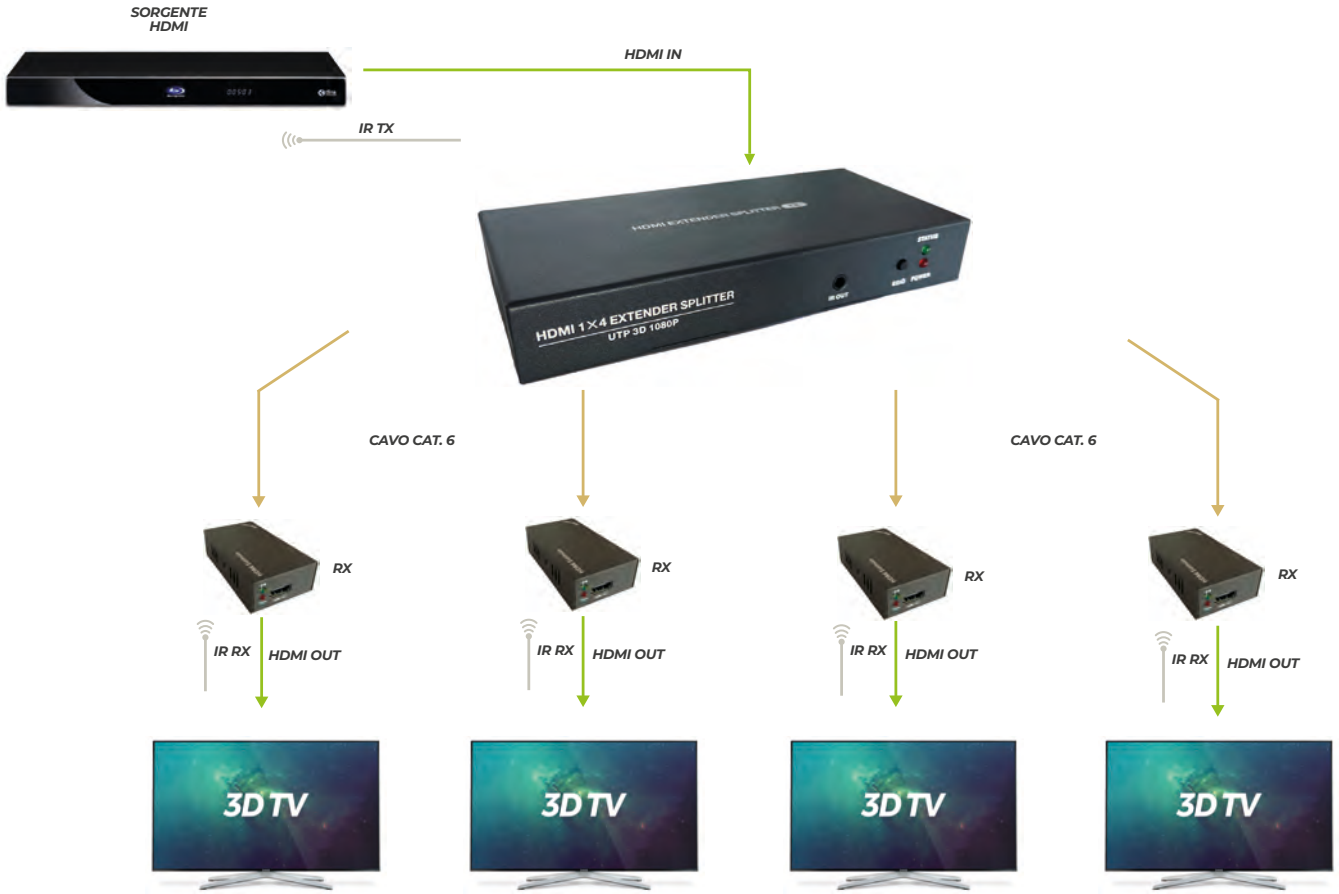
TCP/IP | HDMI | IR

Ricevitore

SPECIFICA	RICEVITORE
Ingressi / Uscite	1x HDMI out / 1x RJ45 / 1x IR
Velocità trasferimento dati	6.75 Gbps
Distanza trasmissione	1080p fino a 50 m
IR frequency	20 ~ 60 Khz
Formati video	1080p / 1080i / 720p / 576p / 480p
Formati audio	DTS-HD Master Audio, Dolby True HD, multi canale 5.1, ecc
EQ	EQ automatic adjust button
Led	1x Status, 1x Power
Temperatura operativa	-5° ~ +70° C
Dimensioni	81 x 45 x 23 mm

LOHD454KIT

DISTRIBUZIONE IN APPARTAMENTO



LOHDAUEX

LOHDAUEX

- Three Audio EDID Settings: Auto / 2.0 Ch / 5.1 Ch
- Extract the digital HDMI audio signal from the HDMI input to 2 channel analog stereo output or 5.1 channel Audio output
- Support PCM and Dolby DTS
- Supports resolution up to 4K@60 Hz YUV4:4:4
- Supports deep color up to 36 bit
- HDCP 2.2 / 1.4 Compliant
- Support CEC
- Support firmware updating through USB port

SPECIFICA	LOHDAUEX
Input Video Signal	0.5 ~ 1.0 Vpp
Input DDC Signal	5 Vpp (TTL)
Support Video format	4Kx2K/1080p/1080i/720p/576p/576i/480p/480i 3D video
Support Video Color Format	xv-YCC/deep color 36 bit
Support Audio Format	PCM, DTS-HD Master Audio,Dolby true-HD, etc.
Data transfer speed rate	18 Gbps max
Power consumption	2 W max
Dimension	104.4 x 64 x 28.3 mm
Operating Temperature Range	-5° ~ +35° C
Operating Humidity Range	5 ~ 90% RH (no condensation)
Net weight	175 g

TCP/IP HDMI

LOHDS2V4KHDR, LOHDS4V4KHDR, LOHDS8V4KHDR

LOHDS2V4KHDR

LOHDS4V4KHDR

LOHDS8V4KHDR

4K 60HZ

HDR

HDMI

4K HDR

4K HDR ***EDID*** ***HDCP***

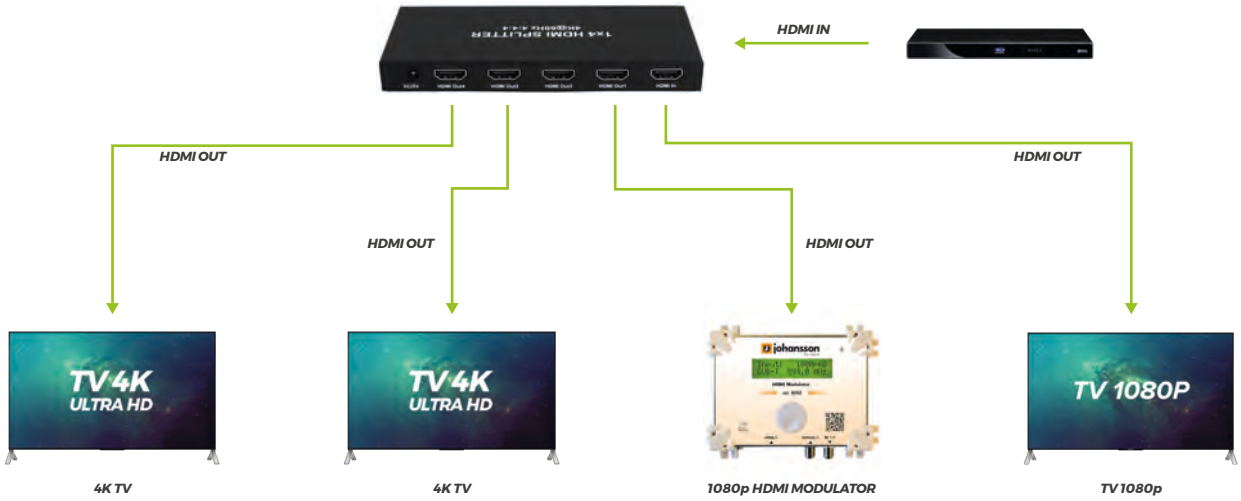
LOHDS2V4KHDR, LOHDS4V4KHDR, LOHDS8V4KHDR

- Simultaneously displays an Ultra Hi-Def source on up to four Ultra HD displays.
- Supports resolutions up to Ultra HD 4Kx2K (3840x2160@60 Hz YUV 4:4:4).
- Supports three kinds of EDID handling abilities.
- Supports HDCP 2.2 / 1.4 Compliant.
- Supports 36 bit Deep Color.
- Supports LPCM 7.1, Dolby TrueHD, Dolby digital Plus, and DTS-HD Master Audio.
- Support 3D.
- Bandwidth 18 Gbps.
- Support HDR.
- Support online firmware upgrade via Micro USB Port.

SPECIFICA	LOHDS2V4KHDR	LOHDS4V4KHDR	LOHDS8V4KHDR
Bandwith frequency	18 Gbps		
HDCP	2.2 / 1.4		
Input ports	1x HDMI (female)		
Output ports	2x HDMI outputs (female)	4x HDMI outputs (female)	8x HDMI outputs (female)
Resolution outputs	up to 4Kx2K (3840x2160@80 Hz YUV 4:4:4)		
Dimensions (LxWxH)		150 x 64.2 x 17 mm	
Power consumption	1 W max	2 W max	5 W max
Transmission Distance	15 m (max) over standard HDMI cable / 26AWG		
Operating Temperature Range	-5° ~ +40° C		
Operating Humidity Range	5% ~ 90% (no condensation)		
Net weight	120 g	245 g	610 g

LOHDS2V4KHDR, LOHDS4V4KHDR, LOHDS8V4KHDR

SCHEMA COLLEGAMENTO



LOHDS2UHD, LOHDS4UHD

LOHDS2UHD

LOHDS4UHD

EDID HDCP

HDMI

LOHDS2UHD, LOHDS4UHD
Suddivide il segnale HDMI in ingresso, in 2/4 uscite video. Compatibile HDMI 2.0 per risoluzioni fino a 3840x2160@60 Hz. Supporta DHCP 2.2, funzionalità EDID e uscita audio stereo. Installazione semplificata con sistema plug and play.

SPECIFICA	LOHDS2UHD	LOHDS4UHD
Bandwith frequency	18 Gbps	
HDMI / HDCP	2.0 / 2.2	
Input ports / Impedance	1x HDMI (female) / 100 Ω	
Output ports	2x HDMI outputs (female)	4x HDMI outputs (female)
Resolution outputs	Max 3840x2160@80 Hz	
Dimensions (LxWxH)	64 x 62 x 14 mm	105 x 59 x 18 mm
Power supply / Consumption	5 Vdc - 2.5 W max	5 Vdc - 3.9 W max
Transmission Distance	Less than 5 m over standard HDMI cable / 26AWG	
Operating Temperature Range	-5° ~ +70° C	
Operating Humidity Range	5% ~ 90% (no condensation)	

LOHD88104K

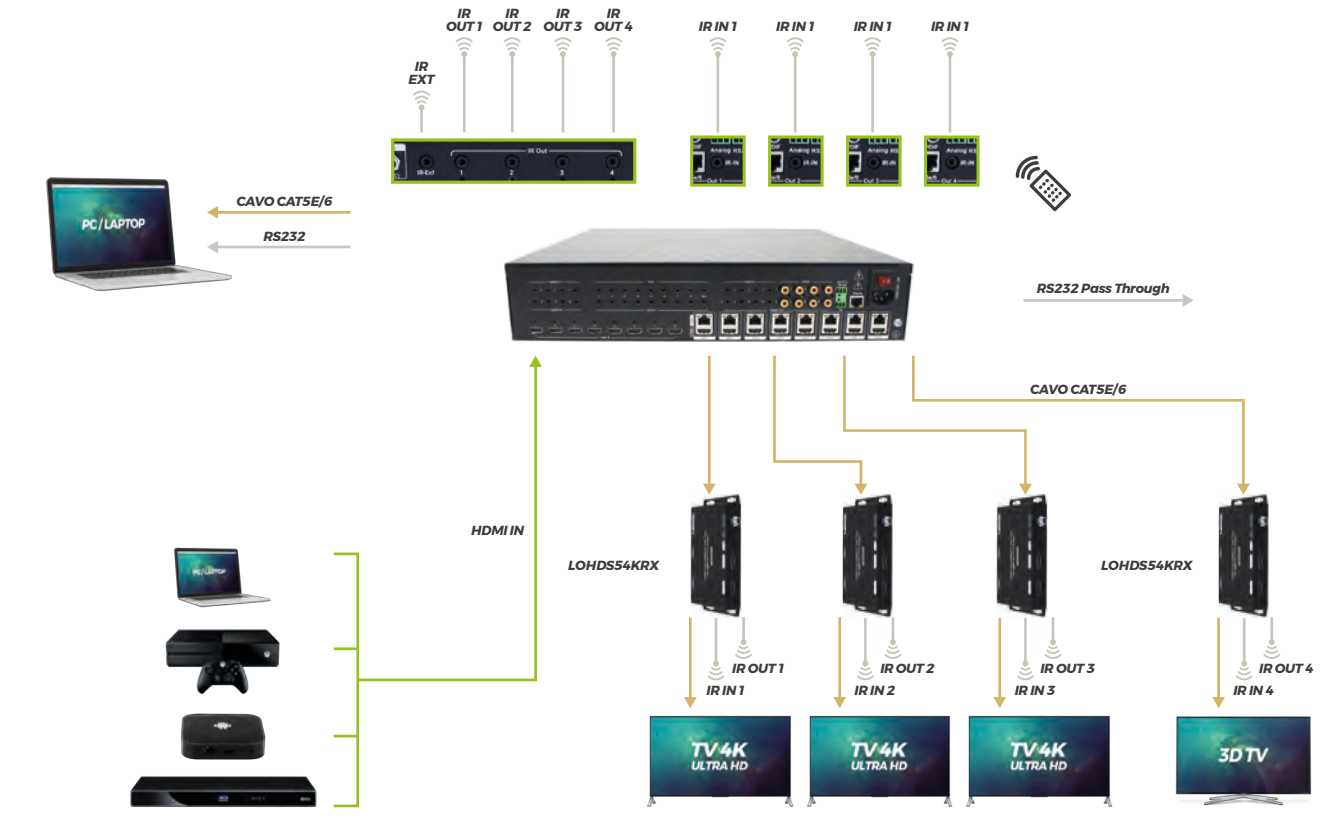
SPECIFICA	LOHD88104K
Input DDC Signal	5 Vpp (TTL)
Bandwidth	18 Gbps
Video Format Supported	4K@60Hz,YUV4:4:4 4k@30Hz/1080p/1080i/720p/576p/480p/576i/480i
HDCP Compliant	2.2 / 1.4
Output Video	HDMI 2.0 and HDMI 1.4 (over HDBaseT and HDMI)
Audio Format Supported	PCM, Dolby 5.1, DTS 5.1 digital audio
Max Transmission Distance	1080p 70 m, 4K 40 m
Power Consumption	125 W max
OperatingTemperature Range	-5 ~ +40°C
Input Video Signal	0.5 - 1.0 Vpp
Dimensions	438 x 394 x 88 mm
Mass (Main Unit)	8 Kg

LOHD88104K

- Incorporate HDBaseT technology
- HDMI 2.0 version support 4K@60Hz YUV4:4:4, 18 Gbps, HDR10, Dolby Vision (HDMI LOOP)
- Any one of the 8 HDMI Sources to any one of the 8 HDMI Displays
- Each of the 8 outputs includes one HDBaseT output and one HDMI output simultaneously
- Transmit up to 70 m under 1080p, 40 m under 4K@60 Hz
- HDCP 2.2 / 1.4 compliant
- With wide-band Bi-Direction IR routed control (38 ~ 56 Khz)
- Support 8x Analog Audio input
- Support 8x Analog Audio and 8x SPDIF Audio extraction output
- Support RS232 pass through
- Support Panel Button with LCD, IR Routing, RS232, TCP/IP, PC Tool Control
- Support POC (Receiver powered by HDBaseT Matrix)
- 2U rack design with mounting ears
- Input voltage: 110 ~ 220 Vac - 50/60 Hz

LOHD88104K

CONNESSIONE DA 8 SORGENTI



LOHDMX44VW

1080p | WALL | IP | RS232

SAT | DTT | TVCC

SPECIFICA	LOHDM44VW
Ingressi	4x HDMI (connettore tipo A)
Uscite	4x HDMI (connettore tipo A)
Modalità Matrix	4x4
Modalità Video Wall	2x2
Formati video supportati	DTV/HDTV: 1080p/1080i/720p/576p/480p/576i/480i
Formati audio supportato	LPCM
Ingresso segnale video	0.5 - 1.0 Vpp
Ingresso segnale DCC	5 V pp (TTL)
Comsumo	24 W (max)
Temperatura d'esercizio	0° ~ +35° C
Dimensioni	438 x 220 x 44 mm
Peso	2,8 Kg

LOHDMX44VW

- Qualunque delle 4 sorgenti su qualunque dei 4 display
- Commutazione senza soluzione di continuità consente di avere nessun ritardo e perdita di immagini. Velocità di commutazione inferiore a 40 millisecondi.
- Supporta la modalità Video Wall 2x2
- Possibilità di disattivare qualunque delle 4 uscite in modo indipendente
- Ogni porta supporta sia HDMI che DVI
- Risoluzioni supportate: 1080p@60 Hz @36 b/pixels, 1080i, 720p
- Facile installazione, design per installazione rack
- Alimentazione 12 Vdc - 3.0 A

HDMI

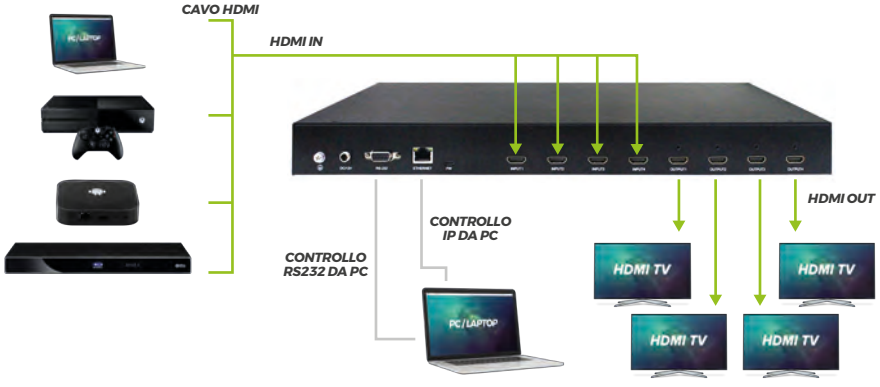
LOHD44KHDR19R
TELECOMANDO SUPPLEMENTARE

VIDEOWALL 2x2

LOHDMX44VW

2X2 VIDEOWALL

4X4 HDMI MATRIX



LOHDMX444KW

4K 1080p WALL

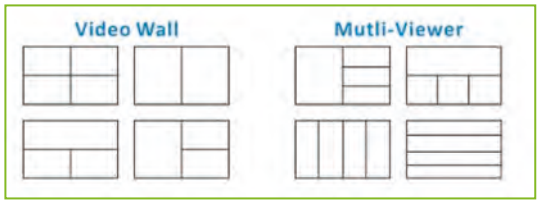
SAT
DTT
TVCC

4K 30HZ

SPECIFICA	LOHDMX444KW
Input Video Signal	0.5 ~ 1.0 Vpp
Input DDC Signal	5 Vpp (TTL)
Video Format Supported	DTV/HDTV: 1080p/1080i/720p/ 576p/480p/4K
Audio Format Supported	LPCM 2.0
Input ports	4x HDMI
Output ports	4x HDMI
Matrix mode	4x4 Seamless switching
Video wall mode	Multiple video wall modes
Power consumption	20 W max
Dimension	438 x 205 x 44 mm
Operating Temperature Range	0 ~ +40° C
Operating Humidity Range	5 ~ 90 % RH (no condensation)
Weight	2710 g

LOHDMX444KW

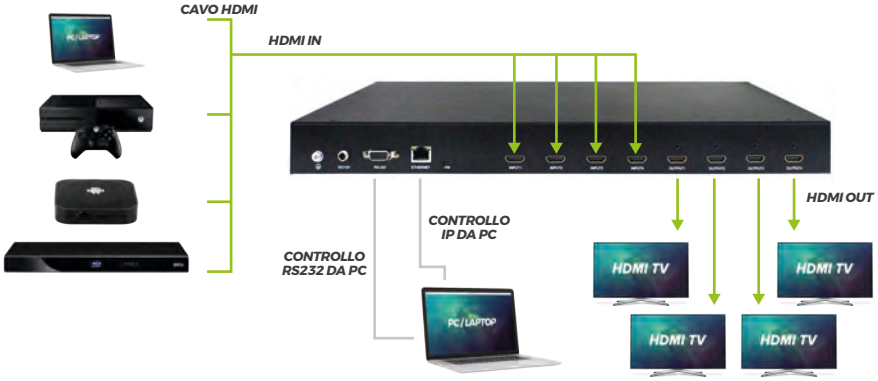
- Any one of the 4 sources to any one of the 4 displays.
- Seamless switching ensures no switching delay and pictures loss during transitions, the switching speed is less than 40 millisecond.
- Support video wall mode and output image mirror function
- Any one of the four outputs can be turned off independently.
- Support PCM 2CH audio.
- Support EDID management
- Compliant HDCP 2.2 and HDCP 1.4
- Support high definition resolutions, including: 4K@30 Hz, 1080p@60 Hz@36 b/pixels, and other standard video formats.
- Support output downscale to: 1080p / 720p / 2560*1440 / 1920*1200 / 1360*768
- With panel button, Remote Control, RS232 Control, TCP/IP Control to select the source. And support for third-party platform control.
- 1U rack design, easy installment.
- 12 Vdc - 2 A power supply.



LOHDMX444KW

2X2 VIDEOWALL

4X4 HDMI MATRIX



LOHDMX224KW

4K 1080p WALL

4K 60HZ

HDMI

SAT DTT TVCC

LOHDMX224KW

The 2x2 TV wall controller 4Kx2K support 1-way HDMI input and 4 HDMI output, the main function is to divide a complete HDMI, HD image signal into 4 blocks and assign to 4 video display unit (such as Rear projection unit, LCD TV, etc.). Complete with 4 HDMI high-definition video display units to form a large dynamic image screen.

Main future:

- Support 1 HDMI input
- Support input HDMI 2.0 / HDCP 2.2
- Support 4 HDMI outputs
- Support input 480i / 480p / 576p / 720p / 1080p / 4K30p / 4K60p
- Support output resolution 1920x1080
- Support multiple splicing modes, easy to operate, plug and play
- Output 180° flip
- IR remote controller

LOHDMX44V

1080p WALL

SAT DTT TVCC

LOHDMX44V

- Split and splicing TV, monitors, video walls easily and conveniently
- No need computer and software control
- Screen (180° Rotation of splicing monitor images)
- Display by 1x2, 1x3, 1x4, 2x2, and so on (option)
- Extendable Display by 3x2, 3x3, 4x4, etc (needs more controllers, or see the following connections and diagrams)

HDMI DVI IN VGA IN CVBS IN

SPECIFICA	LOHDMX44V
Feature	
AV/CVBS Input	PAL/NTSC/SECAM CVBS signal (1.0 Vpp +/-5%)
HDMI Input	480p, 576p, 720p, 1080i, 1080p
DVII Input	480p, 576p, 720p, 1080i, 1080p
ATV Input	Analog TV
USB Input	Play movie, read text, photo from USB device
HDMI Input	x4
Selection Button	
Split/No	Split function (4 images display separate) Splicing function (one image on the entire video wall)
USB Mode	Enter USB mode
HDMI Mode	Enter HDMI mode and DVI mode
Input	Sources selection
Power supply	
Working Voltage	12 Vdc
Power Consumption	≤ 1W
Comb Filter	3D
Others	
Keys Function	Full-function remote control: Mute, MENU, VOL+/- CH+/- , Source, and so on
OSD Language	English, Chinese
Applications	Wall Display/Shopping Center/Security /Airport/Control Room/Show Room/Entertainment Venue/Command Centers//Educational Presentations /Medical Campuses Corporate Lobbies/Restaurants/Point-of Sale
Packing	
Dimensions (L x W x H)	258 x 134 x 34 mm

LOHD88KHDR

4K HDR POC HDCP

SAT
DTT
TVCC

4K UHD

SPECIFICA	LOHD88KHDR
Bandwidth	18 Gbps
Resolution	480p@60Hz, 576P@50Hz,720P@60Hz, 1080P@24Hz, 1080P@50Hz, 1080P@60Hz, 4K@24Hz, 4K@30Hz, 4K@60Hz YUV4:2:0, 4K@60Hz YUV4:4:4
Video Input Connectors	8x HDMI Type A, 19-pin, female
Video Output Connectors	8x HDMI Type A, 19-pin, female
RS-232 serial port	DB9, female
Ethernet port (IP control)	RJ45, female
IR Ext port	1x 3.5mm stereo jack
Rack-Mountable	Rack ears included
Dimensions (LxWxD)	440 x 220 x 44.5 mm
Net Weight	2.8 Kg
Operating Temperature	-20° ~ +60° C
Storage Temperature	-40° ~ +70° C
Power consumption	19 W max

LOHD88KHDR

- HDMI 2.0 version (Support 4K@60Hz YUV4:4:4)
- Support 3D
- Bandwidth up to 18 Gbps
- HDCP 2.2 input ,HDCP 2.2 output
- HDCP 1.4 input, HDCP 1.4 output
- Support HDR10
- 8x HDMI Input, 8x HDMI output with 8x SPDIF Audio
- Any one of the 8 Ultra HD sources to any one of the 8 Ultra HD displays
- Support Panel Button, Local IR, RS232 Control with command, IP Control, Web GUI Control
- Support Dolby True HD and DTS-HD master audio
- 1U rack design, easy installment
- Unit size: 440 x 220 x 44.5 mm

HDR

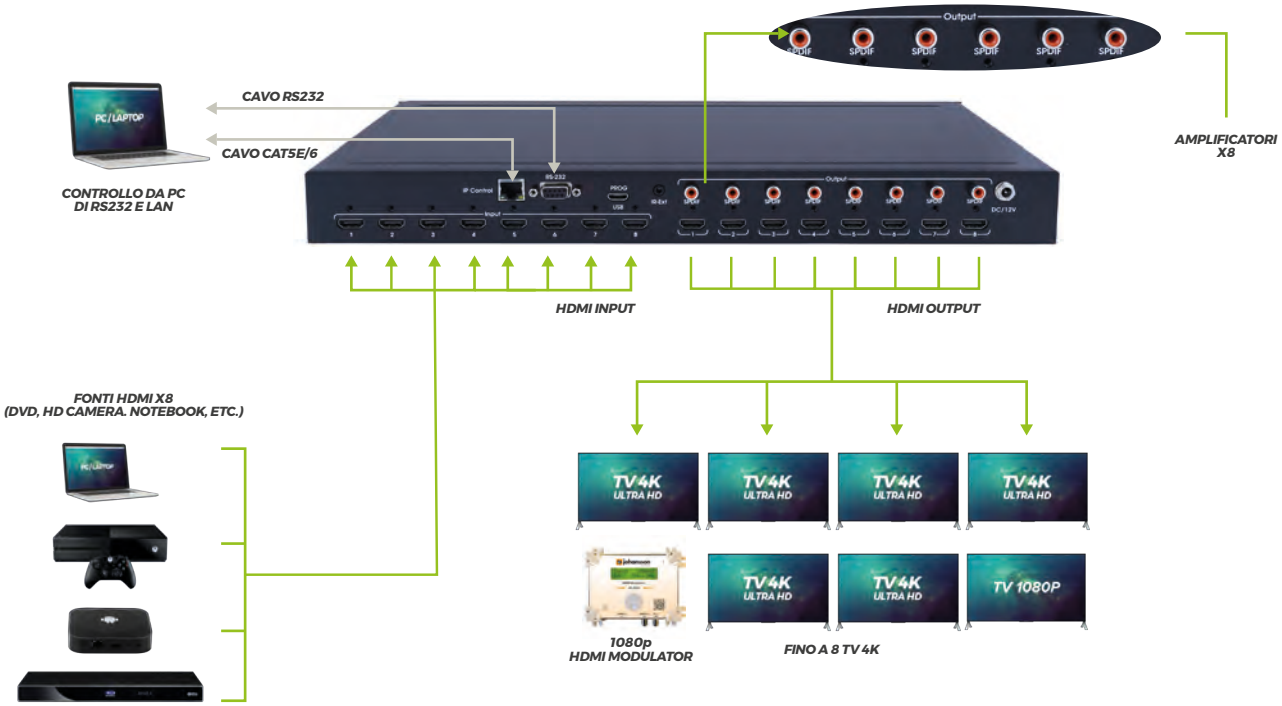
HDMI 8 IN

HDMI 8 OUT

COMPATIBILE!

LOHD88KHDR

SCHEMA COLLEGAMENTO



LOHD16164K

4K HDR POC HDCP

SPECIFICA	LOHD16164K
Specification	Interface A-type HDMI Female Minimum Level 0.5 V p-p Maximum Level 1.0 V p-p Differential Impedance 100 Ω Return Loss -30db@5 Mhz Interface HDMI A-type (19 pin) Female Input Level 0.7 V p-p Differential Impedance 100 Ω Return Loss -30db@5 Mhz DC Compensation 5 mV max
Signal Type	HDMI 1.4 specification HDMI-A all-digital T.M.D.S.
Protocol	Support HDMI 1.4 Protocol compatible with DVI 1.0 Protocol
Bandwidth	340 Mhz
Video Format Supported	3840x2160p / 1080p / 1080i / 720p 576p / 480p /576i / 480i
Serial interface	RS232, 9-pin female D-type connector, Ports 2, 3 and 5 are directly connected, Serial port parameters: 9600bps, 8-bit data, 1 start bit, 1 stop bit
Control Method	Panel Button, RS232, Remote Controller, PC software control
Power Supply	176 - 264 Vac
Power consumption	30 ~ 50 W
Operation Temperature	0° ~ +45°C
Relative Humidity	10 ~ 90%
ESD Protection	Human-body Model: ±8 KV (Air-gap discharge) ±4 KV (Contact discharge)

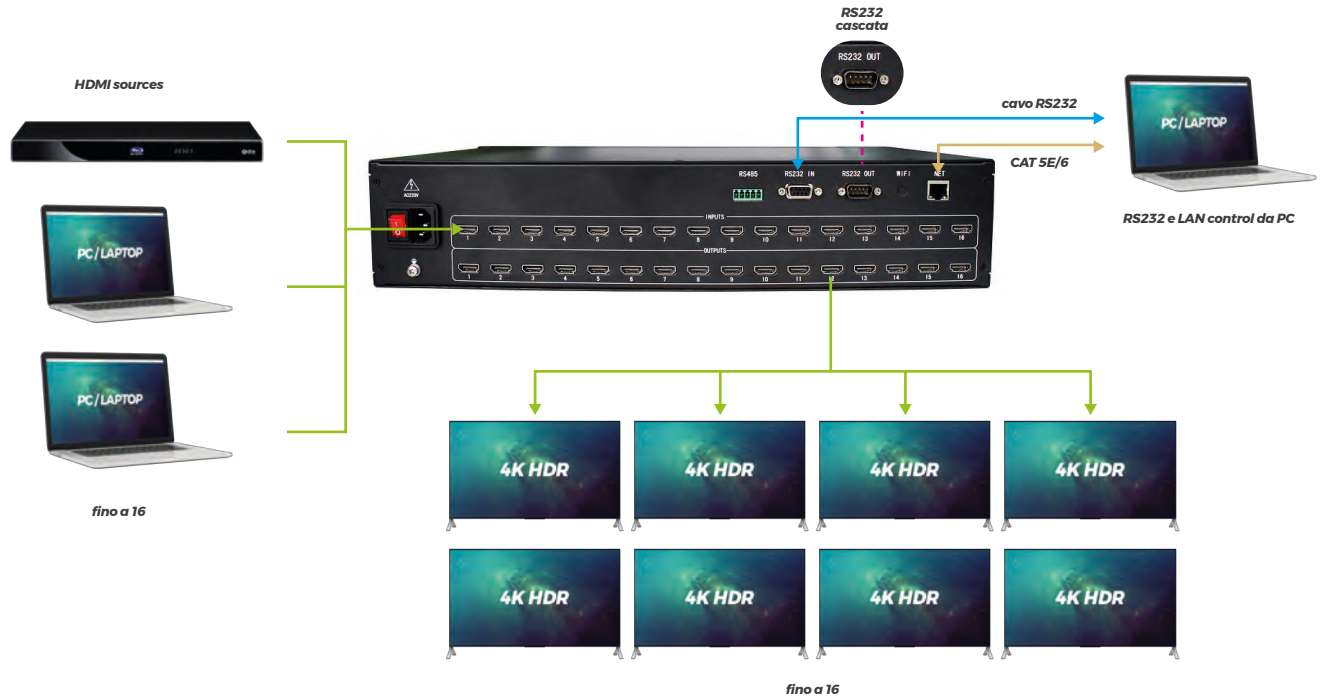
LOHD16164K

- Allows up to 16 HDMI Sources to be independently switched to HDMI Displays
- Supports resolutions up to 4K@30 Hz
- Reading and saving EDID Function from HDMI Displays
- Switching modes: Panel Buttons, RS232, RS485, PC software control, WIFI (Option)

HDMI 16 IN HDMI 16 OUT 4K UHD

LOHD16164K

SCHEMA COLLEGAMENTO



LOHD44KHDR

4K HDR POC HDCP

SAT
DTT
TVCC

4K UHD

SPECIFICA	LOHD44KHDR
Resolution	480p@60Hz, 576p@50hz, 720p@60Hz, 1080p@24Hz, 1080p@50Hz, 1080p@60Hz, 4K@24Hz, 4K@30Hz, 4K@60Hz YUV4:2:0, 4K@ 60Hz YUV4:4:4
HDCP Compliant	HDCP 2.2 and HDCP 1.4
Output video	HDMI 2.0 and HDMI 1.4
Audio Format Supported	PCM, Dolby5.1 / 7.1, DTS5.1 / 7.1 digital audio, Dolby Atmos
RS-232 serial port	3 PIN terminal block connectors
Ethernet port (IP control)	RJ45, female
IR Ext port	1x 3.5mm stereo jack
USB port	Micro 5P female
Bandwidth	18 Gbps
Default IP	192.168.1.168
Rack-Mountable	Rack ears included
Dimensions(LxWxH)	216 x 105 x 34 mm
Operating Temperature	-5° ~ +45° C
Storage Temperature	-20° ~ +60° C
Net Weight	0.72 Kg
Power consumption	13 W max

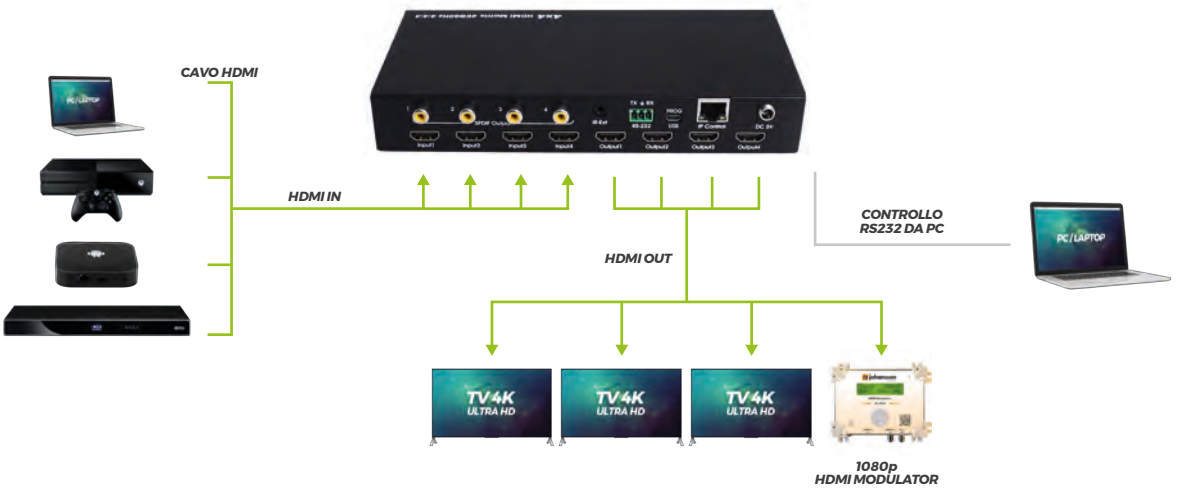
LOHD44KHDR

- HDMI 2.0 version (Support 4K@60 Hz YUV4:4:4)
- Bandwidth up to 18 Gbps
- HDCP 2.2 Input / Output
- HDCP 1.4 Input / Output
- Support HDR10
- 4x HDMI Input, 4x HDMI output with 4x SPDIF Audio
- Any one of the 4 Ultra HD sources to any one of the 4 Ultra HD displays
- Support Panel Button, Local IR, RS232 Control with command, IP Control, Web GUI Control
- Support Dolby True HD and DTS-HD master audio, Dolby Atmos under copy EDID mode
- Support firmware updating through USB port
- Unit size: 216 x 105 x 34 mm

HDR
HDMI 4 IN
HDMI 4 OUT

LOHD44KHDR

SCHEMA COLLEGAMENTO



LOSCL4K

4K UHD 1080p 1080i H.264 HDMI

SPECIFICA	LOSCL4K
Input ports	1x HDMI, 1x mini-usb
Output ports	1x HDMI,1x Earphone
HDMI input resolution	480i to 4Kx2K@30Hz
HDMI OUTPUT resolution	4Kx2K@60 Hz, 4Kx2K@30 Hz, 1080p@60 Hz, 720p@60 Hz
Power supply	5 Vdc - 1.0 A
Power consumption	3.5 W
Dimensions(DxWxH)	93 x 84 x 28 mm
Weight	155 g
Operating Temperature Range	0 ~ +40° C
Operating Humidity Range	20 ~ 90 % RH (no condensation)

SAT
DTT
TVCC

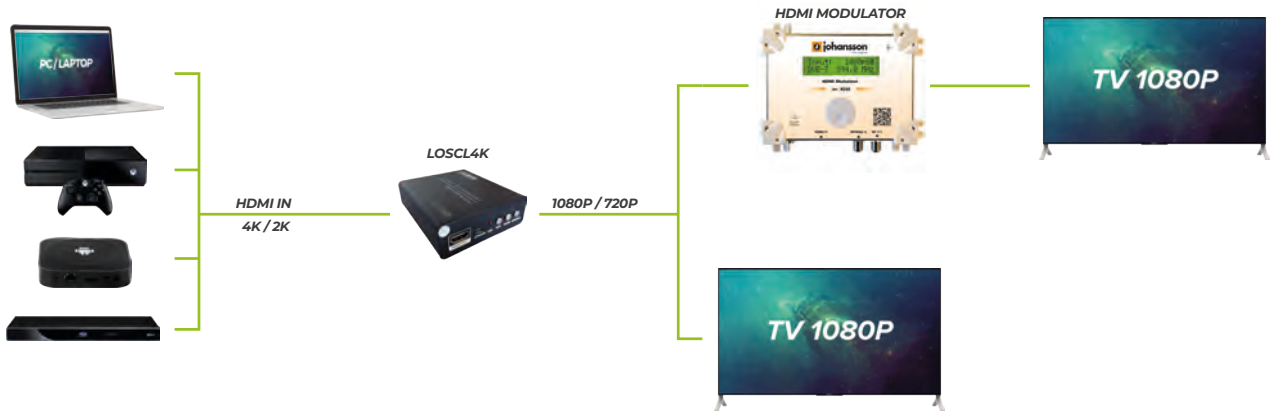
4K UHD

HDMI

HDMI to HDMI 4Kx2K Scaler Converter Box
Universal scaler converter for HDMI input to HDMI up to 4Kx2K@60 Hz output.
Auto-detect and auto-convert HDMI to HDMI output, with color transition improvement and dynamic range expansion.

LOSCL4K
- No need to install drivers, portable, flexible, plug and play
- Provide advanced signal processing with great precision, colors, resolution and details.
- Support scaler up, scaler down digital signal process
- Support multi HDMI input format
- Support HDMI 4Kx2K@60 Hz, 4Kx2K@30 Hz, 1080p@60 Hz, 720p@60 Hz

LOSCL4K
SCHEMA COLLEGAMENTO



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CATALOGO
FIBRA OTTICA
COMPONENTI ATTIVI
2023 Q3

Fibra ottica / componenti attivi
2023 Q3

INDICE

MOCH2 31-33-xx, MOCH2 35-37-55 - Optical Compact Transmitter

MOCH2 31-33-00

SPECIFICHE	MOCH2 31-33-00	MOCH2 31-33-55	MOCH2 35-37-55
Sat Inputs	2x Satellite (Wideband/ Quattro)	2x Satellite (Wideband/ Quattro) + 1x DTT	2x Satellite + 1x DTT + 1x Optical from MOCH2 31-33-00
Sat Frequency range	290 - 2340 Mhz (WB)		
Min Sat input level	65 dBµV		
DC LNB	18 Vdc - 400 mA		
Min Terr/CATV Input level	65 dBµV		
Optical Outputs	1x SC/APC		
Optical Power	≥9 dBm per wavelenght		
Optical Output wavelen-ghts	1310, 1330 nm	1310, 1330, 1550 nm	1350, 1370, 1550 nm
Automatic Gain Control	15 dB		
Automatic Slope Control	10 dB		
Power Supply	18 to 20 Vdc - ≥1,5 A (J2469 not included)		
Power Consumption	Max 30 W		
Enviromental Temperature	-20° ~ +50° C		
Dimensions	221 x 141 x 50 mm		
Weight	0.8 Kg		

MOCH2 31-33-55

MOCH2 31-33-xx / MOCH2 35-37-55

- Integrated amplifier with AGC/ASC/LTE filtering
- Signal Indication via LED
- Operation Mode indication via LED
- Operation Mode Setting
- Bandwidth Selection (WB/Quattro and TER/CATV)
- Availabilityin 19“ Housing

Due to the integrated amplifier with AGC and ASC, the signal of the LNB and a terrestrial VHF antenna can be inserted directly without any preprocessing.
The device accepts input signal levels from 70 to 85 dBµV.

MOCH2 35-37-55

Optical Triple Transmitter 1350/1370/1550 nm
Optimized for Wideband Satellite signal input (optional Quattro signal input)
3rd input optimized for terrestrial frequencies up to 700 MHz (optional CATV input frequency range up to 1.2 GHz).
This device is designed to support the transmission of satellite signals of a 2nd satellite via one single fiber.
It **only** can be used in combination with the MOCH2 31-33-00.

The device has an optical input that accepts wavelengths below 1340 nm and combines them with the internally produced wavelengths.

PRODOTTO NECESSARIO!
J2469

Alimentatore switching 20 Vdc - 3,2 A
Connettore F

PRODOTTO CONSIGLIATO!
MIRA MLWB21

PRODOTTO CONSIGLIATO!
MIRA MLQWB2

MCOR25 - Optical Receiver

MOCOR25

SPECIFICHE	MOCOR25
Optical Inputs	1
RF Outputs	2
Optical Wavelength	1310 - 1330 nm
Terrestrial Output Frequency Range	-
Satellite Output Frequency Range	5 ~ 2400 MHz
Optical Input Level	-15 ~ +5 dBm
RF Output Level per Tr. (AGC)	80 dBµV
Signal Presence Indicator	Green LED per wavelength
Return Loss	10 dB
Optical Connector Type	SC / APC
RF Connector	75 Ω F-type (female)
Power Consumption	2 W
Power Supply	12 - 20 V (via V or H port)
Power Indicator	Green LED
Operating Temperature Range	-20° ~ +55° C
Dimensions	36 x 45 x 125 mm
Weight	0.11 Kg

MCOR25

- Optimized for Wideband Satellite IF signals (290 - 2350 MHz)
- Suitable for CATV signals (5 - 862 MHz) and/or Quattro Satellite IF signals (950 - 2150 MHz)
- Converts single fibre with two wavelengths (1310 / 1330 nm)
- Perfect match for the MSW Multiswitches series of DELTA
- Perfect receiver for the Optical Compact Transmitter of MOCH25

MCOR25, 35, 55AGC - Optical Receiver with AGC

MOCOR25AGC

MOCOR35AGC

SPECIFICHE	MOCOR25AGC	MOCOR35AGC	MOCOR55AGC
Optical Inputs	1	1	1
RF Outputs	2	3	5
Optical Wavelength	1310 - 1330 nm	1310 - 1330 - 1350 nm	1310-1330-1350-1370-1550nm
Terrestrial Output Frequency Range	-		
Satellite Output Frequency Range	5 ~ 2400 MHz		
Optical Input Level	-15 ~ +4 dBm		
RF Output Level per Tr. (AGC)	80 dBµV		
Signal Presence Indicator	Green LED per wavelength		
Return Loss	-10 dB		
Optical Connector Type	SC / APC		
RF Connector	75 Ω F-type (female)		
Power Consumption	2 W	3 W	4 W
Power Supply	12 - 20 V (via V or H port)		
Power Indicator	Green LED		
Operating Temperature Range	-20° ~ +55°C		
Dimensions	40 x 125 x 50 mm	60 x 125 x 50 mm	100 x 125 x 50 mm
Weight	0.11 Kg	0.165 Kg	0.275 Kg

MOCOR55AGC

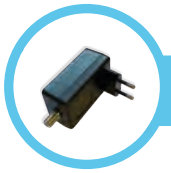
MOCOR25AGC, MOCOR35AGC, MOCOR55AGC

- Optical mutliple Receiver with automatic gain control (AGC)
- LED-indication for signal receive
- Compact design
- DC Supply on all SAT outputs
- Wide range of optical input

MOTD3216 - Optical Receiver

MOTD3216

- One device covers multiple applications:
  - Optic-Legacy Converter
  - dSCR-Converter
- Excellent optical sensitivity
- Automatic Legacy / dSCR recognition.
- Supports Unicable 1 and 2
- Powered via RF outputs or separate power supply
- LED indication of optical signal & power supply
- 16 User bands per output in dSCR mode
- Compact design



PRODOTTO CORRELATO: J2499L

SPECIFICHE	MOTD3216
Optical Inputs	1x connector SC/APC
Optical wavelength	1310, 1330, 1550 nm
Terrestrial output frequency range	40 - 790 MHz (1 connector F-Type)
Terrestrial output level (AGC)	70 dBµV
Satellite output frequency range	950 - 2150 MHz (4 connector F-Type)
Satellite output level (AGC)	80 dBµV
Signal presence indicator	Green LED per wavelength
dSCR outputs	2
Supported Output Modes	SCR + Legacy + DVB-T/DAB/FM
SCR Channel Bandwidth	46 Mhz
SCR User Bands	16 per output EN 50494: 1210, 1420, 1680, 2040; EN 50607: 985, 1050, 1115, 1275, 1340, 1485, 1550, 1615, 1745, 1810, 1875, 1940
SCR Standards (automatic Recognition)	BSkyB SCR CENELEC EN 50494, CENELEC EN 50607, Universal LNB Tone & Voltage
Legacy Output Power per Txp	Up to -15 dBm, no AGC
DiSEqC Commands	DiSEqC conform
DC Powering	Can be powered through the DC connector or through the SAT-RF outputs (all F type)
Voltage	10 to 20 Vdc from connected receivers or multiswitches 11 to 20 Vdc from power supply
Max. Power Consumption	5 W
DC via RF outputs	Yes (not on terrestrial RF output)
Shortage & Power On Diagnostics	Yes
Operating Temperature Range	-20° ~ +50° C (indoor use only)
Dimensions - Weight	164 x 142 x 50 mm - 0.35 Kg

MOQC5416, MOTD5416 - dSCR/legacy Quad/Quattro FTU

MOQC5416

- One device covers multiple applications:
  - Optic-Legacy Converter
  - Optic dSCR-Converter
  - Optic Quattro-Converter
- Excellent optical sensitivity
- Automatic Legacy / dSCR recognition.
- Supports Unicable 1 and 2
- Powered via RF outputs or separate power supply
- LED indication of optical signal & power supply
- 16 User bands per output in dSCR mode
- Compact design

PRODOTTO CORRELATO: J2469

SPECIFICHE	MOQC5416	MOTD5416
Optical Inputs	1 x connector SC/APC	
Optical wavelength	1310, 1330, 1550 nm	1310, 1330, 1350, 1370, 1550 nm
Terrestrial output frequency range	40 - 790 MHz (1 connector F-Type)	
Terrestrial output level (AGC)	Quad Mode: 65 dBµV / Quattro Mode 75 dBµV	
Satellite output frequency range	950 - 2150 MHz (4 connector F-Type)	
Satellite output level (AGC)	Quad Mode: 80 dBµV / Quattro Mode 80 dBµV	
Signal presence indicator	Green LED per wavelength	
dSCR outputs	4 (in Quad Mode)	
Supported Output Modes	SCR + Legacy + DVB-T/DAB/FM	SCR + Legacy + CATV
SCR Channel Bandwidth	46 Mhz	
SCR User Bands	16 per output EN 50494: 1210, 1420, 1680, 2040; EN 50607: 985, 1050, 1115, 1275, 1340, 1485, 1550, 1615, 1745, 1810, 1875, 1940	
SCR Standards (automatic Recognition)	BSkyB SCR CENELEC EN 50494, CENELEC EN 50607, Universal LNB Tone & Voltage	
Legacy Output Power per Txp	Up to -15 dBm, no AGC	- 8 dB (Typ -12 dB)
DiSEqC Commands	DiSEqC conform	
DC Powering	Can be powered through the DC connector or through the SAT-RF outputs (all F type)	
Voltage	10 to 20 Vdc from connected receivers or multiswitches 11 to 20 Vdc from power supply	
DC via RF outputs	Yes (not on terrestrial RF output)	
Shortage & Power On Diagnostics	Yes	
Max. Power Consumption	8 W	16 W
Operating Temperature Range	-20° ~ +50° C	-10° ~ +55° C
Dimensions - Weight	164 x 142 x 50 mm - 0.5 Kg	166 x 170 x 50 mm - 0.5 Kg

MOT83W, MOT87W, MOT103W, MOT105W

PRODOTTO CONSIGLIATO!
J9780 - Digital DSCR Solutions

SPECIFICHE	MOT87W	MOT105W	MOT83W	MOT103W
Optical Characteristics				
Laser Type	DFB			
Optical Wavelength	1550 nm		1310 nm	
Output Optical Power	8,5 dBm	10,0 dBm	8,5 dBm	11,0 dBm
Optical Return Loss	50 dB			
Optical Connector Type	SC/APC			
CATV RF Characteristics				
Operating Bandwidth	45 ~ 862 MHz			
Input Range	75 ~ 85 dBµV			
Flatness	± 1 dB			
Input Return Loss	14 dB			
C/N	≥51 dB	42CH CENELEC 80dBµV AGC OMI=3.8%		
C/CTB	≥63 dB	42CH CENELEC 80dBµV AGC OMI=3.8%		
C/CSO	≥58 dB	42CH CENELEC 80dBµV AGC OMI=3.8%		
Input Impedance	75 Ω			
RF Connector	F type (Male/Female)			
SAT-IF Characteristics				
Working Bandwidth	950 ~ 2600 MHz			
Input Range	68 ~ 83 dBµV			
Flatness	±3 dB			
Input Return Loss	10 dB			
C/IM3	≥55			
General Characteristics				
Power Supply (AC)	IN: 110 ~ 265Vac, OUT: 12Vdc/18 Vdc - 10W			
Working Temperature	0° ~ +50° C			
Dimension	200 x 102 x 35 mm			

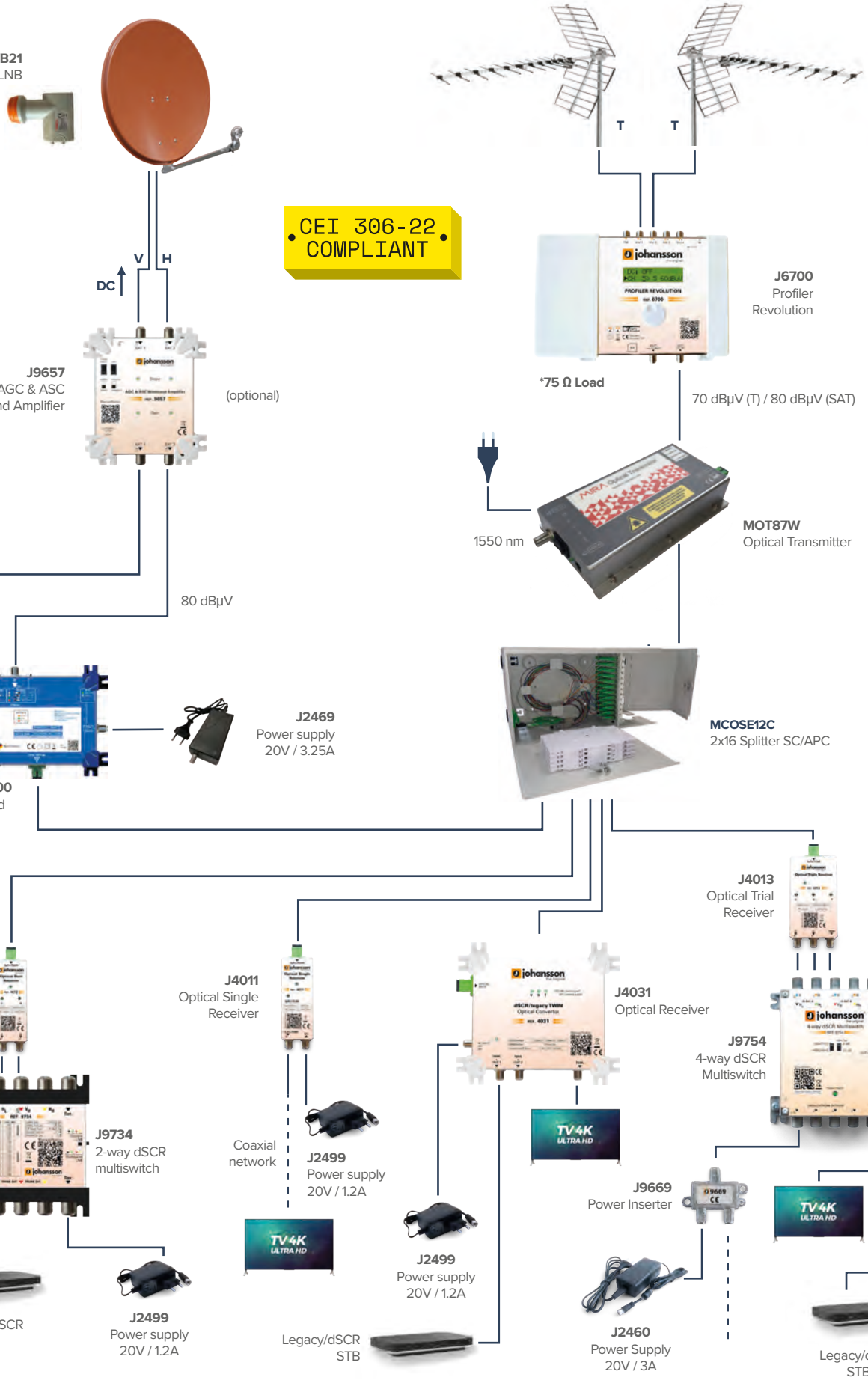
MOR300W, MOR355, MOR500W

MOR300W, MOR500W:

- High linearity, suitable for Analog TV&SAT-IF application
- MOR300W-MOR355 Bandwidth: 45 ~ 1000 MHz
- MOR500W Bandwidth: 45 ~ 2600 Mhz
- Simultaneously receive CATV and SAT-IF signal, can be compatible with FTTxPON technology
- Analog TV, Digital TV and Satellite TV have excellent performance:
  - Analog TV: (84CH PAL-D, OMI= 3.8%, Pin= -1 dBm) C/N >51 dB, CTB ≤ -66 dB, CSO ≤ -62 dB;
  - Digital TV: (Original signal MER =38.6 dB, BER < 1.0E-9) Pin= -14 dBm, MER ≥33 dB (MER degrade 5 dB), Pin= -19 dBm, BER <1.0E-9;
  - Satellite TV: (Original signal quality= 64%) Pin= 20 dBm, signal quality >38%.

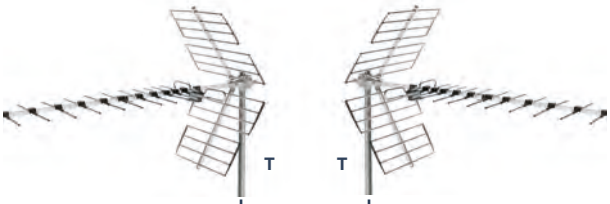
SPECIFICHE	MOR300W	MOR500W	MOR355
Optical Characteristics			
Operating Wavelength	1260 ~ 1620 nm		1530 ~ 1570 nm
Responsivity	0.85 A/W		
Receiving optical power range	Analog TV: - 7 ~ +2 Digital TV: - 14 ~ +2 Satellite TV: - 20 ~ +2		
Optical Return Loss	50 dB		
Optical Connector Type	SC/APC		
RF Characteristics			
Operating Bandwidth	45 ~ 1000 MHz	45 ~ 2600 MHz	45 ~ 1000 MHz
Output Level	90 dBµV@Pin=0 dBm		
Flatness	- 1.0 ~ +1.0 dB (45 ~ 862 MHz) - 2.5 ~ +2.5 dB (950 ~ 2600 MHz)		
Output Return Loss	14 dB min. (45 ~ 862 MHz) 12 dB min. (950 ~ 2600 MHz)		
C/N	51 dB min. @Pin= -1 dBm, Pout>88 dBµV, 84CH PAL-D, OMI=3.8%		
CTB	66 dB min. 66 @Pin= -1 dBm, Pout>88 dBµV, 84CH PAL-D, OMI=3.8%		
CSO	62 dB min. @Pin= -1 dBm, Pout>88d BµV, 84CH PAL-D, OMI=3.8%		
HUM	- 60 dB min.		
Output Impedance	75 Ω		
RF connector	F type (Male/female selectable)		
General Characteristics			
Operating Voltage	12 Vdc		
Consumption	≤3 W		
Operating Temperature	- 20° ~ +60° C		
Dimension	105 x 67 x 24 mm		

Fiber Optical Distribution SAT + DTT



Fiber Optical SAT

MLWB21
Wideband LNB



CEI 306-22
COMPLIANT

V H
DC

J6701
Profiler
Revolution

J9657
AGC & ASC
Wideband Amplifier

(optional)

***75 Ω Load**

70 dBµV (T) / 80 dBµV (SAT)

J2469
Power supply
20V / 3.25A

MCOSE12C
2x16 Splitter SC/APC

MOCH2 31-33-55
Optical Headend

J4013
Optical Trial
Receiver

J4012
Optical Dual
Receiver

J4011
Optical Single
Receiver

J4031
Optical Receiver

J9754
4-way dSCR
Multiswitch

J9734
2-way dSCR
multiswitch

Coaxial
network

J2499
Power supply
20V / 1.2A

J2499
Power supply
20V / 1.2A

J9669
Power Inserter

Legacy/dSCR
STB

J2499
Power supply
20V / 1.2A

Legacy/dSCR
STB

J2460
Power Supply
20V / 3A

Legacy/dSCR
STB

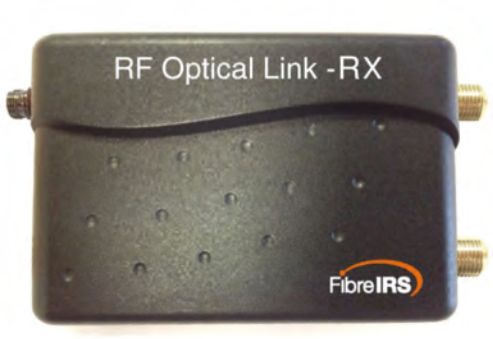
MOTX90, MOTX120

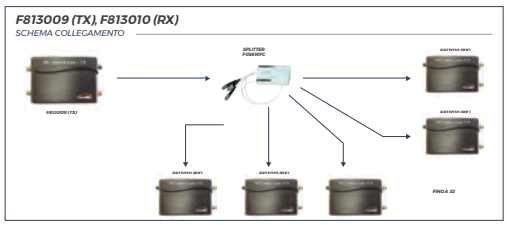
CEI 306-22
COMPLIANT

Trasmettitore TV RF ottico RACK 19": 7,8 dBm / 9,0 dBm / 12 dBm, 47-862 Mhz, connettore uscita SC/APC (fibra Single Mode)

SPECIFICHE	MOTX90	MOTX120
Potenza ottica	10 mW (10 dbM)	16 mW (12 dbM)
Frequenza	47 ~ 870 MHz	
CNR	≥ 52 dB (classe A)	
CTB	≥ 67 dB (classe A)	
CSO	≥ 62 dB (classe A)	
Specifiche ottiche		
Tipo di laser	DFB (con isolatori ottici)	
Lunghezza d'onda	1310 nm ± 20	
Tipo modulazione	Modulazione intensità luce diretta	
Connettore fibra	SC/APC	
Livello segnale ingresso RF	80 ±3	
Piattezza	±0.75 dB	
Impedenza ingresso RF	75 Ω	
Perdita di ritorno ingresso RF	≤-16 dB (47-550 MHz) ≤-14 dB (551-870 MHz)	
Generiche		
MTBF	≥ 40000 h	
Temperatura operativa laser	+5° ~ +40° C	
Alimentazione (linea)	220 Vac (86 ~ 264 Vac)	
Consumo	50 W	
Dimensioni	480 x 350 x 44 mm	

F813009 (TX), F813010 (RX)





SPECIFICHE	F813009 (TX)	F813010 (RX)
Optical Characteristics		
Operating Wavelength	1310 nm	1100 ~ 1600 nm
Return loss	20 dB min	
Receiving optical power range	Analog TV: - 7 ~ +2 Digital TV: - 14 ~ +2 Satellite TV: - 20 ~ +2	-
Optical Power	7 dBm	-
SAT, DTT, DAB and FM (Electrical)		
RF Frequency Range		
Input Power DTT	60 ~ 92 dBµV	-
Input Power SAT	60 ~ 85 dBµV	-
Gain Variation Across Band	4 dB max	
DC Specification		
Input Voltage Range	12 ~ 20 V	
LNB Supply Voltage	12 ~ 20 V	
Current Consumption	<200 mA	<140 mA
Connector		
Output	Fibre Optic FC/PC	
DTT/DAB/FM	F	-
Power Supply in/out	F	-
RF Out / Ter Out		F
Power supply	-	2.1 mm jack
Enviromental Specification		
Operating Temperature	-20° ~ +55° C	
Storage Temperature	-20° ~ +65° C	
Others		
Laser Classification	Classs 1M	
Dimensions	85 x 55 x 25 mm	

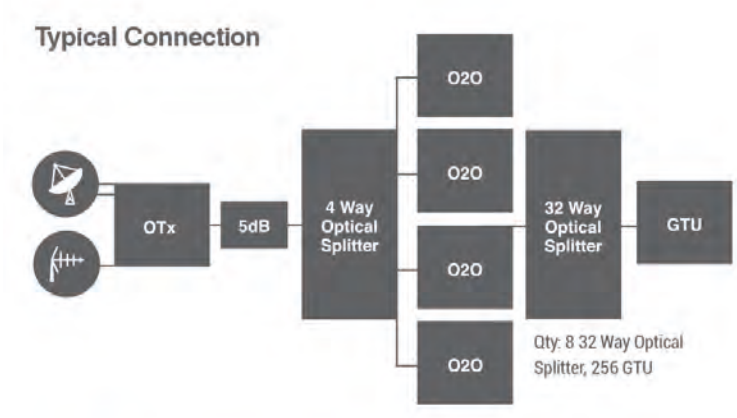
FD000452, FD000411 - Satellite and terrestrial optical converter

FD000452:
Introducing the new OTx optical headend from Global Invacom.

Fully compatible with all the current FibreIRS equipment and designed for future compatibility, replaces both the ODU32 and fibre LNB.

Fully compatible with all existing GTU's and SwitchBlade units. The output frequency stacking has not changed.

Main features:
- 1310 nm option either as a kit with a wideband LNB included or as a standalone unit
- Wideband LNB input. Unlike the previous ODU32 that required a specific wholeband LNB with frequencies above 5GHz, the OTx unit uses standard H & V wideband inputs
- The wideband LNB supplied in the kit uses a local oscillator set to 10.41 Ghz
- Single optical output with a 7 dBm 1/32 split ratio. ODU32 units are more costly but would offer two 1/32 split optical outputs. If more than 32 splits are required, additional equipment will be needed
- IP65 rated and can therefore be installed outside. Intended to be fitted behind the dish itself. Ensure that it is mounted vertically
- 5G / 700 Mhz filtered input accepting frequencies 88 - 694 Mhz. Additional channel processing with channel conversion is recommended with transmitters that still offer COM 7 at channel 55
- Vertical leg powering of the wideband LNB only. For horizontal signal testing, it is recommended that power is fed to the LNB via the vertical leg connection of the powered OTx unit.



The **O2O** has been designed to be used in conjunction with either the OTx, ODU32 or the fibre optic LNB to increase the number of subscribers that can be connected to a single dish.

FD000411:
The O2O (Optical to Optical) convertor from Global Invacom. Fully compatible with all the current FibreIRS headend equipment and designed for future compatibility. Replaces the functionality of the O2E and ODU32 in one compact unit.

Specifications:
- FibreIRS FC/PC optical input (1100 nm to 1650 nm)
- Fully compatible with GI optical LNB, ODU32 & ODU32 (1550) and the new wideband LNB and OTX
- 2 x FC/PC optical outputs
- Space saving design
- Small form factor

FD000188, FD000187

CEI 306-22 COMPLIANT

FD000188
Ricevitore QUATTRO HVHV: output + DTT, output virtuale Ottico–Coax, alimentatore **non incluso** Serie Compact

CEI 306-22 COMPLIANT

FD000187
Ricevitore QUAD: output + DTT, output virtuale Ottico–Coax, alimentatore **non incluso** Serie Compact.

SPECIFICHE		FD000188 (QUATTRO)	FD000187 (QUAD)
DTT, DAB & FM (Elettrica)			
Frequenza RF	DTT	470 - 790 MHz	470 - 790 MHz
	DAB	174 - 240 MHz	174 - 240 MHz
	FM	88 - 108 MHz	88 - 108 MHz
Impedenza nominale		75 Ω	75Ω
Perdita di ritorno		10 dB (min.)	10dB (min.)
Uscita nominale DTT Quad / Quattro		71 dBµV	78 dBµV
Variazione guadagno sulla banda		5 dB (max)	5 dB
Rejection 950-2150MHz		35 dB	35 dB
FM.DAB,DTT & Satellite (Ottica)			
Lunghezza d'onda Ottica		da 1100 a 1650 nm	
Ingresso alimentazione Ottica		-12 dBm (min) / 3 dBm (max)	
Segnali controllo			
Selezione voltaggio verticale		10.5 V (min) / 14.5 V (max)	–
Selezione voltaggio orizzontale		15.5 V (min) / 19 V (max	–
Banda Low / High		0 / 22 Khz	–
Specifiche Elettriche			
Tensione d'ingresso		da 10.5 V a 21 V	
Consumo corrente (Quad)	@10.5V con solo RX1 e Rx2 alimentati	235 mA (max)	–
	@10.5V con solo RX3 e Rx4 alimentati	235 mA (max)	–
Consumo corrente (Quad)	Totale @ 10.5V (aliment. diretta)	470 mA (max)	–
Consumo corrente (Quatro)	@ 10.5V	–	490 mA (max)
Specifiche generiche			
Temperature d'esercizio		da -15° a +50° C	
Misure		128.7 x 116.5 x 27 mm	120.8 x 80.1 x 26.3 mm
Peso		325 g	175 g

LA20D12PB1, FD000342

Alimentatore 20volt per moduli **FD000187/188, F101938, F102029, F102030, FD000199.**

FD000199 - SkyQ dCSS Adapter

The Sky Q dSCR GTU converts optical power to Radio Frequency (RF) power (4 satellite bands and FM, DAB, DTT).

Terrestrial signals are overlaid onto both output ports. All units have built in Automatic Gain Control (AGC) which allows a wide dynamic range of optical levels without affecting output power and quality. One LED indicator allows the user to monitor the status of the unit. it is able to work in legacy, analogue SCR (aSCR) and digital SCR (dSCR) modes.

FD000199:
Optical to RF convertor (Satellite and FM,DAB,DTT)

- The GTU will be connected to a suitable Global Invacom FibreIRS Passive Optical Network (PON), providing minimum optical signal levels of -12.2 dBm at the connection point of the GTU.
- The GT U will be been installed in a dry indoor environment.
- The installation will be carried out by a competent person.
- All ferrule end faces of the FC/PC optical connectors are cleaned prior to making a connection using a suitable fibre optic cleaning kit.
- The keyway on the FC/PC connector is aligned before tightening. Ensuring not to overtighten the connection.
- The installer has followed the installation guide for the ODU32 or optical LNB.

Cable and Connections:
Output satellite 2 x dCSS and legacy
Output 2 only supports terrestrial signals (DVB-T/T2,FM and DAB.)

Power
This unit draws power from the STB (Set Top Box) via output 1. The STB must be capable of delivering >500 mA.

UB N°	UB CENTER FREQUENCY (MHZ)	EN50494	EN50607	USAGE
1	1210	Y	N	Legacy STB and PVR SCR compatible
2	1420	Y	N	
3	1680	Y	N	
4	2040	Y	N	
5	985	N	Y	
6	1050	N	Y	
7	1115	N	Y	
8	1275	N	Y	
9	1340	N	Y	
10	1485	N	Y	
11	1550	N	Y	
12	1615	N	Y	
13	1745	N	Y	
14	1810	N	Y	
15	1875	N	Y	
16	1940	N	Y	

User band frequency plan.

Fibra ottica / componenti attivi
2023 Q3

INDICE

LOHD59

4K UHD

4K@60HZ HDMI 2.0 Fiber Optic Extender

LOHD59

- Uncompressed transmits HDMI video signals up to 1.5km over 2 singlemode fiber cable;
- Highest resolution is up to 3840x2160@60 Hz or 4096x2160@60 Hz; YUV 4:4:4
- Support EDID learning function, improve compatibility, match signal sources and display devices
- TMDS signal Lossless transmission.
- Compliance with HDMI 2.0 and HDCP 1.4/2.2 standard;
- Built-in automatic adjustment system, make the image smooth, clear and stable;
- Built-in ESD protection system;
- Wall-mounted type more convenient
- Simple to install, plug and play;

HDR 4K UHD

PERFORMANCE	
Protocol	HDMI 2.0, HDCP 1.4 / 2.2
Data Rate/ Pixel Clock	18 Gbps / 600 Mhz
Resolution	3840x2160@60/30 Hz; 1920x1200@60 Hz; 1920x1080@60/50 Hz /30/25/24 Hz ; 1080I@60/50 Hz, 1280x720@60/50 Hz
Audio	7.1 channel LPCM, 192 Khz, 24-bit
CONNECTIONS	
HDMI Input/Output	1 HDMI A Female
Fiber Quantity	2 simplex *LC
TRANSMISSION DISTANCE	
Fiber Type / Maximum Distance	50/125 µm OM3-300 MMF: ≤300 m, 9/125 µm G.625D SMF: ≤1500 m
EDDI / HDCP	EDID Auto-Learning, EDID Manage, Support HDCP 1.4 / HDCP 2.2
MECHANISM	
Material	Metal Housing
Dimensions (L*W*H)	108 x 90 x 26 mm
Weight	Approximately 2 * 250 g (Source receiver)
STORAGE	
Working Temp	0° to +50° C
Storage Temp	-20° ~ +70° C
Storage Humidity	5% to 95% (Non - Condensing)
POWER SUPPLY	
Power Adapter	Input: 100-240 Vac / 50-60 Hz - 0.2 A Output : 5 Vdc, 3 A
Power Dissipation	600 - 900 mA
WARRANTY	
Limited Warranty	1 year warranty, Lifetime Maintenance.

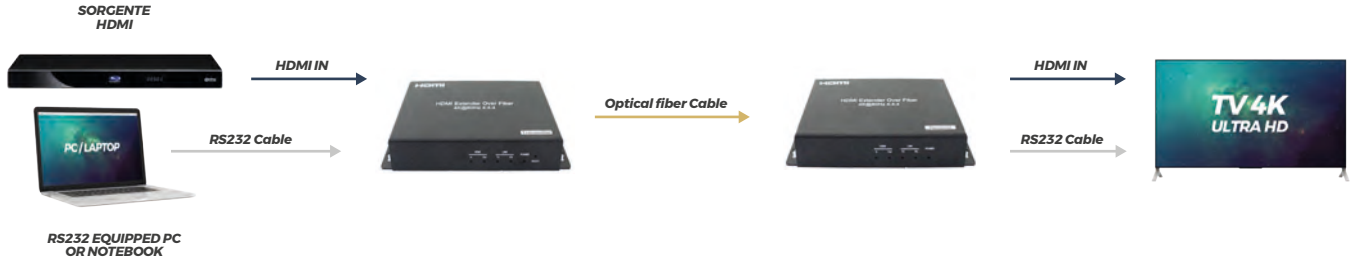
PRODOTTI CORRELATI

FALCPSD

FPLCLC2S3HD

LOHD59

SCHEMA COLLEGAMENTO



LOHD474KU

TVCC

PC

4K UHD

LOHD474KU

- Trasmette il segnale HDMI fino a 10km su cavo in fibra ottica SM
- Supporta risoluzioni fino a 3860x2160@60 Hz
- Compatibile con HDMI 1.4
- Sistema protezione HDCP 2.2
- Semplice da installare, plug-and-play, nessun software aggiuntivo

HDMI USB M&K

SPECIFICA	LOHD474KU
Video	
Standard	HDMI 1.4
Risoluzione	3840x2160@60 Hz
Connettore	HDMI femmina tipo A
Impedenza	100 Ω
Fibra ottica	
Interfaccia	Modello SFP – connettore LC
Tipo fibra	Single Mode
Lunghezza d'onda	1310 nm
Banda	10 Gbps
Tastiera, mouse, video	
Connessioni	PC: connettore USB tipo B Mouse/Tastiera: connettore USB tipo A
Distanza trasmissione	Fibra SM standard fino a 10Km max
Varie	
Alimentatore	5 Vdc - 1 A, dissipazione 5W max
Temperatura operativa	-10° ~ +55° C
Dimensioni	163 x 86 x 24 mm

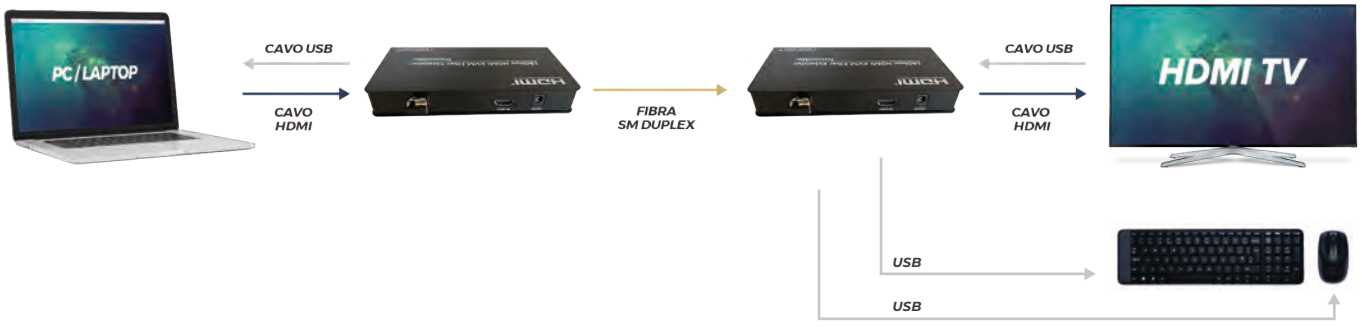
PRODOTTI CORRELATI

FALCPSD

FPLCLC2S3HD

LOHD474KU

SCHEMA COLLEGAMENTO



LOHD27

SPECIFICA	LOHD27
Video	
Standards	HDMI 720P / 1080p
Maximum pixel clock	165 MHz
Maximum data rate	6.75 Gbps
Risoluzione	Up to 1920x1080P@60 Hz
Connettore	Femmina HDMI type A
Impedenza	100 Ω
Infrarosso	
Interfaccia	3.5 mm earphone seat
Tipo di segnale	Digitale
Trasmissione	Unidirezionale
Carrier	38 Khz
Fibra Ottica	
Interfaccia	1x HDMI / 1x conn. FC
Tipo fibra	Single Mode
Lunghezza d'onda	1310 nm, 1510 nm
Banda	6.25 Gbps
Distanza trasmissione	20 Km
Varie	
Alimentazione	5 Vdc / 2 A
Power dissipation	Max 5 W
Temperatura d'esercizio	-5° ~ +70° C
Dimensioni	113 x 80 x 28 mm

LOHD27

- Aluminum shell, small volume, lightweight design, more beautiful, strong anti-interference ability; wall-mounted type more convenient
- Using single Mode Fiber to transmit 20 Km
- Video resolution up to 1920x1080@60 Hz
- The sender supports HDMI local loop output
- Support infrared (38 Khz) signal return control
- HDMI 1.3 and HDCP 1.2 standards
- High compatibility, automatic matching of signal sources and display devices
- Built-in automatic adjustment system for smooth, clear and stable image
- Built-in ESD electrostatic protection circuit, easy to install, plug and play
- Real-time Video / Audio Transmission from HDMI to Fiber based on IP

PRODOTTI CORRELATI

FA-FCP-SS

FOFAL****

LOHD27

SCHEMA COLLEGAMENTO

LOHD47

SPECIFICHE	LOHD47
Video	
Standards	HDMI 1.3, HDCP 1.2
Pixel clock (max)	165 MHz
Maximum Data Rate	6.75 Gbps
Resolution Range	Max: 1920x1080@60 Hz
Connector	Female HDMI Type A
Impedance	100 Ω
K/M	
Connector	USB-A
Signal	USB HID
Infrared	
Interface	3.5 mm Earphone Seat
Fiber Type	Single Mode
Transmission Direction	Unidirectional
Carrier Frequency	38 Khz
Optical Fiber	
Interface	FC connector
Fiber Type	Single Mode
Wavelenght	TX 1310 nm; RX 1550 nm
Interface Bandwidth	155 Mbps
Transmission Distance	Standard: 20 Km
Other	
Power Supply	5 Vdc - 2 A
Power Dissipation	Max: 5 W
Temperature	Operating: -5° ~ +70° C
Humidity	Operating: 5% ~ +90%
Dimension	100 x 97.5 x 18.6 mm

LOHD47

- Aluminum shell, small volume, lightweight design, more beautiful, strong anti-interference ability; wall-mounted type more convenient
- Using single Mode Fiber to transmit 20 Km
- Video resolution up to 1920x1080@60 Hz
- The sender supports HDMI local loop output
- Support **USB** with keyboard and mouse control
- Support for one sender to multi-receiver transmission via an optical switch
- Support infrared (38 Khz) signal return control
- HDMI 1.3 and HDCP 1.2 standards
- High compatibility, automatic matching of signal sources and display devices
- Built-in automatic adjustment system for smooth, clear and stable image
- Built-in ESD electrostatic protection circuit, easy to install, plug and play
- Real-time Video / Audio Transmission from HDMI to Fiber based on IP

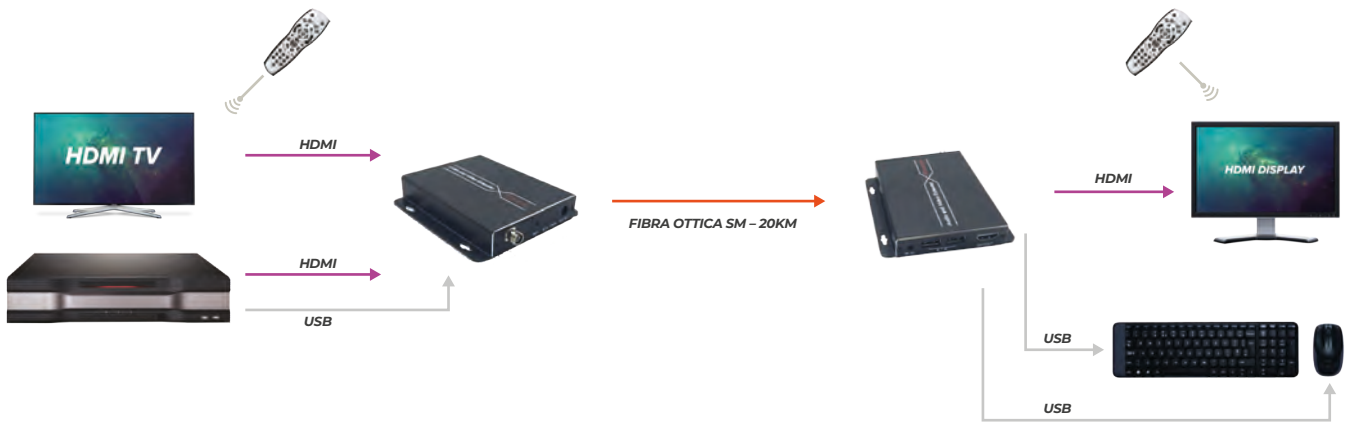
PRODOTTI CORRELATI

FA-FCP-SS

FOFAL****

LOHD47

SCHEMA COLLEGAMENTO



LO591VTR1DFSW, LO592VTR1DFSW, LO91VTR1DFSW, LO92VTR1DFSW

5 MP 2 MP

LO591VTR1DFSW: 5MP, TX+RX 1 canale AHD/TVI/CVI 1080p, 960H + 1 RS 485 Data

LO592VTR1DFSW: 5MP, TX+RX 2 canali AHD/TVI/CVI 1080p, 960H + 1 RS 485 Data

LO91VTR1DFSW: 1080p, TX+RX 1 canale AHD/TVI/CVI 1080p, 960H + 1 RS 485 Data

LO92VTR1DFSW: 1080p, TX+RX 2 canali AHD/TVI/CVI 1080p, 960H + 1 RS 485 Data

SPECIFICA	LO591VTR1DFSW / LO592VTR1DFSW		LO91VTR1DFSW / LO92VTR1DFSW	
Modello	**TX**	**RX**	**TX**	**RX**
Ingresso	1x / 2x BNC 1x RS-485	fibra FC/PC	1x / 2x BNC 1x RS-485	fibra FC/PC
Uscita	fibra FC/PC	1x / 2x BNC 1x RS-485	fibra FC/PC	1x / 2x BNC 1x RS-485
Video				
Interfaccia	BNC			
Impedenza	75 Ω			
Ampiezza video	1.0 Vpp typ.			
Risoluzione	5MP / 4MP / 3MP / 1080p / 720p / 960H		AHD / TVI / CVI / 1920x1080 / 960H	
Guadagno differenziale (10%-90% APL)	< ±1.5 %		< ±1 % typ.	
Guadagno di fase (10%-90% APL)	< ±1 % typ.			
SNR	>60 dB (8Bit)			
Interfaccia Ottica				
Lunghezza d'onda	1310 / 1550 nm		1310 / 1470 / 1610 nm	
Tipo cavo fibra ottica	9/125 µ single mode			
Potenza in uscita tipica	-8 ~ -3 dBm		-3 ~ -9 dBm	
Sensibilità ricezione	-26 dBm			
Interfaccia	FC/PC			
Varie				
Alimentazione	110 ~ 240 Vac, 5 Vdc - 2 A			
Temperatura d'esercizio	-15° ~ +65° C		0° ~ +60° C	

LO594VTR1DFSW, LO598VTR1DFSW, LO94VTR1DFSW, LO98VTR1DFSW

5 MP 2 MP

LO594VTR1DFSW: 1080p, TX+RX 4 canali AHD/TVI/CVI 1080p, 960H + 1 RS 485 Data One Way

LO598VTR1DFSW: 1080p, TX+RX 8 canali AHD/TVI/CVI 1080p, 960H + 1 RS 485 Data One Way

LO94VTR1DFSW: 1080p, TX+RX 4 canali AHD/TVI/CVI 1080p, 960H + 1 RS 485 Data One Way

LO98VTR1DFSW: 1080p, TX+RX 8 canali AHD/TVI/CVI 1080p, 960H + 1 RS 485 Data One Way

SPECIFICA	LO594VTR1DFSW / LO598VTR1DFSW		LO94VTR1DFSW / LO98VTR1DFSW	
Modello	**TX**	**RX**	**TX**	**RX**
Ingresso	4x / 8x BNC 1x RS-485	fibra FC/PC	4x / 8x BNC 1x RS-485	fibra FC/PC
Uscita	fibra FC/PC	4x / 8x BNC 1x RS-485	fibra FC/PC	4x / 8x BNC 1x RS-485
Video				
Interfaccia	BNC			
Impedenza	75 Ω			
Ampiezza video	1.0 Vp-p typ.			
Risoluzione	5MP / 4MP / 3MP / 1080p / 720p / 960H		AHD / TVI / CVI / 1920x1080 / 960H	
Guadagno differenziale (10%-90% APL)	< ±1.5 %		< ±1% typ.	
Guadagno di fase (10%-90% APL)	< ±1°		< ±1% typ.	
SNR	>67 dB		>60 dB (8 Bit)	
Interfaccia Ottica				
Lunghezza d'onda	1310 / 1550 nm		1310 / 1470 / 1610 nm	
Tipo cavo fibra ottica	9/125 µ single mode			
Potenza in uscita tipica	-8 ~ -3 dBm		-3 ~ -9 dBm	
Sensibilità ricezione	-26 dBm			
Interfaccia	FC/PC			
Varie				
Alimentazione	110 ~ 240 Vac, 5Vdc - 2A			
Temperatura d'esercizio	-15° ~ +65° C		0° ~ +60° C	

LO7xVTR1DFSW

2MP

LO71VTR1DFSW: TX+RX 1 canale AHD/TVI/CVI 1080p, 960H + 1 RS 485 Data One Way, 1x Fibra Multi Mode, portata 800 m.

LO72/74VTR1DFSW: TX+RX 2/4 canali AHD/TVI/CVI 1080p, 960H + 1 RS 485 Data One Way, 1x Fibra Multi Mode, portata 300 m.

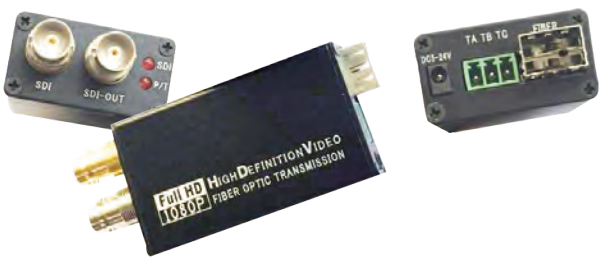
SPECIFICA	LO71VTR1DFSW / LO72VTR1DFSW		LO74VTR1DFSW	
Modello	**TX**	**RX**	**TX**	**RX**
Ingresso	1x/2x BNC 1x RS-485	1x/2x BNC 1x RS-485	4x BNC 1x RS-485	4x BNC 1x RS-485
Uscita	Fibra ST/PC			
Video				
Interfaccia	BNC			
Impedenza	75 Ω			
Ampiezza video	1.0 Vpp typ.			
Risoluzione	AHD / TVI / CVI / 1920x1080 / 960H			
Guadagno differenziale (10%-90% APL)	< ±1% typ.			
Guadagno di fase (10%-90% APL)	< ±1% typ.			
SNR	>60 dB (8Bit)			
Interfaccia Ottica				
Lunghezza d'onda	1310 - 1470 - 1610 nm			
Tipo cavo fibra ottica	50/125 µ multimode			
Potenza in uscita tipica	-3 ~ -9 dBm			
Sensibilità ricezione	-26 dBm			
Varie				
Alimentazione	110 ~ 240 Vac, 5 Vdc - 2 A			
Temperatura d'esercizio	0° ~ +60° C			

LOUSB3SMFC

LOUSB3SMFC:
KIT trasmettitore + ricevitore estensore USB
Trasmettitore supporta:
2x USB tastiere, mouse o memoria USB
Ricevitore supporta:
1x USB PC NVR/DVR, connessione FC/PC

SPECIFICA	LOUSB3SMFC	LOUSB3MMST
Fibra Ottica		
Connettore	1x SM FC/FC	2x MM SC/ST
Lunghezza d'onda	1310 / 1550nm	
Portata	20 Km	
Alimentazione		
Voltaggio	5 Vdc	
TX / RX consumo	< 3.5 W	
Varie		
Case	Alluminio nero	
Dimensioni	104 x 104 x 28 mm	
Peso (netto)	0.75 Kg	
Temperatura d'esercizio	-20° ~ +70° C	

LO121VTRDFSW / LO31VTRDFSW



LO121VTRDFSW: TX+RX 1 canale HD-SDI 4K UHD + 1 RS 485 Data one way 1 Fibra Single mode Connett. di Uscita FC/PC portata 10 Km

LO31VTRDFSW: TX+RX 1 canale HD-SDI 1080p + 1 RS 485 Data one way 1 Fibra Single mode Connett. di Uscita FC/PC portata 10 Km

LO91VTR1D2A2KLFS, LO91VTR2B2A5KLFS

LO91VTR1D2A2KLFS: TX+RX Ottico 1 ch Video +1 ch Bi-Di Audio + 1 ch RS485 Data + 2 x Contatti Bi-Di NC/NA + Lan 10/100 Single mode conn. FC/PC 20 Km

LO91VTR2B2A5KLFS: TX+RX Ottico 1 ch Video +1 ch Bi-Di Audio + 2 ch BI-DI RS485 Data + 4 x Contatti Bi-Di NC/NA + 1 x NC/NA Fibra loss + Lan 10/100 SM. FC/PC 20 Km

LO11xT1DFSW, LO12xT1DFSW, LO14xT1DFSW

LO11xT1DFSW: Trasmettitore 1x Video 1080p + 1 Way RS485 Data Single mode Ottico Conn. Uscita FC/PC (fibra Single Mode)

LO12xT1DFSW: Trasmettitore 2x Video 1080p + 1 Way RS485 Data Single mode Ottico Conn. Uscita FC/PC (fibra Single Mode)

LO14xT1DFSW: Trasmettitore 4x Video 1080p + 1 Way RS485 Data Single mode Ottico Conn. Uscita FC/PC (fibra Single Mode)

SPECIFICHE		
Modello	**TX**	
Ingresso	1x/2x BNC / 1x RS-485	4x/8x BNC / 1x RS-485
Uscita	Fibra FC/PC	Fibra FC/PC
Video		
Interfaccia	BNC	
Impedenza	75 Ω	
Ampiezza video	1.0 Vpp typ.	
Risoluzione	1920 x 1080	
Guadagno differ. (10%-90% APL)	< ±1 % typ.	
Guadagno di fase (10%-90% APL)	< ±1 % typ.	
SNR	>60 dB (8Bit)	
Interfaccia Ottica		
Lunghezza d'onda	1310 - 1470 - 1610 nm	
Tipo cavo fibra ottica	9/125 µ single mode	
Potenza in uscita tipica	-3 ~ -9 dBm	
Sensibilità ricezione	-26 dBm	
Interfaccia	FC/PC	
Varie		
Alimentazione	110 ~ 240 Vac, 5 Vdc - 2A	
Temperatura d'esercizio	0° ~ +60° C	

LOFMTR9SC, LOFMTR50SC

LOFMTR9SC: TX + RX ottico single mode adatto per trasporto BUS per centrali allarme RS-232/422/485 9/125 SC/PC 20 Km

LOFMTR50SC: TX + RX ottico multimode adatto per trasporto BUS per centrali allarme RS-232/422/485 50/125 SC/PC 1 Km

Fiber modem is a multi-function and economic RS-232/422/485 interface fiber optic product. Is the best choice to connect RTU to HOST or SCADA controller. It uses Optic fiber as transmission media, increasing the system transmitting function.

Function and characteristic:

- Support RS-232/422/485 interface
- Asynchronous, point to point, rate up 115 Kbps
- Support 5 Vdc power input, consumption 2 W
- 1500 W surge protection, 15 KV static protection
- RS-232/422 port support 32 node (can choise hand tailor 128 node)
- Working wavelength: 1310 nm (multi mode and single mode)
- Auto test signal rate, zero delay, auto-transmit
- Transmit distance: RS-232 port 15 m, RS422/485 port 1500 m, optical port multi mode 2 Km, single mode 20 Km
- Working temperature -25° to +70°C
- Dimensions: 110 x 104 x x28 mm

Fibra ottica / componenti attivi
2023 Q3

INDICE

LOMCK1G86S, LOMCK1G44S

LOMCK1G86S

6 x

LOMCK1GSCS

LOMCK1G44S

4 x

LOMCK1GSCS

LOMCK1G86S (LOMCK1G44S)

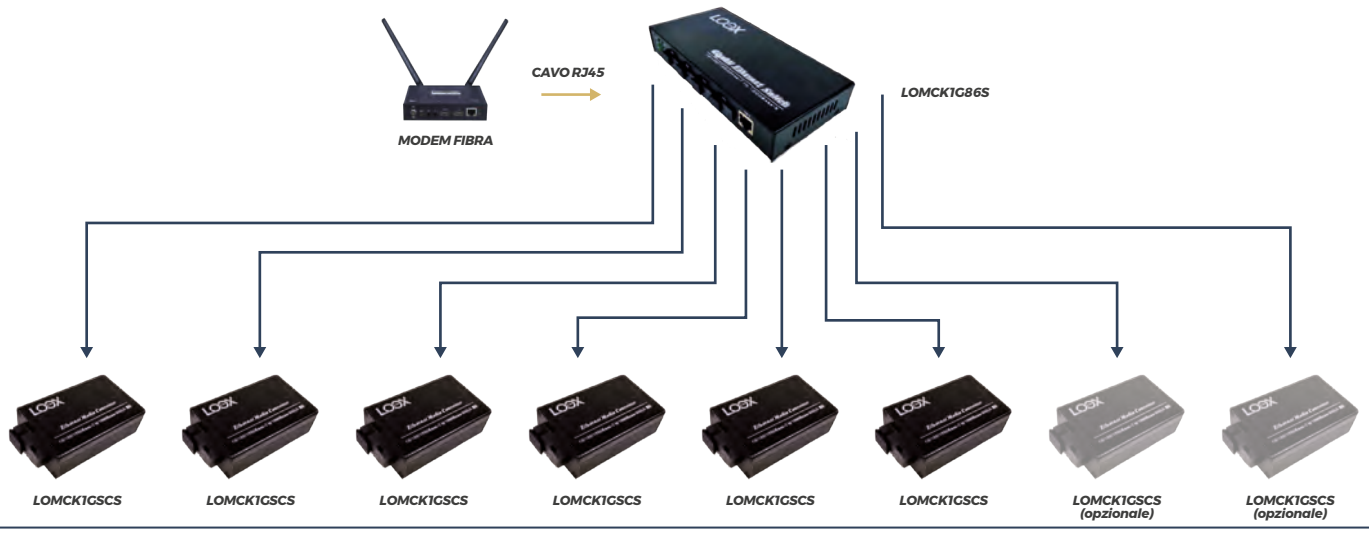
- 8× 1000Base-SX/LX to 2× 10/100/1000Base-T Port (4x 1000)
- RJ45 support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Each port has the complete LED Indicator light
- Support IEEE802.1d Spanning Tree
- Supports high performance QoS function on each port
- Built-in 1 Mb SRAM for packet buffer
- Internal 8K MAC Address Entities
- Support 9K Jumbo packet
- Flow control fully supported
- Supports 256 Bridge Multicast groups
- Support broadcast storm protection
- Wide-range redundant power design (4.5 ~ 20 Vdc)
- Requires no configuration and will instantly operate as soon as you power it up

SPECIFICA	LOMCK1G86S	LOMCK1G44S
Protocol Standards	IEEE802.3 10Base-T / IEEE802.3u 100Base-TX/FX / IEEE802.3ab 1000Base-T / IEEE802.3z 1000 Base-SXLX / IEEE802.3x Flow control / IEEE802.1p QoS / IEEE802.1d Spanning Tree / IEEE802.3az	
Copper port		
Connector	RJ45	
Data Rate	10/100/1000 Mbps	
Distance	0 ~ 100 m	
UTP Type	UTP-5e or higher level	
Fiber Port Parameters		
Connector	8x SC Simplex Port	4x SC Simplex Port
Data rate	1.25 Gbps	
Optical wavelength	1310 / 1550 nm	
Distance	10 Km	
Performance		
Processing Type	Store and forward	
MAC Table Size	8K	1K
Buffer Space	1 Mb	
Maximum Packet Lenght	9 Kb	
Back bandwidth	20G	14G
Time Delay	< 20µs	
Power		
Input voltage	100 ~ 240 Vac - 50/60 Hz	
Machine power connector	DC socket	
Machine operating voltage	5 Vdc	
Machine power consumption	4 ~ 10 W	1.8 ~ 5 W
Working environment		
Working temperature	-10° ~ +55°C	
Relative humidity	5% ~ 95% non-condensing	
Mechanical Structure		
Size	216 x 133 x 30 mm	160 x 84 x 26 mm
Net Weight	0.55 Kg	0.30 Kg
Body color	Metal and black	

FTTH SO-HO HOTEL B&B 1 GB

LOMCK1G86S

SCHEMA COLLEGAMENTO



LOMCK1GSCS (KIT)

SPECIFICA	LOMCK1GSCS
Protocol Standards	IEEE802.3 10Base-T / IEEE802.3u 100Base-TX/FX IEEE802.3ab 1000Base-T / IEEE802.3z 1000Base-SX LX / IEEE802.3x Flow control / IEEE802.1q VLAN / IEEE802.1pQoS / IEEE802.1d Spanning Tree
RJ45 Ports Parameters	
Connector	RJ45
Transmission Rate	10/100/1000 Mbps
UTP Type	UTP-5e or higher
Distance	0 ~ 100 meters
Fiber Port Parameters	
Connector	SC Simplex Port
Data rate	1.25 Gbps
Optical wavelength	1310 / 1550 nm
Distance	10 Km
Performance	
Processing Type	Store and forward
MAC Table Size	2K
Buffer Space	1 Mb
Maximum Packet Length	9 Kb
Time Delay	<20 µs
Power	
Input voltage	100 ~ 240 Vac - 50/60 Hz
Connector	DC socket
Working Voltage	5 ~ 16 Vdc
Power Consumption	0.75 ~ 3 W
Environment	
Storage temperature	-40° ~ +70° C
Operating temperature	-10° ~ +55° C
Relative humidity	5% ~ 95% (no condensation)
Physical characteristics	
Dimension	62.3 x 42.3 x 22 mm
Weight	0.1 Kg
Color	Metal and black

LOMCK1GSCS

Kit composto di LOMCK1GSC53 e LOMCK1GSC35

- 1× 1000Base-SX to 1× 10/100/1000Base-T Port
- RJ45 support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Each port has the complete LED Indicator light
- Support IEEE802.1d Spanning Tree
- Supports high performance QoS function on each port
- Flow control fully supported
- Support broadcast storm protection
- Wide-range redundant power design (5~16 Vdc)
- 1×9 fixed fiber module or SFP slot optional
- Support max forwarding packet length 9K bytes option
- Requires no configuration and will instantly operate as soon as you power it up
- Small volume
- Low power consumption

FTTH SO-HO HOTEL B&B 1 GB

LOMCK1GSCS (KIT)

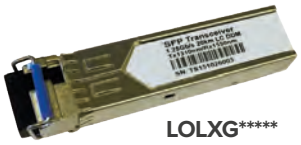
SCHEMA COLLEGAMENTO

1 FIBRA OTTICA SINGLE MODE

LOMCXESFP, LOLXG****

LOMCXESFP

10 GB



LOLXG***

SPECIFICHE	
Velocità trasmissione	10Gbps
Protocolli	IEEE802.3an(10Gbase-T) IEEE802.3ae(10Gbase-SR/LR/ER/ZR)
Tipo di accesso	10G LAN
Tipo di interfaccia	RJ45 To/From SFP+ RJ45 To/From XFP
Distanza di trasmissione	XFP / SFP+ module: Up to 80 Km 10Gbase-T: 100 m Cat .6a cable
Maximum Packet Forwarding Rate	14,880,950/S
Alimentazione	100 ~ 240 Vac – 50 ~ 60 Hz 40 ~ 50 Vdc – 50 ~ 60 Hz
Consumo	≤6W (senza modulo)
Dimensioni	90 x 60 x 22 mm

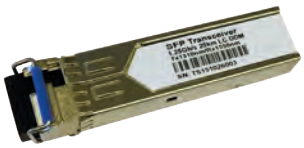
LOMCXESFP: Media converter, con porta RJ45 da 10G, auto-sensing per SFP slot, LC Duplex - SC Simplex.

LOLXG02D: Modulo SFP 10GBASE-LRM, 1310 nm FP, MM, 220 m, Duplex LC.
LOLXG10D: Modulo SFP 10GBASE-LR, 1310 nm DFB, SM, 10 Km, Duplex LC.
LOLXG20D-27: Modulo SFP 10GBASE-LRM, 1310 nm DFB, SM, 20 Km, DDM Simplex SC.
LOLXG20D-33: Modulo SFP 10GBASE-BX-D BIDI, 1330 nm DFB, SM, 20 Km, DDM Simplex SC.

LOMCGESFP, LOMC2RGESFP, LOLG1*****

1 GB

LOMCGESFP



LOLG1***

SPECIFICHE	
Protocollo	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3ab 1000Base-T IEEE802.3z 1000Base-SX/LX
Connessioni	
Rj45	10/100/1000 Mbps, Auto MDI/MDI-X
	UTP/STP Cat. 3, 4, 5 Cable EIA/TIA-568 100 Ω (100 m)
Connessione Fibra Ottica	
Fibra Ottica	1000 Mbps, 1000Base-SX/LX/ZX (SC/ST/FC connector) – Single Mode 0 ~ 120 Km
Connettore	LC
Lunghezza d'onda	1310 nm
Potenza max trasmissione	≥ -10
Sensibilità	≤ -25
Varie	
Trasferimento dati	10 Mbps, 100 Mbps, 1000 Mbps
Voltaggio ingresso	100-240 Vac; 12 ~ -48 Vdc
Voltaggio uscita	5 Vdc / 2 A
Consumo	1 ~ 5 W
Temperatura operativa	0° ~ 55° C
Dimensioni	90 x 60 x 22 mm
Peso (lordo)	0.4 Kg

LOMCGESFP: media converter, con porta RJ45 10/100/1000M auto-sensing per slot SFP LC Duplex - SC Simplex.

LOLGRJ45: Modulo RJ45 Rame su slot SFP 10/100/1000 BASE-T
LOLG1G04D: Module SFP 1000BASE, 850 nm, FP, MM, 0,5 Km, 10dB DDMI Duplex LC
LOLG1G06D: Modulo SFP 1000BASE, 1310 nm, FP, MM, 2 Km, 10 dB DDMI Duplex LC
LOLG1G06D-35: Modulo SFP 1000BASE-BX-U (TX 1310 RX1550) BIDI 1310 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G06D-53: Modulo SFP 1000BASE-BX-D (TX 1550 RX1310) BIDI 1550 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G20D: Modulo SFP 1000BASE-LX 1310 nm, FP, SM, 20 Km, 15 dB DDMI Duplex LC
LOLG1G20D-35: Modulo SFP 1000BASE-BX-U (TX 1310 RX1550) BIDI 1310 nm, FP, SM, 20 Km, 14 dB DDMI Simplex SC
LOLG1G20D-53: Modulo SFP 1000BASE-BX-D (TX 1550 RX1310) BIDI 1550 nm DFB, SM, 20 Km, 14 dB DDMI Simplex SC
LOLG1G20D-34: Modulo SFP 1000BASE-BX-U (TX 1310 RX1490) BIDI 1310 nm, FP, SM, 20 Km, 14 dB DDMI Simplex SC
LOLG1G20D-43: Modulo SFP 1000BASE-BX-D (TX 1490 RX1310) BIDI 1490 nm DFB, SM, 20 Km, 14 dB DDMI Simplex SC

LOMC2RGESFP: media converter con 2x RJ45 10/100/1000M auto-sensing per SFP slot LC Duplex - SC Simplex. Dimensioni 90 x 60 x 22 mm.

LOMC2RGESFP

LOMCFESFP, LOLF1*****

LOMCFESFP

LOLF1***

SPECIFICHE	
Protocollo	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX/100Base-FX
Connessioni	
RJ45	1× 10/100BaseT(X), Auto-negotiation, Auto MDI/MDI-X UTP/STP Cat. 3, 4, 5 Cable EIA/TIA-568 100 Ω (100 m)
Connessione Fibra Ottica	
Fibra Ottica	1× 100Base-FX (SC/ST/FC connector) Single Mode 0 ~ 120 Km
Connettore	LC
Lunghezza d'onda	1310 nm
Potenza max trasmissione	≥ -12
Sensibilità	≤ -36
Varie	
Trasferimento dati	10Mbps, 100Mbps
Voltaggio ingresso	100-240 Vac; 12/-48 Vdc
Voltaggio uscita	5 Vdc / 1 A
Consumo	1 ~ 5W
Temperatura operativa	0° ~ +55° C
Dimensioni	90 x 60 x 22 mm
Peso (lordo)	0.4 Kg

LOMCFESFP: Media converter, con porta RJ45 10/100M auto-sensing per slot SFP LC Duplex - SC Simplex. Dim. 90x60x22mm.

LOLF1E06D: Modulo SFP 100BASE-FX 1310nm FP MM, 2 Km, 17 dB DDMI Duplex LC.
LOLF1E06D-35: Modulo SFP 100BASE-BX-U (TX 1310 RX1550) BIDI 1310 nm FP, MM, 2 Km, 13 dB DDMI Simplex SC.
LOLF1E06D-53: Modulo SFP 100BASE-BX-D (TX 1550 RX1310) BIDI 1550 nm FP, MM, 2 Km, 13 dB DDMI Simplex SC.
LOLF1E20D: Modulo SFP 100BASE-LX 1310 nm FP SM, 20 Km, 19 dB DDMI Duplex LC.
LOLF1E20D-35: Modulo SFP 100BASE-BX-U (TX 1310 RX1550) BIDI 1310 nm FP, SM, 20 Km, 14 dB DDMI Simplex SC.
LOLF1E20D-53: Modulo SFP 100BASE-BX-D (TX 1550 RX1310) BIDI 1550 nm DFB, SM, 20 Km, 14 dB DDMI Simplex SC.

LOM2SFP - Fiber to fiber converter

10 GB

LOM2SFP
- 125M~11.7G OEO Converter (3R Repeater) is connection between fiber to fiber 10 Gbps equipment
- Function as fiber media converter, or as fiber repeater for long distance transmission.
- OEO for network backbone (SAN, LAN, MAN). Support SDH/ SONET STM-64/OC-192 10G fiber channel 10G Ethernet etc.
- Can be applied in Telecommunication room, R&D laboratory, Data center, etc.
- 1310nm/1550nm/CWDM/DWDM Optical Wavelength Conversion. Support Loopback

SPECIFICHE	
Performance Data	**Technical Indexes**
Equipment function	3R Repeater
Transmission Speed	125 Mbps - 11.7 Gbps
Protocols	Fast Ethernet / STS-3/STM-1 / ESCON/SBCON / STS-12/STM-4 / 1×Fiber Channel / Gigabit Ethernet 2×Fiber Channel / STS-48/STM-16 / 2.5 InfiniBand or PCI Express / 4×Fiber Channel / 8.5G Fiber Channel / SONET OC-192, SDH STM-64 (9.95Gbps) / 10G WAN (10Gbps) / 10G LAN (10.31Gbps) / OTN OTU-2 (G.709) (10.70Gbps) / 10G LAN with 255/237 FEC coding (11.09Gbps) / 10G Fiber Channel (11.32Gbps) / 10G POS
Interface Type	Type A : XFP to SFP+ / Type B : SFP+ to XFP
Transmission Distance	XFP / SFP+ module: up to 80 Km
Maximum Packet Forwarding Rate	14,880,950/S
Power requirement	Rack-mountable : 85 ~ 220 Vac or -48 Vdc Standalone: 110~220Vac OR -48 to 5V - 2A Power consumption: ≤4W
Work Environment	Operating Temperature: 0 ~ +50° C Humidity: 5%~90% (non-condensing)
Dimension	Standalone: 60 x 20 x 90 mm

LOMC2R2GESFP

LOMC2R2CGESFP

1 GB

SPECIFICA	LOMC2R2CGESFP
Protocol Standards	IEEE802.3 10Base-T / IEEE802.3u 100Base-TX/FX / IEEE802.3ab 1000Base-T / IEEE802.3z 1000Base-SX/LX / IEEE802.3x Flow control / IEEE802.1q VLAN /IEEE802.1pQoS / IEEE802.1d Spanning Tree
RJ45 Ports Parameters	
Connector	2x RJ45
Transmission Rate	10/100/1000 Mbps
UTP Type	UTP-5e or higher
Distance	0 ~ 100 m
Fiber Port Parameters	
Connector	2x SFP slot
Data rate	1.25 Gbps
Optical wavelength	MM 850, 1300, 1310 nm / SM 1310, 1550 nm
Distance	MM up to 5Km / SM up to 60 Km
Power	
Input voltage	100 ~ 240 Vac - 50/60 Hz
Connector	DC socket
Working Voltage	5 Vdc - 2A
Power Consumption	10W max
Environment	
Storage temperature	-40° ~ +105° C
Operating temperature	-10° ~ +70° C
Relative humidity	5% to 90% (no condensation)
Physical characteristics	
Dimension	95 x 70 x 26 mm
Weight	0.15 Kg
Color	Metal and black

LOMC2R2GESFP

- 2× 10/100/1000Base-T Port (4x 1000)
- 2x RJ45 support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Each port has the complete LED Indicator light
- Support IEEE802.1d VLAN tag, Spanning Tree
- Flow control fully supported
- Supports over-sized packets up to 1552 Bytes
- Requires no configuration and will instantly operate as soon as you power it up

LOLG1***

LOLG1G04D: Module SFP 1000BASE, 850 nm FP, MM, 0,5 Km, 10 dB DDMI Duplex LC
LOLG1G06D: Module SFP 1000BASE, 1310 nm FP, MM, 2 Km, 10 dB DDMI Duplex LC
LOLG1G06D-35: Modulo SFP 1000BASE-BX-U (TX 1310 - RX1550) BIDI 1310 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G06D-53: Modulo SFP 1000BASE-BX-D (TX 1550 - RX1310) BIDI 1550 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G20D: Module SFP 1000BASE-LX 1310 nm FP, SM, 20 Km, 15 dB DDMI Duplex LC
LOLG1G20D-35: Module SFP 1000BASE-BX-U (TX 1310 - RX1550) BIDI 1310 nm FP, SM, 20 km, 14 dB DDMI Simplex SC
LOLG1G20D-53: Module SFP 1000BASE-BX-D (TX 1550 - RX1310) BIDI 1550 nm DFB, SM, 20 Km, 14 dB DDMI Simplex SC

LOMC2R2CGESFP

SCHEMA COLLEGAMENTO

7IS02GPS-2F

7IS02GPS-2F

SPECIFICA	7IS02GPS-2F
Protocol Standards	IEEE802.3 10Base-T / IEEE802.3u 100Base-TX/FX / IEEE802.3ab 1000Base-T / IEEE802.3z 1000Base-X / IEEE802.3af POE / IEEE802.3at POE
RJ45 Ports Parameters	
Connector	2x RJ45
Transmission Rate	10/100/1000 M
UTP Type	UTP-5E or higher
Distance	0 ~ 100 meters
Fiber Port Parameters	
Connector	2x SFP slot
Data rate	1.25 Gbps
Optical wavelength	MM 850, 1300, 1310 nm / SM 1310, 1550 nm
Distance	MM up to 5Km / SM up to 60 Km
Power	
Input voltage	100 ~ 240Vac - 50/60 Hz
Connector	2-pin terminal block
Working Voltage	12 - 48 Vdc
Power Consumption	5 W max (no POE load)
Environment	
Operating temperature	-40° ~ +75° C
Relative humidity	5% to 90% (no condensation)
Physical characteristics	
Dimension	95 x 70 x 30 mm
Weight	0.25 Kg
Case / Color	Aluminium / Black

7IS02GPS-2F
- 2× 10/100/1000Base-T Port
- 2x RJ45 support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- 2x 1000Mbps SFP fiber ports
- Each port has the complete LED Indicator light
- Supports IEEE802.3af PoE (15.4 W) or IEEE802.3at PoE+ (30 W)
- Supports Link Fault Pass Through
- MAC address table 2K
- Supports 9K Bytes Jumbo Frame
- Supports DIN-Rail & Wall-mount installation
- Requires no configuration and will instantly operate as soon as you power it up

1 GB

LOLG1***

LOLG1G04D: Module SFP 1000BASE, 850 nm FP, MM, 0,5 Km, 10 dB DDMI Duplex LC
LOLG1G06D: Module SFP 1000BASE, 1310 nm FP, MM, 2 Km, 10 dB DDMI Duplex LC
LOLG1G06D-35: Modulo SFP 1000BASE-BX-U (TX 1310 - RX1550) BIDI 1310 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G06D-53: Modulo SFP 1000BASE-BX-D (TX 1550 - RX1310) BIDI 1550 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G20D: Module SFP 1000BASE-LX 1310 nm FP, SM, 20 Km, 15 dB DDMI Duplex LC
LOLG1G20D-35: Module SFP 1000BASE-BX-U (TX 1310 - RX1550) BIDI 1310 nm FP, SM, 20 Km, 14 dB DDMI Simplex SC
LOLG1G20D-53: Module SFP 1000BASE-BX-D (TX 1550 - RX1310) BIDI 1550 nm DFB, SM, 20 Km, 14 dB DDMI Simplex SC

PRODOTTI CORRELATI

LOC48V60W

SPECIFICHE	
Alimentazione	100 ~ 240Vac – 50/60Hz
Uscita	48 Vdc - 1,25 A
Potenza	60 W
Dimensioni	110 x 52 x 33 mm
Note	Adatto per serie POE 7IS102GPS-2F

7IS024GPS-RJ, 7IS022GPS-RJ

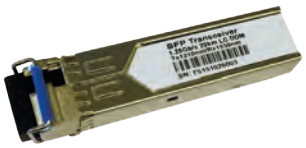
7IS024GPS-RJ

7IS024GPS-RJ, 7IS022GPS-RJ

- Mini industrial switch, DIN-rail mounting method
- 4× 10/100/1000Base-T Port (2x 7IS022GPS-RJ)
- 2x 1000 Mbps SFP fiber ports
- RJ45 ports support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Each port has LED Indicator light
- 4KV Ethernet surge protection
- Max power to 15.4 W under af standard and 30 W under at standard to each PoE port
- Support IEEE802.1d VLAN tag, Spanning Tree
- Flow control fully supported
- MAC address table 8K
- Supports for up to 9K long packet transmission
- Support dual input power supply 48-52 Vdc, output power is determinated by POE load
- IP40 grade protection, corrugated high strenght metal casing
- The reliable industrial grade design could ensure continuous and stable operation of the automation system.

SPECIFICA	7IS024GPS-RJ / 7IS022GPS-RJ
Protocol Standards	IEEE802.3i 10Base-T / IEEE802.3u 100Base-TX/ IEEE802.3af POE IEEE802.1af DTE Power via MIDI / IEEE802.3x Flow control IEE-E802.3z 1000Base-SX/LX, IEEE802.1d Spanning tree, IEEE802.1p QoS, IEEE802.3az
RJ45 Ports Parameters	
Connector	4x RJ45 / 2x RJ45
Transmission Rate	10/100/1000 Mbps
UTP Type	UTP-5e or higher
Distance	0 ~ 100 meters
Fiber Port Parameters	
Connector	2x SFP slot
Data rate	1.25 Gbps
Optical wavelength	MM 850, 1310 nm / SM 1310, 1490, 1550 nm
Distance	MM up to 2 Km / SM up to 120 Km
Power	
Input voltage	100 ~ 240 Vac - 50/60 Hz
Connector	Flange terminal
Working Voltage	5 Vdc
Power Consumption	10 W max (no POE load)
Environment	
Operating temperature	-40° ~ +85° C
Relative humidity	5% to 90% (no condensation)
Physical characteristics	
Dimension	114 x 93 x 35 mm
Weight	0.35 Kg
Color	Metal and black

1 GB



LOLG1***

LOLG1G04D: Module SFP 1000BASE, 850 nm FP, MM, 0,5 Km, 10 dB DDMI Duplex LC
LOLG1G06D: Module SFP 1000BASE, 1310 nm FP, MM, 2 Km, 10 dB DDMI Duplex LC
LOLG1G06D-35: Modulo SFP 1000BASE-BX-U (TX 1310 - RX1550) BIDI 1310 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G06D-53: Modulo SFP 1000BASE-BX-D (TX 1550 - RX1310) BIDI 1550 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G20D: Module SFP 1000BASE-LX 1310 nm FP, SM, 20 Km, 15 dB DDMI Duplex LC
LOLG1G20D-35: Module SFP 1000BASE-BX-U (TX 1310 - RX1550) BIDI 1310 nm FP, SM, 20 Km, 14 dB DDMI Simplex SC
LOLG1G20D-53: Module SFP 1000BASE-BX-D (TX 1550 - RX1310) BIDI 1550 nm DFB, SM, 20 Km, 14 dB DDMI Simplex SC

PRODOTTI CORRELATI

7PS52V3A

SPECIFICHE	
Alimentazione	100 ~ 240Vac – 50/60Hz
Uscita	52 Vdc - 3,15 A
Potenza	150 W
Montaggio	Barra DIN
Dimensioni	125 x 130 x 40 mm
Note	Adatto per serie POE > 4/8 porte

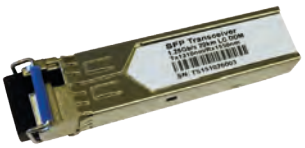
7IPS33012FM

7IPS33012FM

1 GB

7IPS33012FM
- Industrial switch, DIN-rail mounting method
- Switch capacity: 256Gbps
- MAC address table 8K
- 2× 10/100/1000Base-T Port
- 12x 1000Mbps SFP fiber ports
- RJ45 ports support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Each port has the complete LED Indicator light
- 4KV Ethernet surge protection
- Support IEEE802.1d VLAN tag, QinQ configuration
- Flow control fully supported
- L2+ full network management
- Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3)
- QoS, Priority mode based on 802.1P, Port & DSCP, the queue scheduling algorithm including EQU, SP, WRR & SP+WRR
- CPU/memory monitoring, Ping test, cable diagnose
- Low power consumption, fan-less design
- Support dual input power supply voltage: 12-48Vdc
- IP40 grade protection, corrugated high strenght metal casing
- The reliable industrial grade design could ensure continuous and stable operation of the automation system.

SPECIFICA	7IPS33012FM
Protocol Standards	IIEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX, IEEE802.3u 100Base-FX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x
Switch capacity	256 Gbps
MAC address table	8K
RJ45 Ports Parameters	
Connector	2x RJ45 / 1x RS232 console
Transmission Rate	10/100/1000 Mbps
UTP Type	UTP-5e or higher
Distance	0 ~ 100 meters
Fiber Port Parameters	
Connector	12x SFP slot
Data rate	1.25 G
Optical wavelength	MM 850 nm / SM 1310, 1550 nm
Distance	MM up to 0,5 Km / SM up to 120 Km
Power	
Input voltage	100 ~ 240 Vac - 50/60 Hz
Connector	Flange terminal
Working Voltage	12-48 Vdc
Power Consumption	15 W max
Environment	
Operating temperature	-40° ~ +85° C
Relative humidity	5% to 90% (no condensing)
Physical characteristics	
Dimension	165 x 148 x 54 mm
Weight	0.8 Kg
Color	Metal and black



LOLG1***

LOLG1G04D: Module SFP 1000BASE, 850 nm FP, MM, 0,5 Km, 10 dB DDMI Duplex LC
LOLG1G06D: Module SFP 1000BASE, 1310 nm FP, MM, 2 Km, 10 dB DDMI Duplex LC
LOLG1G06D-35: Modulo SFP 1000BASE-BX-U (TX 1310 - RX1550) BIDI 1310 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G06D-53: Modulo SFP 1000BASE-BX-D (TX 1550 - RX1310) BIDI 1550 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G20D: Module SFP 1000BASE-LX 1310 nm FP, SM, 20 Km, 15 dB DDMI Duplex LC
LOLG1G20D-35: Module SFP 1000BASE-BX-U (TX 1310 - RX1550) BIDI 1310 nm FP, SM, 20 Km, 14 dB DDMI Simplex SC
LOLG1G20D-53: Module SFP 1000BASE-BX-D (TX 1550 - RX1310) BIDI 1550 nm DFB, SM, 20 Km, 14 dB DDMI Simplex SC

LOLGRJ45

LOLGRJ45: Module RJ45 Copper on slot SFP 10/100/1000 BASE-T

7IPS33012FM is a full gigabit L2+ managed industrial Ethernet fiber switch: it has 2x 10/100/1000Base-T RJ45 ports and 12x 100/1000Base-X SFP fiber slot ports. Each port can support wire-speed forwarding. The **7IPS33012FM** has L2+ full network management function, IPV4/IPV6 management, software/static route forwarding, security protection mechanisms, complete ACL/QoS policies, and rich VLAN functions, and is easy to manage and maintain. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and (ITU-TG.8032) ERPS (<20ms) to improve link backup and network reliability. Any port can be looped, supporting chain, star, Double star, ring, tangent ring, intersecting ring, coupling ring, self-healing within 20 ms of the ring network. When a one-way network fails, communication can be quickly resumed to ensure uninterrupted communication of important applications.
This model has high reliability, high security, and high manageability. The industrial products fully comply with industrial product design and materials. The shell is made of aluminum alloy to enhance heat dissipation performance, and has excellent industrial field environment adaptability (including mechanical stability, climatic environment adaptability, electromagnetic environment adaptability, etc.), protection class up to IP40, support dual redundant power supply, low power fanless cooling technology, MTBF average trouble-free working time up to 35 years.

7IPS36248FM

7IPS36248FM

10 GB

SPECIFICA	7IPS36248FM
Protocol Standards	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX , IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X IEEE802.3ae 10GBase-LR/SR, IEEE802.3x
Switch capacity	598 Gbps
MAC address table	32K
RJ45 Ports Parameters	
Connector	12x RJ45 / 1x RS232 console
Transmission Rate	10/100/1000 Mbps
UTP Type	UTP-5E or higher
Distance	0 ~ 100 meters
Fiber Port Parameters	
Connector	8x 1Gbps SFP slot / 4x 10Gbps SFP slot
Data rate	2.5 G
Optical wavelength	MM 850 nm / SM 1310, 1550 nm
Distance	MM up to 0,5 Km (0.3 Km 10 Gb) / SM up to 120 Km
Power	
Input voltage	100 ~ 240 Vac - 50/60 Hz
Connector	Flange terminal
Working Voltage	12 - 48 Vdc
Power Consumption	36 W max (no POE load)
Environment	
Operating temperature	-40° ~ +80° C
Relative humidity	5% to 90% (no condensing)
Physical characteristics	
Dimension	166 x 149 x 89 mm
Weight	2.2 Kg
Color	Metal and black

7IPS36248FM

- Industrial switch, DIN-rail mounting method
- Switch capacity: 598Gbps
- MAC address table 32K
- 12× 10/100/1000Base-T Port
- 8x 1Gbps + 4x 10Gbps SFP fiber ports
- RJ45 ports support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Each port has the complete LED Indicator light
- 6KV Ethernet surge protection
- Support IEEE802.1d VLAN tag, QinQ configuration
- Flow control fully supported
- L2+ full network management
- Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3)
- QoS, Priority mode based on 802.1P, Port & DSCP, the queue scheduling algorithm including EQU, SP, WRR & SP+WRR
- CPU monitoring, memory monitoring, Ping test, and cable diagnose
- Low power consumption, fan-less design,
- Support dual power input power supply 12-48Vdc
- IP40 grade protection, corrugated high strenght metal casing
- The reliable industrial grade design could ensure continuous and stable operation of the automation system.

LOLG1***

LOLG1G04D: Module SFP 1000BASE, 850 nm FP, MM, 0,5 Km, 10 dB DDMI Duplex LC
LOLG1G06D: Module SFP 1000BASE, 1310 nm FP, MM, 2 Km, 10 dB DDMI Duplex LC
LOLG1G06D-35: Modulo SFP 1000BASE-BX-U (TX 1310 - RX1550) BIDI 1310 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G06D-53: Modulo SFP 1000BASE-BX-D (TX 1550 - RX1310) BIDI 1550 nm, MM, 2 Km, 10 dB FP Simplex LC
LOLG1G20D: Module SFP 1000BASE-LX 1310 nm FP, SM, 20 Km, 15 dB DDMI Duplex LC
LOLG1G20D-35: Module SFP 1000BASE-BX-U (TX 1310 -RX1550) BIDI 1310 nm FP, SM, 20 Km, 14 dB DDMI Simplex SC
LOLG1G20D-53: Module SFP 1000BASE-BX-D (TX 1550 - RX1310) BIDI 1550 nm DFB, SM, 20 Km, 14 dB DDMI Simplex SC

LOLGRJ45

LOLGRJ45: Module RJ45 Copper on slot SFP 10/100/1000 BASE-T

The **7IPS36248FM** is a L2+ 10G uplink managed industrial Ethernet fiber switch: it has 12x 10/100/1000Base-T RJ45 ports, 8x 100/1000Base-X SFP fiber slot ports and 4x 1/10G SFP+ fiber slot ports. Each port can support wire-speed forwarding. The **7IPS36248FM** has the L2+ full network management function, IPV4/IPV6 management, software/static route forwarding, security protection mechanisms, complete ACL/QoS policies, rich VLAN functions, and is easy to manage and maintain. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50 ms) and (ITU-TG.8032) ERPS (<20 ms) to improve link backup and network reliability. Any port can be looped, supporting chain, star, Double star, ring, tangent ring, intersecting ring, coupling ring, self-healing within 20 ms of the ring network. When a one-way network fails, communication can be quickly resumed to ensure uninterrupted communication of important applications.
This model has high reliability, high security, and high manageability. It ensures reliable transmission of critical data, supports remote management, and can be clustered with the NMS network management platform of the optical network to achieve blind management.
The shell is made of aluminum alloy to enhance heat dissipation performance, and has excellent industrial field environment adaptability, protection class up to IP40, support dual redundant power supply, low power fanless cooling technology, MTBF average trouble-free working time up to 35 years.

HORED®

Intelligence Network Switch

AI Poe

• *AI POE:* Lo switch in assenza di un flusso dati per più di 120 secondi, riavvia automaticamente i dispositivi POE connessi alla porta.

AI Extend

• *AI EXTEND:* Supporta POE e dati fino a 250 mt.

AI Qos

• *AI QOS:* Lo Switch dà priorità al flusso video in modo indipendente ad ogni porta.

AI Vlan

• *AI VLAN:* Isola le porte di collegamento tra loro, evita il sovraccarico dei dati di rete e migliora le prestazioni dello switch.

AI Loop

• *AI LOOP:* Controlla automaticamente lo stato del loop dello switch e ne gestisce la direzione del flusso dati.

AI Web

• *AI WEB:* Interfaccia Web per la gestione e la configurazione del dispositivo.

AI Cloud

• *AI CLOUD:* Esclusivamente con l'utilizzo di 7M1APOLLO è possibile usufruire della piattaforma Visual Cloud, che permette la gestione e la manutenzione dei dispositivi (fino a 128) connessi alla medesima rete.

7IS108GPS-4F, 7IS108GPS-2F, 7IS104GPS-2F

L2 Layer2

AI Cloud

7IS108GPS-4F / 7IS104GPS-2F

- MAC address: 8K
- Port Cache: 2 Mbit
- 100 Mbps forwarding speed: 148810pps
- Gigabit forwarding speed: 1488100pps
- 100M maximum filter speed: 148810pps
- Gigabit maximum filtration speed: 1488100pps
- Transmission method: store and forward
- Backplane bandwidth: 24 Gbps
- Switching Delay: <5 µs
- Input voltage: 48-56 Vdc
- Input method: plug-in 5-core 5.08 mm pitch terminal block
- Support dual DC power backup, built-in over current protection
- Power supply anti-reverse connection

AI Poe | AI Extend | AI Qos | AI Vlan | AI Loop | AI Web

SPECIFICA	7IS108GPS-4F, 7IS108GPS-2F / 7IS104GPS-2F
Chip	Broadcom high performance chip
Flash/Ram	16Mb / 64Mb DDR4
Standards	IEEE 802.3 10Base-T IEEE 802.3u 100Base-T IEEE 802.3ab 1000Base-T IEEE 802.3z 1000Base-X IEEE 802.3af/at
Exchange characteristics	MAC address: 8K Port Cache: 2 Mbit Backplane bandwidth: 12 Gbps Switching Delay: <5 µs 100Mbps forwarding speed: 148810pps Gigabit forwarding speed: 1488100pps 100M maximum filter speed: 148810pps Gigabit maximum filtration speed: 1488100pps
Ports	8x 10/100/1000Base-Tx RJ45 - Max power 46 W port Optical port: 4x 1000Base-X (SFP), 2x 1000Base-X 4x 10/100/1000Base-Tx RJ45 - Max power 46 W port Optical port: 2x 1000Base-X (SFP)
Front panel indicator	Interface indicator: Link (1~4/F1~F2)
Power supply	Input voltage: 48 Vdc Input method: 5-pin 3.81 mm-spacing plug-in terminal block Support dual DC power backup, built-in over current protection Power supply support anti-reverse connection
Power consumption	No-load power: 4 W@48 Vdc Full load power: 60 W@48 Vdc (including POE output)
Physical characteristics	Housing: IP40 grade protection, corrugated high strength metal housing Installation: DIN rail mounting Dimensions (L× W × H): 134 x 30 × 90 mm Weight: 0.5kg
Industry Standard	EMI:FCC CFR47 Part 15, EN55022/CISPR22, Class A EMS: IEC61000-4-2 (ESD): ±8 kV (contact), ±15 kV (air) IEC61000-4-3 (RS): 10 V/m (80Mhz - 2Ghz) IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±6kV IEC61000-4-6(CS):3V (10kHz-150kHz); 10V (150kHz-80MHz) IEC60068-2-6 (Vibration) IEC60068-2-27 (Shock) IEC60068-2-32 (Free Fall)
Working environment	Working temperature: -40 ~ +75° C Storage temperature: -40 ~ +75° C Relative humidity: 5% ~ 95% (no condensation)
Certification	CE, FCC, RoHS
MTBF	100,000 hrs
ESD	Contact: ±8 KV Air: ±15 KV

7IS108GPS-4F / 7IS104GPS-2F

SCHEMA COLLEGAMENTO

7S5700-12G-12F

SPECIFICA	7S5700-12G-12F
Chipset	Broadcom high performance chip
Flash	16 Mb
Storage	128 Mb DDR
Port	12x 10/100/1000Mbps RJ45 port 12x Gigabit SFP port 1x RJ45 Console port
Performance	Forward mode: store and forward Bandwidth: 48 Gbps Packet forwarding rate: 41.664 Mpps Support 8K MAC address table depth
Lightning protection	±6 KV
ESD	Contact: ±6 KV Air: ±8 KV
Input power	100-240 Vac / 50-60 Hz
Dimensions (L×W×H)	440 × 180 × 44 mm

7S5700-12G-12F

- Support hardware watchdog, restore factory Settings, system and port LED
- Support global information, statistics, log information
- Support user management, alarm management, configuration management
- Support port rate, duplex, flow control, maximum frame length configuration
- Support port mirroring, port speed limit, port energy saving
- Support three management methods: local management, cloud management, mobile management
- Prevention in advance - Real-time map, fast fault location
- Cloud operation, maintenance, configuration, upgrade batch processing
- Multi-user, multi-dimensional authority, hierarchical control
- AI blessing, intelligent scheduling
- Business analysis and decision making - Open interface, customer business import
- Support for automatic identification, management and acquisition of information about the downlink device
- Support Layer 2 interface
- Support port redirection, flow rate limiting, QoS re-marking

7S5700-12G-12F

SCHEMA COLLEGAMENTO

7S5700-24F-8G-4TF

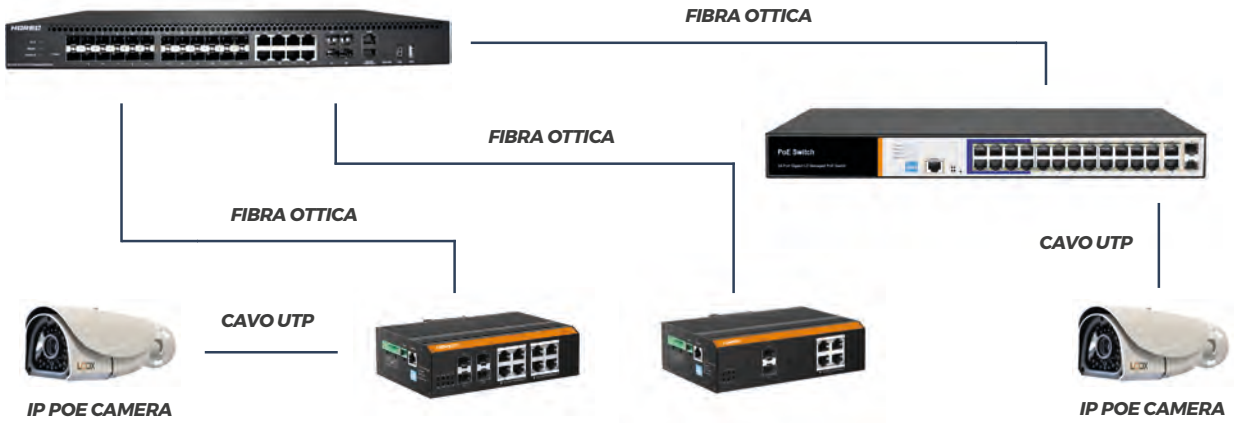
SPECIFICA	7S5700-24F-8G-4TF
Chipset	Broadcom high performance chip
Flash	16 Mb
Storage	256 Mb DDR
Port	8x 10/100/1000Mbps RJ45 ports Combo 4x 10G SFP ports 24x Gigabit SFP ports 1x RJ45 Console port 1x USB 2.0 , 1 Mini-usb Console port
Performance	Forward mode: store and forward Bandwidth: 128 Gbps Rate: 96 Mpps Support 16K MAC address table depth
Lightning protection	±6 KV
ESD	Touch : ±6 KV air : ±8 KV
Input power	100-240 Vac / 50-60 Hz
Dimensions (L×W×H)	440 × 320 × 44 mm

7S5700-24F-8G-4TF

- Support hardware watchdog, restore factory Settings, system and port LED
- Support global information, statistics, log information
- Support user management, alarm management, configuration management
- Support port rate, duplex, flow control, maximum frame length configuration
- Support port mirroring, port speed limit, port energy saving
- Support three management methods: local management, cloud management, mobile management
- Prevention in advance - Real-time map, fast fault location
- Cloud operation, maintenance, configuration, upgrade batch processing
- Multi-user, multi-dimensional authority, hierarchical control
- AI blessing, intelligent scheduling
- Business analysis and decision making - Open interface, customer business import
- Support for automatic identification, management and acquisition of information about the downlink device
- Support Layer 3 interface
- Support port redirection, flow rate limiting, QoS re-marking

7S5700-24F-8G-4TF

SCHEMA COLLEGAMENTO



7S5700-48GP-4TF / 7PS2024G

7S5700-48GP-4TF

L3 Layer3 · AI Cloud · AI Poe · AI Extend · AI Qos · AI Vlan · AI Web

SPECIFICA	7S5700-48GP-4TF
Chipset	Broadcom high performance chip
Flash	16 Mb
Storage	256 Mb DDR
Port	48x 10/100/1000Mbps RJ45 ports Combo 4x 10G SFP ports 1x RJ45 Console port 1x USB 2.0, 1 Mini-usb Console port
Performance	Forwarding rate: 130.9 Mpps Bandwidth 176 Gbps Support 16K MAC address table depth
PoE	24x 10/100/1000Mbps port support PoE Max 300 W Single port max 46 W
Input	100-240 Vac / 50-60 Hz
Dimensions (L×W×H)	440 × 320 × 44 mm

7PS2024G

L3 Layer3 · AI Cloud · AI Poe · AI Extend · AI Qos · AI Vlan · AI Web

SPECIFICA	7PS2024G
Chipset	Broadcom high performance chip
Flash	16 Mb
Storage	256 Mb DDR
Port	24x 10/100/1000Mbps RJ45 port 4x gigabit SFP fiber port 1x Console port
Performance	Forwarding mode: store and forward Switch Volume (Full-duplex): 56 Gbps Packet forwarding rate: 41.664 Mpps 8K MAC address table
PoE	24x 10/100/1000Mbps port support PoE Max 400 W Single port max 30 W
LEDs	28x Link/Act LEDs 24x POE LEDs 1x Power LEDs
Input	100-240 Vac / 50-60 Hz
Dimensions (L×W×H)	440 × 320 × 44 mm

7S5700-48GP-4TF / 7PS2024G

- Support hardware watchdog, restore factory Settings, system and port LED
- Support global information, statistics, log information
- Support user management, alarm management, configuration management
- Support port rate, duplex, flow control, maximum frame length configuration
- Support port mirroring, port speed limit, port energy saving
- Support three management methods: local management, cloud management, mobile management
- Prevention in advance - Real-time map, fast fault location
- Cloud operation, maintenance, configuration, upgrade batch processing
- Multi-user, multi-dimensional authority, hierarchical control
- AI blessing, intelligent scheduling
- Business analysis and decision making - Open interface, customer business import
- Support for automatic identification, management and acquisition of information about the downlink device
- Support Layer 2 interface
- Support port redirection, flow rate limiting, QoS re-marking

7PS3016GS / 7PS3024GS

7PS3016GS

7PS3024GS

L2 Layer2

AI Cloud

SPECIFICA	7PS3016GS	7PS3024GS
Network standard	IEEE 802.3i IEEE 802.3u IEEE 802.3x IEEE 802.3ab IEEE 802.3af IEEE 802.3at	
Port	16x 10/100/1000 Mbps RJ45 port 2x Gigabit SFP 1x Console	24x 10/100/1000 Mbps RJ45 port 2x Gigabit SFP 1x Console
PoE	16x 10/100/1000 Mbps RJ45 (port support PoE+) Max 150 W Single port max 46 W	24x 10/100/1000 Mbps RJ45 (port support PoE+) Max 250 W Single port max 46 W
LEDs	18x Link/Act LEDS 16x POE LEDs 1x SYS LED 1x Power LED	26x Link/Act LEDS 24x POE LEDs 1 xSYS LED 1x Power LED
Performance	Forwarding mode: store and forward Bandwidth: 36 Gbps Packet forwarding rate: 23.8 Mpps 8K MAC address table	Forwarding mode: store and forward Bandwidth: 52 Gbps Packet forwarding rate: 23.8 Mpps 8K MAC address table
Lightning protection	6 KV	
Input	100-240 Vac / 50-60 Hz	
Dimension (L×W×H)	440 x 180 x 44 mm	

7PS3016GS / 7PS3024GS

- Support hardware watchdog, restore factory Settings, system and port LED
- Support global information, statistics, log information
- Support user management, alarm management, configuration management
- Support port rate, duplex, flow control, maximum frame length configuration
- Support port mirroring, port speed limit, port energy saving
- Support three management methods: local management, cloud management, mobile management
- Prevention in advance - Real-time map, fast fault location
- Cloud operation, maintenance, configuration, upgrade batch processing
- Multi-user, multi-dimensional authority, hierarchical control
- AI blessing, intelligent scheduling
- Business analysis and decision making - Open interface, customer business import
- Support for automatic identification, management and acquisition of information about the downlink device
- Support Layer 2 interface
- Support port redirection, flow rate limiting, QoS re-marking

AI Poe

AI Extend

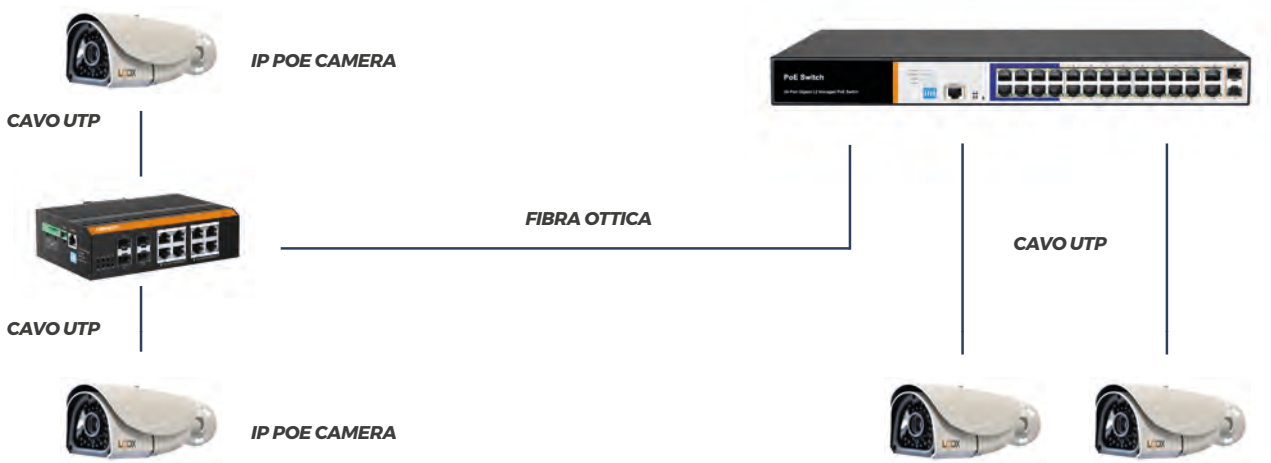
AI Qos

AI Vlan

AI Web

7PS3016GS / 7PS3024GS

SCHEMA COLLEGAMENTO



7PS2010G

L2 Layer2

AI Cloud

SPECIFICA	7PS2010G
Network standard	IEEE 802.3i IEEE 802.3u IEEE 802.3x IEEE 802.3ab IEEE 802.3af IEEE 802.3at
Port	8x 10/100/1000Mbps RJ45 port 2x Gigabit SFP fiber port 1x Console port
PoE	8x 10/100/1000 Mbps RJ45 port Max 150 W Single port max 46 W
LEDs	10x Link/Act LEDs 8x POE LEDs 1xPower LEDs 1 SYS LED
Performance	Forwarding mode: store and forward Switch Volume (Full-duplex): 20 Gbps Packet forwarding rate: 14.88 Mpps 8K MAC address table
Lightning protection	6 KV
Dimension (L×W×H)	285 × 180 × 44 mm

7PS2010G

- Support hardware watchdog, restore factory Settings, system and port LED
- Support global information, statistics, log information
- Support user management, alarm management, configuration management
- Support port rate, duplex, flow control, maximum frame length configuration
- Support port mirroring, port speed limit, port energy saving
- Support three management methods: local management, cloud management, mobile management
- Prevention in advance - Real-time map, fast fault location
- Cloud operation, maintenance, configuration, upgrade batch processing
- Multi-user, multi-dimensional authority, hierarchical control
- AI blessing, intelligent scheduling
- Business analysis and decision making - Open interface, customer business import
- Support for automatic identification, management and acquisition of information about the downlink device
- Support Layer 2 interface
- Support port redirection, flow rate limiting, QoS re-marking

AI Poe

AI Extend

AI Qos

AI Vlan

AI Web

7PS2010G

SCHEMA COLLEGAMENTO

7M1APOLLO

AI Cloud

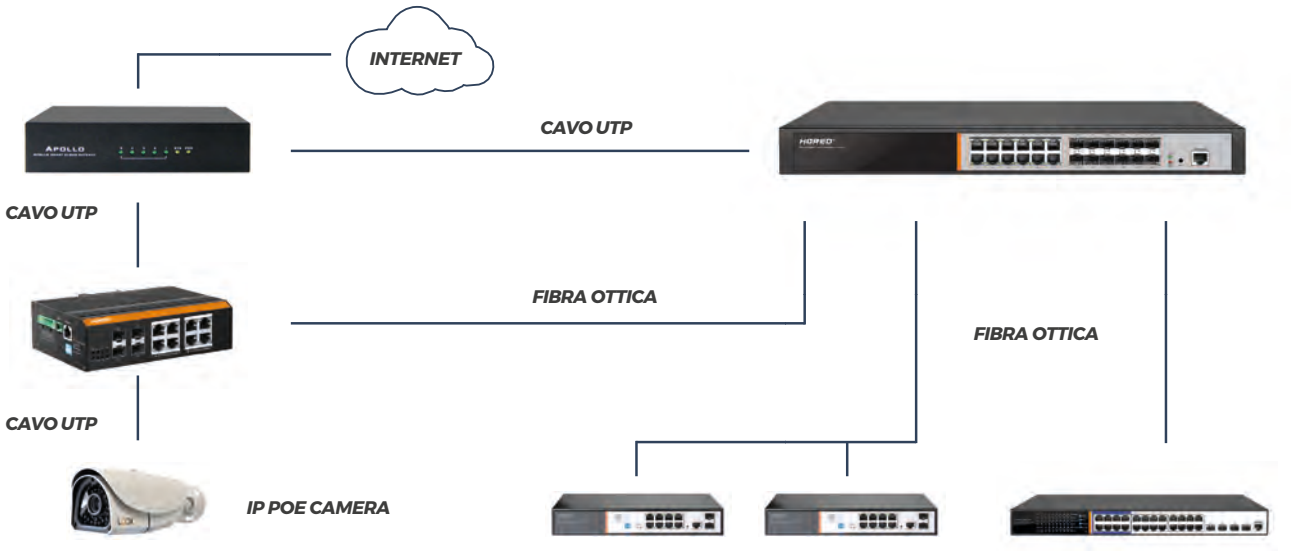
SPECIFICA	7M1APOLLO
Chipset	Qualcomm high-performance chip
Flash	16 Mb
RAM	128 Mb DDR
Network interface	4x 10/100/1000 Mbps RJ45 port (port 1~port 4) 1x 10/100/1000 Mbps RJ45 port (port 5 can be used as WAN) Standard Protocol: IEEE802.3i IEEE802.3u IEEE802.3x
LED Indicator	1x power indicator 1x system indicator 5x LINK/ACT indicator
Power supply	Input: 100-240 Vac - 50/60 Hz Output: 12 V - 1 A Maximum power supply: 5.21 W Reset button (long press 5 ~ 10 sec to restore factory default configuration)
Dimension (L×W×H) / Weight	159 x 104.5 x 37 mm / 0.6 Kg
Environmental specification	Operation temperature: 0° ~ +40° C Storage temperature: -40° ~ +70° C Operation humidity: 10% ~ 90% (non-condensing)
Safety specification	CE/ROHS/FCC/CCC

7M1APOLLO

- The equipment is centralized on one platform, namely the APOLLO platform, which manages operations and maintenance in a unified manner.
- The device can be managed, operated, and maintained in three ways: mobile, PC, and local. 1000 Mbps full duplex
- Support for up to 128 devices
- Backplane bandwidth: 10 Gbps (Non-blocking)
- Support system alarms, log statistics
- Support automatic discovery of cameras for detailed information
- Support discovery and access to PC terminal information
- Support SNMP protocol, discover and manage devices which support SNMP protocol
- Cloud pass-through function. Realize data transmission of the connected device
- CE/ROHS/FCC/CCC

7M1APOLLO

SCHEMA COLLEGAMENTO



NOTE:

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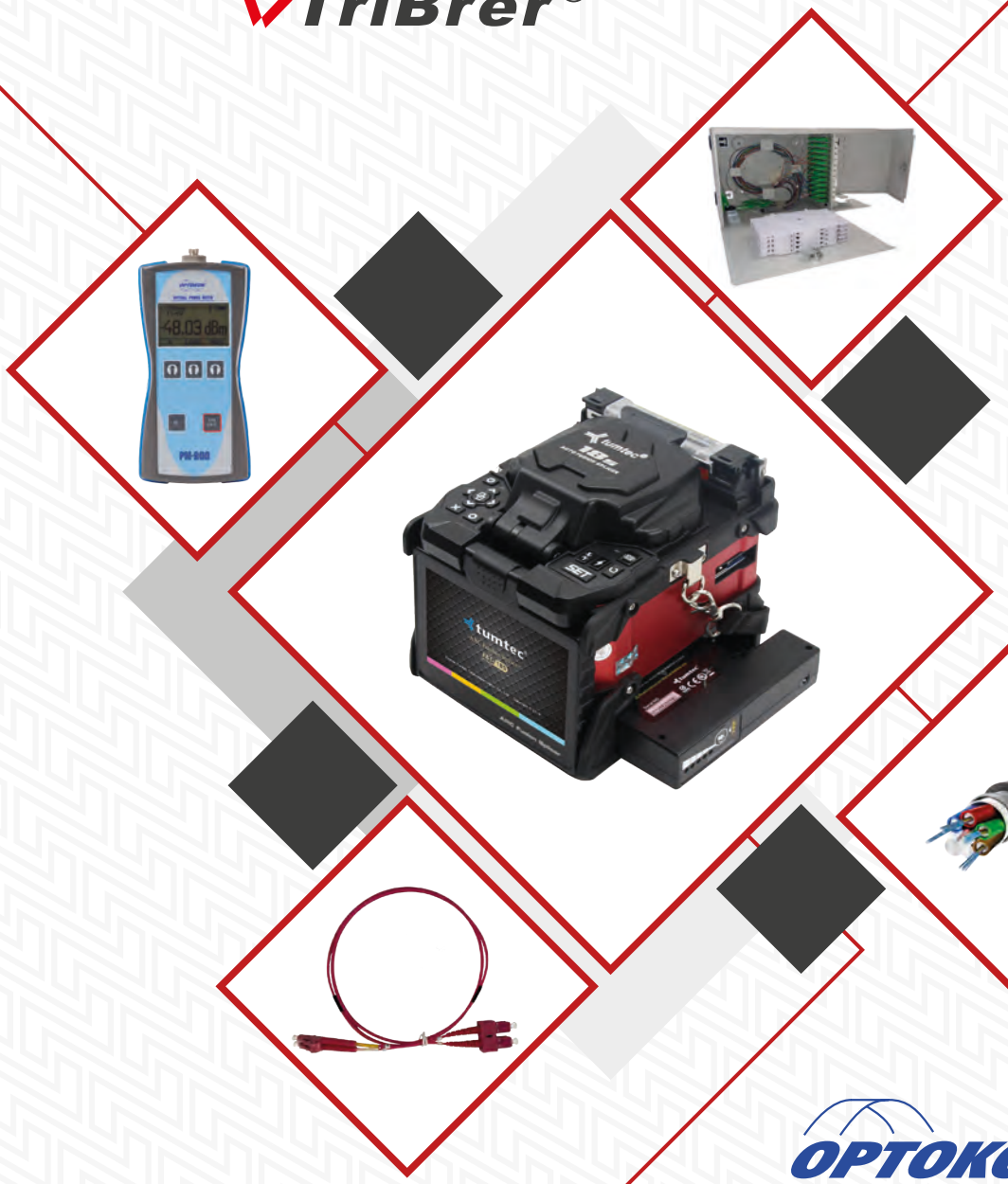

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CATALOGO
FIBRA OTTICA
2023 Q3

NOTE

Fibra Ottica / Strumenti e accessori
2023 Q3

INDICE

Splicer Master TMFST18S - Cladding Alignment 4 Motors

4 MOTORS

OSD ITALIANO INGLESE

LCD 5.0”

TOUCH SCREEN

TM SOC
Adattatore connettori rapidi SOC

SPECIFICHE	SPLICER MASTER TMFST18S
Dimension	115 x 160 x 135 mm (excluding rubber bumper) 120 x 165 x 135 mm (including rubber bumper)
Weight	1735 g (with battery) / 1355 g (without battery)
Number of Fiber	Single
Applicable Fibers	SM (ITU-T G.652& G.657) / MM (ITU-T G.651) / DS (ITU-T G.653) / NZDS (ITU-T G.655)
Compatible Fiber/Cable	0.25 - 3.0 mm / Indoor Cable
Cleaved Length	Diameter 0.125 - 1 mm / Cleave Length: 8 - 16 mm
Cladding Diameter	80 - 150 µm
Splicing Mode	Pre-set 41 splicing modes, max 100 modes
Heating Mode	Pre-set 5 heating modes (20/30/40/50/60 mm), max 100 modes
Typical Splice Loss	SM: 0.03 dB / MM 0.02 dB / DS: 0.05 dB I NZDS 0.05 dB / G.657 0.03 dB (ITU-T Standard)
Return Loss	≥60 dB
Lighting	3 White LEDs
Splicing Time	Quick mode: 6 s
Estimated Splice Loss	Available
Heating Sleeve Length	20 - 60 mm
Heating Time	Quick heating time: 13 s, typical heating time: 30 s
Results Storage	The last 2000 results
Tension Test	1.96 - 2.25 N
Operating Condition	Altitude 0 - 5000 m above sea level, 0 - 95% relative humidity, temperature -10° ~ +50° C, max wind 15 m/s
Storage Condition	0 ~ 95% relative humidity, -40° ~ +80° C
Display	90° bi-directional view, 4.3” Color High Resolution Display
Fiber View & Magnification	X, Y, XY, X/Y 380x Magnification
Power Supply	Input 100 - 240 Vac, Output 12 - 15 Vdc
N° of Splice / Heating	Typical 250 times (Splice + Heat) with 5200 mAh battery capacity
Operating Methods	Button / Touch Screen
Automatic Calibration	Automatic ARC calibration by air pressure and temperature
Electrode Life	5000 arcs
Terminal	Mini USB 2.0

Standard accessories:

- Fusion splicer TMFST18S
- Fiber cleaver TMA9
- Battery
- Power adapter
- AC power line
- Back-up electrode
- Cooling tray
- Carrying case
- Carrying strap
- User manual
- Splicing test report
- Miller stripper
- Drop cable stripper
- Alcohol bottle

Main features:

- Industriai 4-motors driving, high quality and low loss
- 5” high resolution color LCD touch screen, 380x magnification, visible clearly with bare eyes
- Packed with detachable 5200 mAh battery, more than 250 times of splicing and heating
- Auto-splicing mode, using friendly design
- Integrated fiber-adjust frame, performation is more stable
- High-power LED white light simplifies your work at night
- Detachable multifunction fixture, suitable for various fiber type
- Dust-proof, water-proof, high temperature resistance, adapting to various altitude and harsh environment

Fiber Clever TMA9

Borsa e accessori

Splicer Master TMFST18S

Splicer Master TMFST18H - Cladding Alignment 4 Motors

4 MOTORS

OSD ITALIANO INGLESE

LCD 4.3”

TOUCH SCREEN

TM SOC
Adattatore connettori rapidi SOC

SPECIFICHE	SPLICER MASTER TMFST18H
Dimension	115 x 160 x 135 mm (excluding rubber bumper)
Weight	1735 g (with battery) / 1355 g (without battery)
Number of Fiber	Single
Applicable Fibers	SM (ITU-T G.652& G.657) / MM (ITU-T G.651) / DS (ITU-T G.653) / NZDS (ITU-T G.655)
Compatible Fiber/Cable	0.25 - 3.0 mm / Indoor Cable
Cleaved Length	Diameter 0.125 - 1 mm / Cleave Length: 8 - 16 mm
Cladding Diameter	80 - 150 µm
Splicing Mode	Pre-set 41 splicing modes, max 100 modes
Heating Mode	Pre-set 5 heating modes (20/30/40/50/60 mm), max 100 modes
Typical Splice Loss	SM: 0.03dB / MM 0.02dB/ DS: 0.05dB I NZDS 0.05 dB / G.657 0.03dB (ITU-T Standard)
Return Loss	≥60dB
Lighting	3 White LEDs
Splicing Time	Quick mode: 6 s
Estimated Splice Loss	Available
Heating Sleeve Length	20 - 60 mm
Heating Time	Quick heating time: 13 s, typical heating time: 30 s
Results Storage	The last 2000 results
Tension Test	1.96 - 2.25 N
Operating Condition	Altitude: 0 - 5000 m above sea level, 0 - 95% relative humidity, temperature -10°C ~ +50° C, max wind 15 m/s
Storage Condition	0 ~ 95% relative humidity, temperature -40° ~ +80° C
Display	90° bi-directional view, 4.3” Color High Resolution Display
Fiber View & Magnification	X, Y, XY, X/Y 380x Magnification
Power Supply	Input 100 - 240 Vac, Input 12 - 15 Vdc
N°of Splice / Heating	Typical 250 times (Splice + Heat) with 5200 mAh battery capacity
Operating Methods	Button/Touch Screen
Automatic Calibration	Automatic ARC calibration by air pressure and temperature
Electrode Life	5000 arcs
Terminal	Mini USB 2.0

Standard accessories:
- Fusion splicer TMFST18H
- Fiber cleaver TMA9
- Battery
- Power adapter
- AC power line
- Back-up electrode
- Cooling tray
- Carrying case
- Carrying strap
- User manual
- Splicing test report
- Miller stripper
- Drop cable stripper
- Alcohol bottle

Main features:
- Industriai 4-motors driving, high quality and low loss
- 4.3” high resolution color LCD touch screen, 380x magnification, visible clearly with bare eyes
- Auto-splicing mode, using friendly design
- Integrated fiber-adjust frame, performation is more stable
- High-power LED white light simplifies your work at night
- Detachable multifunction fixture, suitable for various fiber type
- Dust-proof, water-proof, high temperature resistance, adapting to various altitude and harsh environment

Splicer Master TMFST18H

Borsa e accessori

Splicer Master TMFST83A - Core Alignment 4 Motors

4 MOTORS

OSD ITALIANO INGLESE

LCD 5.0”

TOUCH SCREEN

TM SOC
Adattatore connettori rapidi SOC

SPECIFICHE	SPLICER MASTER TMFST83A
Dimension	136 x 160 x 148 mm (excluding rubber bumper) 140 x 165 x 148 mm (including rubber bumper)
Weight	2280 g (with battery) / 1900 g (without battery)
Number of Fiber	Single
Applicable Fibers	SM (ITU-T G.652 & G.657) / MM (ITU-T G.651) / DS (ITU-T G.653) / NZDS(ITU-T G.655)
Compatible Fiber/Cable	0.25 - 3.0mm / Indoor Cable
Cleaved Length	Diameter 0.125 - 1 mm / Cleave Length: 8 - 16 mm
Cladding Diameter	80 - 150 µm
Splicing Mode	Pre-set 41 splicing modes, max 100 modes
Heating Mode	Pre-set 5 heating modes (20/30/40/50/60 mm), max 100 modes
Typical Splice Loss	SM: 0.02 dB / MM 0.01 dB / DS: 0.04 dB / NZDS 0.04 dB / G.657 0.02 dB (ITU-T Standard)
Return Loss	≥60 dB
Lighting	3 White LEDs
Splicing Time	Quick mode: 6 s
Estimated Splice Loss	Available
Heating Sleeve Length	20 - 60 mm
Heating Time	Quick heating time: 13 s, typical heating time: 30 s
Results Storage	The last 2000 results
Tension Test	1.96 - 2.25 N
Operating Condition	Altitude: 0 - 5000 m above sea level, 0 - 95% relative humidity, temperature -10° ~ +50° C, max wind 15 m/s
Storage Condition	0 ~ 95% relative humidity, temperature -40° ~ +80° C
Display	90° bi-directional view, 5.0” Color High Resolution Display
Fiber View & Magnification	X, Y, XY, X/Y 500x Magnification
Power Supply	Input 100 - 240 Vac, Input 12 - 15 Vdc
N°of Splice / Heating	Typical 250 times (Splice + Heat) with 5200 mAh battery capacity
Operating Methods	Button/Touch Screen
Automatic Calibration	Automatic ARC calibration by air pressure and temperature
Electrode Life	5000 arcs
Terminal	Mini USB 2.0

Standard accessories:

- Fusion splicer TMFST83A
- Fiber cleaver TMA9
- Battery
- Power adapter
- AC power line
- Back-up electrode
- Cooling tray
- Carrying case
- Carrying strap
- User manual
- Splicing test report
- Miller stripper
- Drop cable stripper
- Alcohol bottle

Main features:

- Industriai 4-motors driving, high quality and low loss
- 5” high resolution color LCD touch screen, 500x magnification, visible clearly with bare eyes
- Packed with detachable 5200 mAh battery, more than 250 times of splicing and heating
- Auto-splicing mode, using friendly design
- Integrated fiber-adjust frame, performation is more stable
- High-power LED white light simplifies your work at night
- Detachable multifunction fixture, suitable for various fiber type
- Dust-proof, water-proof, high temperature resistance, adapting to various altitude and harsh environment

Fiber Clever TMA9

Borsa e accessori

Splicer Master TMFST83A

Splicer Master TMV6 - Core Alignment 6 Motors

SPECIFICHE	SPLICER MASTER TMV6
Dimension	130 x 170 x 170 mm (excluding rubber bumper) 140 x 170 x 176 mm (including rubber bumper)
Weight	2233 g (with battery) / 1853 g (without battery)
Number of Fiber	Single
Applicable Fibers	SM (ITU-T G.652& G.657) / MM (ITU-T G.651) / DS (ITU-T G.653) / NZDS (ITU-T G.655)
Compatible Fiber/Cable	0.25 - 3.0 mm / Indoor Cable
Cleaved Length	Diameter 0.125 - 1 mm / Cleave Length: 8 - 16 mm
Cladding Diameter	80 - 150 µm
Splicing Mode	Pre-set 41 splicing modes, max 100 modes
Heating Mode	Pre-set 5 heating modes (20/30/40/50/60 mm), max 100 modes
Typical Splice Loss	SM: 0.02 dB/ MM 0.01 dB/ DS: 0.04 dB I NZDS 0.04 dB / G.657 0.02 dB (ITU-T Standard)
Return Loss	≥60 dB
Lighting	3 White LEDs
Splicing Time	Quick mode: 6 s
Estimated Splice Loss	Available
Heating Sleeve Length	20 - 60 mm
Heating Time	Quick heating time: 13 s, typical heating time: 30 s
Results Storage	20000 last records & 200 images
Tension Test	1.96 - 2.25 N
Operating Condition	Altitude: 0 - 5000 m above sea level, 0 - 95% relative humidity, temperature -10° ~ +50° C, Max Wind 15 m/s
Storage Condition	0 ~ 95% relative humidity, temperature -40° ~ +80° C
Display	90° bi-directional view, 4.3” Color High Resolution Display
Fiber View & Magnification	X, Y, XY, X/Y 500x Magnification
Power Supply	Input 100 - 240 Vdc, Output 12 - 15 Vdc
N°of Splice / Heating	Typical 250 times (Splice + Heat) with 5200 mAh battery capacity
Operating Methods	Button/Touch Screen
Automatic Calibration	Automatic ARC calibration by air pressure and temperature
Electrode Life	5000 arcs
Terminal	Mini USB 2.0

6 MOTORS

OSD ITALIANO INGLESE

LCD 4.3”

TOUCH SCREEN

TM SOC
Adattatore connettori rapidi SOC

Standard accessories:

- Fusion splicer TMV6
- Fiber cleaver TMA9
- Battery
- Power adapter
- AC power line
- Back-up electrode
- Cooling tray
- Carrying case
- Carrying strap
- User manual
- Splicing test report
- Miller stripper
- Drop cable stripper
- Alcohol bottle

Main features:

- Industriai 4-motors driving, high quality and low loss
- 4.3” high resolution color LCD touch screen, 500x magnification, visible clearly with bare eyes
- Packed with detachable 5200 mAh battery, more than 250 times of splicing and heating
- Auto-splicing mode, using friendly design
- Integrated fiber-adjust frame, performation is more stable
- Fiber type identification function
- High-power LED white light simplifies your work at night
- Detachable multifunction fixture, suitable for various fiber type
- Dust-proof, water-proof, high temperature resistance, adapting to various altitude and harsh environment

Fiber Clever TMA9

Borsa e accessori

Fusion Splicer TMV6

Splicer Master TMV9 - Core Alignment 6 Motors

6 MOTORS

OSD ITALIANO INGLESE

LCD 5.0”

TOUCH SCREEN

TM SOC
Adattatore connettori rapidi SOC

SPECIFICHE	SPLICER MASTER TMV9
Dimension	130 x 170 x 170 mm (excluding rubber bumper) 140 x 170L x 176 mm (including rubber bumper)
Weight	2233 g (with battery) / 1853 g (without battery)
Number of Fiber	Single
Applicable Fibers	SM (ITU-T G.652& G.657) / MM (ITU-T G.651) / DS (ITU-T G.653) / NZDS (ITU-T G.655)
Compatible Fiber/Cable	0.25 - 3.0mm/Indoor Cable
Cleaved Length	Diameter 0.125 - 1 mm / Cleave Length 8 - 16mm
Cladding Diameter	80 - 150µm
Splicing Mode	Pre-set 41 splicing modes, max 100 modes
Heating Mode	Pre-set 5 heating modes (20/30/40/50/60mm), max 100 modes
Typical Splice Loss	SM: 0.02 dB/ MM 0.01 dB/ DS: 0.04 dB I NZDS 0.04 dB / G.657 0.02 dB (ITU-T Standard)
Return Loss	≥60 dB
Lighting	3 White LEDs
Splicing Time	Quick mode: 6 s
Estimated Splice Loss	Available
Heating Sleeve Length	20 - 60 mm
Heating Time	Quick heating time 13s, typical heating time: 30s
Results Storage	The last 2000 results
Tension Test	1.96 - 2.25 N
Operating Condition	Altitude: 0 ~ 5000 m above sea level, 0 ~ 95% relative humidity, temperature -10° ~ +50 °C. Max Wind 15m/s
Storage Condition	0 ~ 95% relative humidity, temperature -40°C ~ 80°C
Display	90° bi-directional view, 5.0” Color High Resolution Display
Fiber View & Magnification	X, Y, XY, X/Y 500X Magnification
Power Supply	Input 100 - 240 Vdc, Output 12 - 15 Vdc
N° of Splice/Heating	Typical 250 times (Splice + Heat) with 5200 mAh battery capacity
Operating Methods	Button/Touch Screen
Automatic Calibration	Automatic ARC calibration by air pressure and temperature
Electrode Life	5000 arcs
Terminal	Mini USB 2.0

Standard accessories:
- Fusion splicer TMV9
- Fiber cleaver TMA9
- Battery
- Power adapter
- AC power line
- Back-up electrode
- Cooling tray
- Carrying case
- Carrying strap
- User manual
- Splicing test report
- Miller stripper
- Drop cable stripper
- Alcohol bottle

Main features:
- Backbone Core Alignment Fusion Splicer
- DACAS - Digitai Analysis Core Alignment Systems
- Integrateci fiber-adjust frame, perfomation is more stable
- Fiber type identification function
- V-groove precise alignment, high quality and low loss
- Auto-splicing mode, using friendly design
- 5” high resolution color LCD touch screen, 500x magnification, visible clearly with bare eyes
- Packed with detachable 5200 mAh battery, more than 250 times of splicing and heating
- High-power 3 white LEDs simplifies your work at night
- Detachable multifunction fixture, suitable for various fiber type
- Fiber endface melter & fusion splicer 2 in 1
- Dust-proof, water-proof, high temperature resistance, adapting to various altitude and harsh environment

Fiber Clever TMA9

Borsa e accessori

Fusion Splicer TMV9

Splicer Master TMFSTV5N - Core Alignment 4 Motors

4 MOTORS

OSD ITALIANO INGLESE

LCD 3.5”

TOUCH SCREEN

SPECIFICHE	SPLICER MASTER TMFSTV5N
Dimension	200 x 230 x 120 mm (including rubber bumper)
Weight	1200 g (including rubber bumper)
Operating Methods	Button / Touch Screen
Applicable Fibers	SM (ITU-T G.652&G.657) / MM (ITU-T G.651) / DS (ITU-T G.653) / NZDS (ITU-T G.655)
Compatible Fiber/Cable	0.25 - 3.0 mm / Indoor Cable
Cleaved Length	Coating Diameter 0.125 - 1 mm / Cleave Length: 8 - 16 mm
Automatic Calibration	Automatic ARC calibration by air pressure and temperature
Splicing Mode	Preset 41 splicing modes, max 100 modes
Heating tank	Preset 5 kinds of thermal heating tube (20/30/40/50/60 mm), max 100 modes
Typical Splice Loss	SM: 0.03dB / MM: 0.02dB / DS: 0.05dB / NZDS 0.05dB / G.657 0.03 dB (ITU-T Standard)
Return Loss	≥60dB
Lighting	2 powerful white LEDs
Splicing Time	SM fast mode: 6 s
Estimated Splice Loss	Yes
Protection Sleeve Length	20 - 60 mm
Heating Time	Fast heating time: 13 s, typical heating time: 30 s
Results Storage	2000 latest records & 200 images
Tension Test	1.5 - 2.0 N
Operating Condition	Operating Altitude: 0 - 5000 m above sea level, 0 - 95% relative humidity, temperature -10° ~ 50° C, max wind 15 m/s
Storage Condition	0 ~ 95% relative humidity, temperature -40° ~ +80° C
Display	3.5” Color High Resolution display with touch screen
Fiber View & Magnification	X, Y, XY, X/Y 380x Magnification
Power Supply	Input 100 - 240 Vac, Output 12 - 15 Vdc
Battery Capacity	4000 mAh
Heating times	Typical 120 times (Splicing + Heating)
Fiber alignment	Core alignment
Electrode Life	5000 arcs
Terminal	Mini USB 2.0

Standard accessories:

- Fusion splicer TMFSTV5N
- Fiber cleaver TMA9
- Battery
- Power adapter
- AC power line
- Back-up electrode
- Cooling tray
- Carrying case
- Carrying strap
- User manual
- Splicing test report
- Miller stripper
- Drop cable stripper
- Alcohol bottle

Main features:

- Industrial 4-motors driving, high quality and low loss
- 3,5” high resolution LCD touch screen, 380x magnification, visible clearly with bare eyes
- Packed with detachable 4000 mAh battery, more than 200 times of splicing and heating
- Auto-splicing mode, with integrated fiber-adjust frame, for more stable performance
- 2 high-power white leds and illuminated keypads simplifies your work at night
- Smart connecting with Internet
- Dust-proof, water-proof, high temperature resistance, adapting to various altitude and harsh environment

Fiber Clever TMA9

Borsa e accessori

Fiber Splicer TMFSTV5N

TMA8

Taglierina professionale mod. A8 per giuntatrice. Nuovo modello, compatta e leggera.

TMA9PRO

Taglierina professionale mod. A9+ Pro per giuntatrice, con apertura automatica coperchio raccogli spezzoni fibre.

TMSOC

Fusion splicer holder per connettori rapidi SOC.

TMBATT52

Pacco batterie aggiuntivo da 5200 mAh.

TMDSS48

Caricabatterie per giuntatrici modello TMFST18H, TMFST18S, TMFST83A, TMV6, TMV9.

TMELECTRODE

Coppia elettrodi di ricambio per giuntatrici.

TMBLADE

Lama di ricambio per taglierina professionale, vari modelli.

TMSTBAGS

Borsa rigida piccola per giuntatrici con display da 4,3” (TMFST18H, TMFSTV5N).

TMSTBAG

Borsa rigida grande per giuntatrici con display da 5,0” (TMFST18S, TMFST83A, TMV6, TMV9).

NVCOPMV26-10 - Optical Power Meter

SPECIFICHE	NVCOPMV26-10
Display Range	-70 ~ + 25dBm
Accuracy	±0.2 dB
Calibrated Wavelenghts	850 / 1300 / 1310 / 1490 / 1550 / 1625 nm
Resolution	0.01 dB
OPM Connector	2.5 mm universal
Wavelenghts Response Range	700 ~ 1700 nm
PD Type	InGaAs
Modulation Test	270 Hz /1 KHz / 2 Khz
Data Storage	Yes
Battery	Rechargeable Li-ion
VFL Connector	2.5 mm
VFL Power LED	10 mW
Automatic shutdown	10 min
Size	89 x 180 x 42 mm
Storage Temperature	-25° ~ +70° C, < 90% RH
Operating Temperature	-10° ~ +60° C, < 90% RH

Main features:
- OPM with trace data storage
- 10 mW VFL for fast fault location
- Automatic standby
- Build in lithium-ion battery

Input adapters:
- FC adaptor
- SC adaptor

YOPM58+ - Multi-Function Optical Power Meter

Main features:
- OPM with 500 trace data storage
- 10 mW VFL for fast fault location
- LED light for dark environment, RJ-45 net cable testing
- Micro USB charging, build in lithium-ion battery

SPECIFICHE	YOPM58+
Display Range	-50 ~ +26dBm
Accuracy*	±0.2 dB
Calibrated Wavelenghts	850 / 1300 / 1310 / 1490 / 1550 / 1625 nm
Resolution	0.01 dB
OPM Connector	2.5 mm universal
Wavelenghts Response Range	700 ~ 1700 nm
PD Type	InGaAs
Modulation Test	270 Hz / 1KHz / 2 Khz
Data Storage	Yes
Battery	450 mAh
VFL Connector	2.5 mm
VFL Power LED	10 mW
RJ-45 Cable Test	Yes
Size	59 x 98 x 27 mm
Weight	100 g
Storage Temperature	-20° ~ 60° C, <90% RH
Operating Temperature	-10° ~ 50° C, <90% RH

*at 20° ±3° C, CW, with FC connector, -10dBm

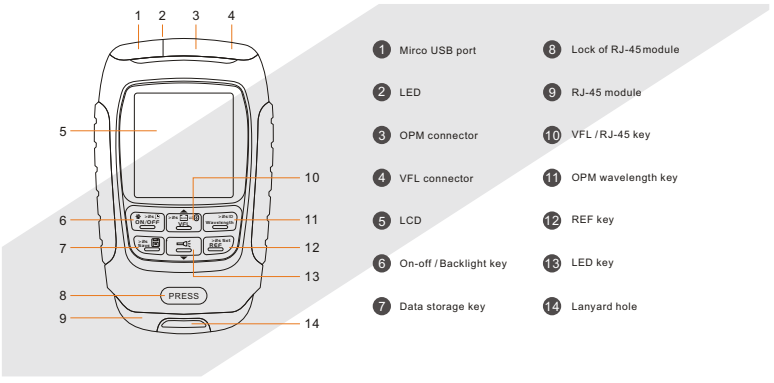
Accessories:


Host


Box


USB cable

Structure:



YAOP100C-V10, YAOP110C-V10 - Optical Power Meter

SPECIFICHE	YAOP100C-V10	YAOP110C-V10
Display Range	1310 / 1490 / 1550 / 1625: +26 ~ -50 dBm 850 / 1300: +26 ~ -40 dBm	1310 / 1490 / 1550 / 1625: +26 ~ -50 dBm 850 / 1300: +26 ~ -40 dBm
Accuracy	±0.2 dB	
Calibrated Wavelenghts	850 / 1300 / 1310 / 1490 / 1550 / 1625 nm	
Resolution	0.01 dB	
Connector	FC & 2.5 mm UPP (option: SC, ST)	
REF	Yes	
Automatic Power Off	No operation in 10 minutes (can be canceled), low battery energy	
Build in VFL	1 or 10 mW	
Data Storage	1000 traces	
Threshold setting	10 sets (colorful reading for pass/fail)	
User defined wavelenghts	10	
Manual Calibration	Yes	
Wave ID Detect	Yes (work with AOS210 laser source)	
Battery Charge	Yes	
Data Transfer	USB	
Real Time Monitor	10 minutes to 360 days. Interval: 0.5, 2, 15, 60, 180, 600s	
Battery Life	Above 50 hours	
Power Supply	AA x 3 batteries or AC/DC power supply by USB cable	
Size	170 x 97 x 38 mm	
Weight	About 380 g	
Storage Temperature	-20° ~ +60° C, < 90% RH	
Operating Temperature	-10° ~ +50° C, < 90% RH	

Main features 100C:

- FC, SC, ST adapters and 2.5mm UPP
- Data storage
- 7x24 real-time test on PC (optional)
- Built-in VFL
- Energy save mode
- Data transfer (optional)
- Reference value storage
- Power autonomy of 100 hours
- Wavelenghts 850 / 1300 / 1310 / 1490 / 1550 / 1625 nm
- One-year warranty and Three-year recommended calibration interval

Main features 110C:

- Normal OPM mode and AUTO TEST OPM mode
- WAVE ID mode and AUTO WAVE ID mode
- Multi-wavelengths display in AUTO TEST mode
- 10 sets of user defined wavelengths
- Thereshold setting (colorful reading for Pass/Fail)
- Manual calibration
- USB connect opm amd 7x24 real-time test on PC
- 1000 traces of Data Storage
- Built-in VFL
- Wavelenghts 850 / 1300 / 1310 / 1490 / 1550 / 1625 nm
- One-year warranty and Three-year recommended calibration interval

YBML-21LIV10, YBML-21LIV30 Multi-Function VFL

SPECIFICHE	YBML-21LIV10 / YBML-21LIV30
Output Power	>10 mW / >30 mW
Dynamic Distance	>8 ~ 10 Km
Wavelength	650 nm ±15 nm
Operation Mode	Pulsed (2 Hz) and CW
Connector	2.5 mm UPP (or customize 1.25 mm UPP)
VFL Output Power	10 mW / 10, 20, 30 mW
VFL Glint	Yes
LED Light	6 Led
Power Bank	LG 3350 mAh Rechargeable battery
Power Bank Output	5 Vdc - 1 A
Size	131 x 27 x 27 mm
Weight	113 g

Main features:

- Bright red laser at 650 nm
- Pulsed and CW operation
- Multi-wavelength testing and display
- LG 3350 mAh Rechargeable Battery
- Fast locate the broken point
- Aluminium Alloy Body
- 2.5 mm universal connector

Accessories

Soft Bag

USB cable

Led ight

Power Bank

Anti-misoperation

Rechargeable Battery

YAOS200 - Optical Laser Source MM-SM

Main features:

- 1 ~ 3 wavelengths + VFL
- High stabilization, built-in optic isolator
- 270 Hz, 1 Khz, 2 Khz modulation output
- Wave ID output, work with Tribrer YAOP100-YAOP110
- Built in VFL (optional)
- Energy save mode
- One-year warranty and Three-year recommended calibration interval

SPECIFICHE	M8	M3	S3	S4	S5	S6	V01	V10
Wavelenghts (nm)	850	1300	1310	1490	1550	1625	1 mW VFL	10 mW VFL
Stabilization	±0.05 dB / 1 hour; ±0.1 dB / 8 hours							
Output Power	> -6 dBm@1310 / 1490 / 1550 / 1625 nm / > -10 dBm@850 / 1300 nm							
Modulation	270 Hz, 1 Khz, 2 Khz							
Connector	FC / PC (or customize)							
Automatic Power Off	No operation in 10 minutes (can be canceled), low battery energy							
Build in VFL (Optional)	1 or 10 mW or customize							
Wave ID	Yes							
Battery Charge	Yes							
Operate Time	Above 16 hours							
Power Supply	AA x 2 batteries or AC/DC power supply adapter							
Size	170 x 97 x 38 mm							
Weight	About 380 g							
Storage Temperature	-20° ~ +60° C, < 90% RH							
Operating Temperature	-10° ~ +50° C, < 90% RH							

YAPA-L500SSC, YAPA-L500MSC - Fiber Launch Cable

SPECIFICHE	YAPA-L500
Fiber Type	SM / G.657A / MM OM3
Connector Type	FC / SC
Polishing Type	APC / UPC selectable
Material	SR Polypropylene
Color	Yellow
Weight	1 Kg (package included)
Size	27.5 x 15.3 x 7.6 cm
Operating Temperature	-40° ~ +55° C
Typical Loss	<0.5 dB@1310 nm for 100 m

YAPL-2-8335 OTDR Platform

SPECIFICHE	YAPL-2-8335
LCD	7“ color LCD, multi-touch screen
Connector	FC / PC (850 / 1300 / 1310 / 1550), FC / APC (1625) interchangeable adapter or customize
Pulse Width	5, 10, 25, 100, 250, 500 ns / 1, 2.5, 5, 10, 20 us
Attenuation Dead Zone	7.0 m
Event Dead Zone	1.5 m
Min. Distance Resolution	0.1 m
Loss Resolution	0.001 dB
Distance Uncertainly (m)	± (0.8 + 0.005% * Testing Distance + Resolution)
OPM Function	+26 ~ -50 dBm, 850 / 1300 / 1310 / 1490 / 1550 / 1625 nm, FC or SC adapter
VFL Function	10 mW
Storage	> 10000 results (SOR or PDF)
Battery	7.4 Vdc - 4.6 Ah Rechargeable lithium-ion batteries
Size (HxWxD)	246.5 x 173.5 x 70 mm
Weight	About 1.55 Kg
Storage Temperature	-20° ~ +60° C, < 90% RH
Operating Temperature	-10° ~ +50° C, < 90% RH

Main features:

- Built-in VFL and OPM
- 7 inch color LCD, Multi-touch screen
- Multi-wavelength testing and display
- User-friendly OTDR simulation software shows details of events
- Max. 5 wavelengths, 850 / 1300 / 1310 / 1550 / 1625 nm
- Input laser signal auto detection and self-protection function

EXTENDABLE OPTIONAL FUNCTIONS	
Function code	Function description
GPS	Display the longitude and latitude position outdoor
VIP	Display the surface of connector by video inspection probe
OLA	Multipulse test using a mix of short, medium and long pulses
TA	Triaxial accelerometer
TH	Hygrothermograph
WF	Wi-Fi
BT	Bluetooth

Accessories:

YAPL-2-8335

Instruction CD (M700)

Calibration Certificate

AC Cable (ACC-700)

AC/DC Adapter (ADC-700)

Carrying Bag (CBG-700)

Optional:

FCU = FC/UPC
FCA = FC/APC

SCU = SC/UPC
LCU = LC/UPC

LCU = LC/UPC

OTDR MODULE				
850 / 1300 nm	AOR502M1	26 / 26 dB	1.5 / 7 m	5 ns ~ 1 µs / 5 ns ~ 5 µs
850 / 1300 / 1310 / 1550 nm	AOR502A-M1	26 / 26 / 40 / 38 dB	MM: 1.5 / 7 m SM: 1 / 6 m	5 ns ~ 1 µs / 5 ns ~ 5 µs@MM 5ns ~ 20 µs@SM

YAOT600 - OPTICAL TALK SET

SPECIFICHE	YAPL-2-8335
Wavelenght	A: 1310 nm - B: 1550 nm
Operating style	Full duplex communication
Output power	> -5 dBm
Fiber type	SM
Dynamic range	SM fiber 45 dB
Dynamic distance	SM fiber > 120Km
Connecting adapter	FC / PC
Battery charge	Optional
Operate time	Above 12 hours
Power supply	2x AA batteries or AC adapter
Size (HxWxD)	170 x 97 x 38 mm
Weight	About 380 g
Storage Temperature	-20° ~ +60° C, < 90% RH
Operating Temperature	-10° ~ +50° C, < 90% RH

Main features:

- Talk by connecting with fiber
- High quality Full-duplex communication
- Light source capabilities
- Wide dynamic range: 45dB
- Large dynamic distance: >120km
- Long/short mode for different distance

The optical fiber telephone achieves Full-duplex communication in single fiber by using WDM (Wavelength Division Multiplex) Technology. Optical Talk Set YAOT600 is designed to help technicians keep communication during optic fiber installation and maintenance via fiber optic cable.

Accessories standard:

YAOT600

Earphone and mic

Carrying Bag

Calibration Certificate

User manual

Optional:

AC/DC Adapter

OPPM800 - Power Meter

SPECIFICHE	OPPM800
Generali	
Dimensions	165 x 80 x 40 mm (with TEADP-250 adapter)
Weight	240 g (with battery)
Operation Temperature	-10° ~ +50° C
Storage Temperature	-40° ~ +70° C
Humidity (non-condensating)	0% ~ 95%
Power Meter	
Detector	InGeAs
Detector Size	1 mm
Wavelength Range	850 ~ 1625 nm
Calibrated Wavelengths	850 / 1300 / 1310 / 1490 / 1550 / 1625 nm
Dynamic Range	-65 ~ +10 dBm
Uncertainty	±5 % 1310 / 1550 nm at -20 dBm
Resolution	0.01
Tone Detection	0.270 Khz / 1 Khz / 2 Khz
Auto Switching (AWD)	Yes
Data Storage	Up tp 3000
AWD /Modulation Detection	-50 ~ -45 dBm / 1300 ~ 1625 nm
Display Units	dBm, dB, W

The **OPPM800** is a part pf Optokon test equipment designed for through fiber line diagnostic. It is designed to measure absolute or relative optical power in optical networks. It can be used as portable power meter or as a USB probe. The changeable adaptor design allows the simple exchange of optical connectors according to actual need.

Automatic Wavelength Detection
Automatic Wavelength Detection (AWD) Mode allows using Optokon Light source and Power meter without manually switching the measured wavelength and decreases the possibility of faulty measurement.

Cycle Mode
Cycle Mode allows the device to automatically toggle between available wavelengths.

ACCESSORIES	
OPADPFC	FC output adaptor
OPADPLC	LC output adaptor
OPADPSC	SC output adaptor
OPADP250	2.5 mm universal adaptor
OPADP125	1.25 mm universal adaptor
OPHC03	Rigid carrying case
OPHP27/NPC	High power probe, FC / APC connectors

Features:
- Standalone Power Meter
- InGaAs or Si photo detector
- CW, 270 Hz, 1 Khz, 2Khz Modulation
- Auto Wavelength Detection (AWD) Mode
- Changeable input adaptors
- Absolute and relative optical power measurement
- Cycle Mode
- USB probe mode
- Two levels high capacity memory

Application:
- Link Loss Characterization
- Measurement of optical power
- Output power of transceivers
- Fiber Detection
- Continuous fiber testing
- Signal detection
- USB probe

Standard accessories:
- Power Meter
- Universal 2.5 mm testing adaptor
- USB cable
- NiMH batteries
- Power charging adapter 220 Vac / 5 Vdc
- Calibration certificate
- Hard carrying case
- Smart Protocol PC software
- Data Exporter PC software

Input adapters:


OPADPFC (FC adaptor)


OPADPLC (LC adaptor)


OPADPSC (SC adaptor)


OPADP250 (2.5 mm)


OPADP125 (1.25 mm)

OPLS800MS4 - Light Source

The **OPLS800MS4** is Optokon test equipment designed for thorough fiber line diagnostics. The laser source is available in various wavelengths. The model with one or two outputs with two light sources on each port provides a maximum of 4 wavelengths in one device.
The changeable adaptor design allows the simple exchange of optical connectors according to actual needs.

Automatic Wavelength Detection
Automatic Wavelength Detection (AWD) Mode enables to use the Optokon Light Source and Power Meter without manually switching the measured wavelength and prevents faulty measurement.

Cycle Mode
Cycle Mode allows the device to automatically toggle between available wavelengths.

Features:
- Standalone light source
- Up to 4 channel light source
- Modulation CW, 270 Hz, 1 kHz, 2 kHz
- Auto Wavelength Detection (AWD) Mode
- Changeable output adaptors
- Auto Off feature
- Cycle mode

Standard accessories:
- Light source
- FC adapter
- USB cable
- Calibration certificate
- Power charging adapter 220 Vac / 5 Vdc
- Hard carrying case
- Rubble cover
- NiMH batteries

Application:
- Link Loss Characterization
- Fiber Detection
- Continuous fiber testing
- Visual fault locator

Output adapters:


OPALSFC


OPALSSC


OPALSST

TECHNICAL SPECIFICATIONS	OPLS800MS4
Generali	
Dimensions	165 x 80 x 40 mm (with OPASPFC adapter)
Weight	340 g (with battery)
Operation Temperature	-10° ~ +50° C
Storage Temperature	-40° ~ +70° C
Humidity (non-condensating)	0% ~ 95%

TRANSMITTER SPECIFICATIONS

Code marketing	Wavelength	Output Power	Stability	Note
LD650	650 nm	0 dBm	N/A	Visible light
LD850	850 nm	0 dBm	± 0.03 dB	Laser
LD31	1310 nm	0 dBm	± 0.05 dB	Laser
LD49	1490 nm	0 dBm	± 0.05 dB	Laser
LD55	1550 nm	0 dBm	± 0.05 dB	Laser
LD62	1625 nm	0 dBm	± 0.05 dB	Laser

ACCESSORIES	
OPALSFC	FC output adaptor
OPALSSC	SC output adaptor
OPALSST	ST output adaptor
OPHC03	Hard carrying case

STANDARD MODELS	
OPLS800-P2-FC-LD850-30 / LD31-55	FC adaptor, Port 1: 850 nm + 1300 nm laser Port 2: 1310 nm + 1550 nm laser
OPLS800-P2-FC-LD31	FC adaptor, Port 1: 1310 nm laser
OPLS800-P2-SC-LD55	SC adaptor, Port 1: 1550 nm laser
OPLS800-P2-SC-LD850-LD30 / LD31-55	SC adaptor, Port 1: 850 nm + 1300 nm laser Port 2: 1310 nm + 1550 nm laser

OPPM215-G - Power Meter

Right-Left hander change

SPECIFICATIONS	OPPM215-G
General	
Dimensions	95 x 47 x 27 mm (with output adapter)
Weight	150 g (with battery)
Operation Temperature	-10° ~ +60° C
Storage Temperature	-40° ~ +70° C
Humidity (non-condensating)	0% ~ 95%
Power Meter	
Detector	InGaAs
Wavelength Range	850 ~ 1700 nm
Calibrated Wavelengths	850 / 1300 / 1310 / 1490 / 1550 / 1625 nm
Dynamic Range	-60 ~ +16 dBm
Accuracy	±5 % (1310 / 1550 nm at -20 dBm)
Resolution	0.01 dB
Data Storage	Up to 100 measurements
Display Units	dBm, dB, W

The **OPPM215-G** optical power meter is a small, pocket size low cost item. The small size does not prevent the optical meter fulfilling all technical requirements for field equipment. The tester can be used as pocket power meter or as USB probe, part of testing workstation. It can be placed within rack mount ODF's with the display on the top or on the side. The Li-Pol rechargeable battery ensures long term working time with a minimum life time of 2 years.
The unit is able to store 100 measurements which can be uploaded. to PC and managed with SmartProtocol software or Data Exporter.

ACCESSORIES	
OPADPFC	FC output adaptor
OPADPLC	LC output adaptor
OPADPSC	SC output adaptor
OPADPST	ST output adaptor

Features:
- Two functions:
  - Portable power meter
  - USB probe - accessory of Testing Workplace
- Small size, light weight
- Rotate display - switchable function (right/left-hander use)
- Backlight option
- SM and MM fiber testing
- Six working wavelengths
- Absolute and Relative optical power measurement
- Internal 2 level memory, capacity up to 100 measurements
- SmartProtocol SW – Test reports creating
- Data Exporter – data download to Excel sheet
- USB port for:
  - USB probe - full control via simple commands
  - charging the battery
  - data upload to PC
  - firmware upgrade
- Build-in Li-Pol rechargeable battery
- Battery status indicator, Auto Off

Standard accessories:
- Power Meter
- Changeable input adaptors
- USB cable
- Li-Pol battery
- Power charging adapter 220 Vac / 5 Vdc
- Calibration certificate
- Hard carrying case
- Smart Protocol PC software
- Data Exporter PC software

TEHC215-G

Application:
- Link Loss Characterization
- Measurement of optical power
- Output power of transceivers
- Fiber Detection
- Continuous fiber testing
- Signal detection
- USB probe

Input adapters:

OPADPFC (FC adaptor) | OPADPLC (LC adaptor) | OPADPSC (SC adaptor) | OPADPST (ST adaptor)

OPLS215-G - Light Source

The **OPLS215-G** optical Light Source is a small size low cost item which fulfils all necessary technical field equipment requirements. Available of working wavelengths 850/1300 for multimode or 1310/1550 nm single mode applications or a visible 650 nm laser source. The rechargeable battery ensures long term working, with a minimum life time of 2 years. Batteries can be charged via a USB port or external AC/DC adaptor.

The universal output port allows the easy installation of optical adaptors FC, SC, or ST widely used in telecommunications, data and industry networks. The output port is designed for connection of PC polished connectors.

The **OPLS215-G** light source can be used in cooperation with the new **OPPM215-G**, the same smallest design optical power meter for measurement of Insertion loss and evaluation of power budget in optical networks.
The tester is equipped with USB port, for battery charging and for PC control.

SPECIFICATIONS	OPLS-15-G
General	
Dimensions	95 x 47 x 27 mm (with output adapter)
Weight	55 g (with battery)
Operation Temperature	-10° ~ +50° C
Storage Temperature	-40° ~ +70° C
Humidity (non-condensating)	0% ~ 95%
Battery working time	>7 hours
Battery life time	> 2 years
Output Power	
LD 650nm	-5 dBm (FC adaptor)
LD 850nm, 1300nm	-5 dBm (FC adaptor)
LD 1310nm, 1550nm	-5 dBm (FC adaptor)
Stability	
LD 850nm, 1300nm	± 0.1 dBm
LD 1310nm, 1550nm	± 0.05 dBm
Data Storage	Up to 100 measurements
Display Units	dBm, dB, W

Changeable adaptors

ACCESSORIES	
OPADPFC	FC output adaptor
OPADPSC	SC output adaptor
OPADPST	ST output adaptor

Features:
- Single or Dual wavelength output
- Smallest size, light weight
- Wide range of output adapters
- USB port:
  - PC control
  - Battery charging
- Powered by Li-Pol type battery
- Battery status indicator
- 10 min Auto Off
- Protection rubber cover

Application:
- Link Loss Characterization
- Fiber Detection
- Continuous fiber testing
- Visual fault locator

Standard accessories:
- Set of adapters: FC, SC, ST
- USB cable
- Power charging adapter
- Traceable calibration certificate
- Hard case TEHC215-G 265 x 270 x 90 mm

Options:
- Soft case TEEVA215-G, 130 x 32 x 80 mm

TEEVA215-G

Output adapters:

OPADPFC

OPALSSC

OPALSST

DT-A86 HD Combine Tester

SPECIFICHE	DT-A86
IPC protocol	ONVIF, RTSP, RTP
IPC test	Discovering the device, real-time video, camera configuration, PTZ test, dicovering ONVIF device cross the network segment
IPC image test	H265/H264 decoding, support 4K@30fps, local zoom preview (at 8 levels)
WiFi Spectrum test	Support 2.4G and 5G frequency band, spatial frequency band signal scanning and detection, and spatial noise (interference) signal detection
WiFi Signal monitoring	Support 2.4G and 5G frequency band quick monitoring of signal change, refresh frequency 1-10 Hz
POE test	The tester supplies the power. 802.3 at 25.5 W, PD actual power and voltage detection
Analog video test	Support format NTSC/PAL/HD-CVI3.0 standard /AHD3.0 standard /HD-TVI3.0 standard
Video input / output	BNC video 1 Vpp
Video digital zoom	Support zoom at 8 level
Video signal generator	Sending PAL/NTSC video test signal, sending CVI, AHD and TVI video test signal (720p/1080p)
HDMI signal test In/Out	720p 25/30/50/60 fps 1080p 25/30/50/60 fps
Audio test	1 x Audio signal input
Coaxial PTZ control test	Video IN BNC interface
Coaxial PTZ protocol	CVI protocol (Dahua coax), AHD protocol (Pelco c) and TVI protocol (Hikvision)
485 PTZ control test	More than 30 protocols, including Pelco-D/P, Samsung, Panasonic, Lilin and Yaan
Baud rate	150, 300, 600, 1200, 2400, 4800, 9600 and 19200 bps
WiFi test	Support 2.4 Ghz e 5Ghz frequency band, connection information (delay detection, packet loss and rate)
Ethernet test	10/100/1000 detection - Loop, DHCP, traffic, quality
TDR cable test	Testing the length of network cable (4 pairs). Resolution: 0.1 m; Accuracy: 1 m The maximum length of the measured cable is 130 - 200 m (depending on the wire rod)
POE test	The tester receive/supplies the power. 802.3at 25.5 W max, PD actual power detection
Head led	2x 35 lm LED, wide angle
Interface	Dual-port RJ45 Ethernet 1 Gbs, support serial connection
Display	7.0" TFT 1920x1200 resolution - 16.7 M color
Battery	2x lithium battery pack capacity of 18.5 Wh
Power supply	12 Vdc - 1.5 A - Charging time 3/4 hours
Power saving	Auto power off setting
Working humidity	30 ~ 90%
Working temperature	-10° ~ +55° C
Dimension (HxWxD)	236.5 x 133.4 x 45.4 mm

NEW item

Main features:

- Built-in 2 Lithium batteries, POE power supply, 12 Vdc - 2 A power output
- 7 inch color LCD, Full HD, touch screen
- Multifunction tester: WiFi/Air spectrum and signal test (using dual antenna omnidirectional), ONVIF test, 4K CVI/AHD/TVI camera test, Signal generator, Cable TDR test, Digital multimeter, Optical power meter

1	RESET	"Reset" button: If necessary, use ball-point pen or other appropriate small tools to press down the keys inside the small hole to restart the tester.
2	AUDIO	Audio input port: 3.5MM Audio input port.
3	DC12 CHARGE	12V/2A charging interface
4	DMM FUSE	Multimeter fuse: It can be replaced after having been fused.
5		Digital multimeter, Headset and extension interface
6		Digital multimeter, Measuring current (AC / DC)
7		Digital multimeter, Common interface
8		Digital multimeter, Measure voltage (AC / DC), resistance, capacitance, diode, and circuit ON/OFF.
9	OUT PUT HDMI	Output HDMI test signal
10	IN PUT HDMI	Input HDMI test signal

1	12V/2A output jack. Outer diameter: 4mm, Inner needle: 1.65mm.
2	MICRO USB jack. It is used to connect with the computer host.
3	USB HOST extension interface
4	RS485 control output. It is used for PTZ control.
5	Analog video input BNC connector
6	Analog video output BNC connector
7	Fiber connector for optical power meter
8	Network port 1 (blue), with POE power supply output function.
9	Network port 2 (green), with POE power supply input detection function, which is also the device charging input port.
10	LED lighting (flashlight)

Signal generator / Camera test / HDMI signal test

DT-A86 HD Combine Tester

OSD italiano

Digital multimeter is a combination of varius electrical measuring instruments, with data recording function for later analysis

ONVIF test to discovering, acquiring and display the camera
Support PTZ control and configuration camera

Optical power meter of laser transmission, with calibration, data recording and saving report to eliminated intermittent problems
The wavelenght range covers 850 ~ 1625 nm

WiFi /Air spectrum - WiFi Tools to detect and monitoring signal at 2.4/5.0 Ghz frequency band

Cable TDR to test/measure lenght/connection of RJ45 cable POE test

Accessories:

Carrying Bag

Multi Cable

AC/DC Adapter

Batteries

STKFK03

Kit con accessori per la pulizia della fibra ottica.

Ogni borsa in tessuto contiene:
- 2x flaconi di solvente per pulizia
- 1x mini vaschetta di CleanWipes ™ (conf. 90 pezzi)
- 1x confezione di CleanWipes™ (conf. 400 pezzi)
- 25x salviette CleanWipes™
- 50x tamponi CleanStixx™
- 1x torcia LED ad alta luminosità

STKS25

Stick di pulizia per ghiere di 2,5 mm (SC, FC, ST, etc.). Confezione da 50 pezzi.

STKS12

Stick di pulizia per ghiere di 1,25 mm (LC). Confezione da 50 pezzi.

STKPOC03M, POC10M

POC03M - 85 g
POC10M - 280 g

Flacone di solvente per la pulizia di connettori fibra ottica. Asciugatura rapida.

STKWCS100

Confezione di salviette ad alta assorbenza per la pulizia di jumpers e connettori.

STKWFW

Confezione da 400 salviette in poliestere per la pulizia di fibra ottica e connettori.

STKDS147

Spray per la rimozione di particelle e polvere di fibra ottica, oltre che per la pulizia di aree difficilmente accessibili.

MOFCJ005

Termorestringente per fibra 35 mm. Imballo 100 pezzi.

MOFCJ007

Termorestringente per fibra 45 mm. Imballo 100 pezzi.

MOFCJ009

Termorestringente per fibra 60 mm. Imballo 100 pezzi.

YTK3

FLARE Stripper per fibra a 3 fori professionale.

YTK6

Buff Tube Stripper 45-162, fino a 1/8”
Altezza lama regolabile

YTK21

Buff Tube Stripper 45-163, 1/8” a 7/32”
Altezza lama regolabile

FS149

FLARE Stripper per fibra a 3 fori professionale.

FF143

FLARE Forbice taglia kevlar.

FS147

FLARE Mini Stripper per fibra a 3 fori professionale.

FRWBFCTRACK

Gancio per trazione su bussola FC/PC per bretelle preterminate FC/FC.

YTK11

Spela fibre assiale.

YTK47

Pulisci connettori FC / LC / SC / ST
Fino a 500 pulizie per nastro.

CONDOMINIO MULTISERVIZI - SOLUZIONI IN FIBRA OTTICA

DISTRIBUZIONE IN FIBRA OTTICA:

CEI 306-22 COMPLIANT

Digitale Terrestre
Digitale Satellitare
Collegamento Dati
Videocitofonia
Videosorveglianza
Canali TV Info Condominio

IMPIANTO IN FIBRA OTTICA REALIZZATO NELL'ANNO 2012

PESCARA - TORRI CAMUZZI

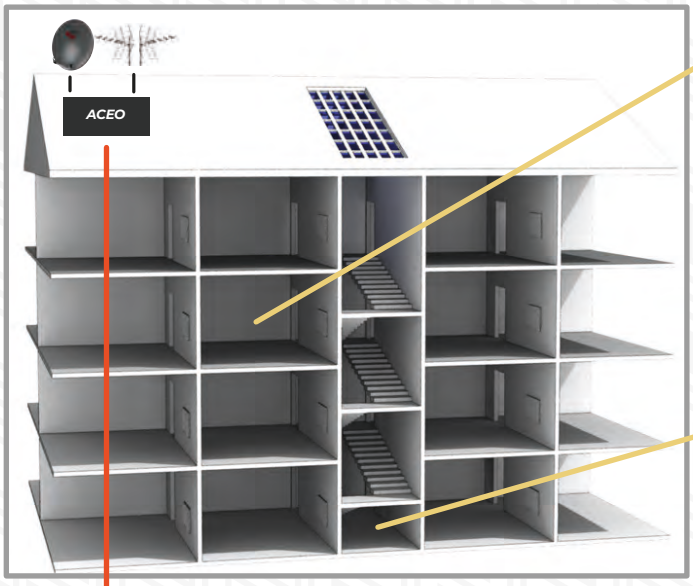
www.novatec-europe.com

NOVATEC EUROPE

Novatec Europe
Via F. Ferrucci 102-104, 59100 Prato (PO)
+39 055 350 155 | +39 327 998 9737
www.novatec-europe.com

DISTRIBUZIONE FIBRA OTTICA IN CONDOMINIO CEI 306-22

(ACEO Armadio Conversione Elettrico Ottico - TETTO)



APPARTAMENTI

La STOA (scatola di terminazione ottica di appartamento) viene usata all'interno delle abitazioni: installazione all'interno del MQDSA

LOCALE TECNICO

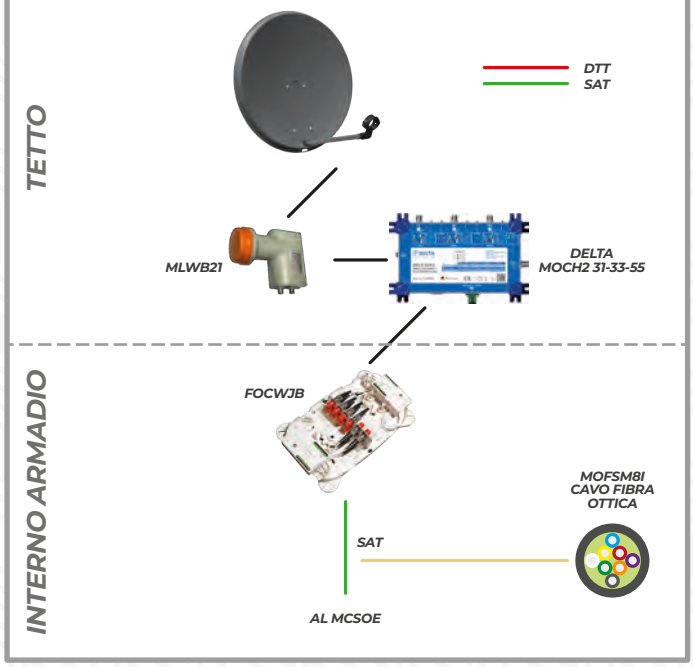
Nello scantinato o locale tecnico è presente il CSOE (Centro Servizio Ottico di Edificio) che connette le fibre provenienti da ogni STOA di appartamento alla fibra degli operatori.

TETTO

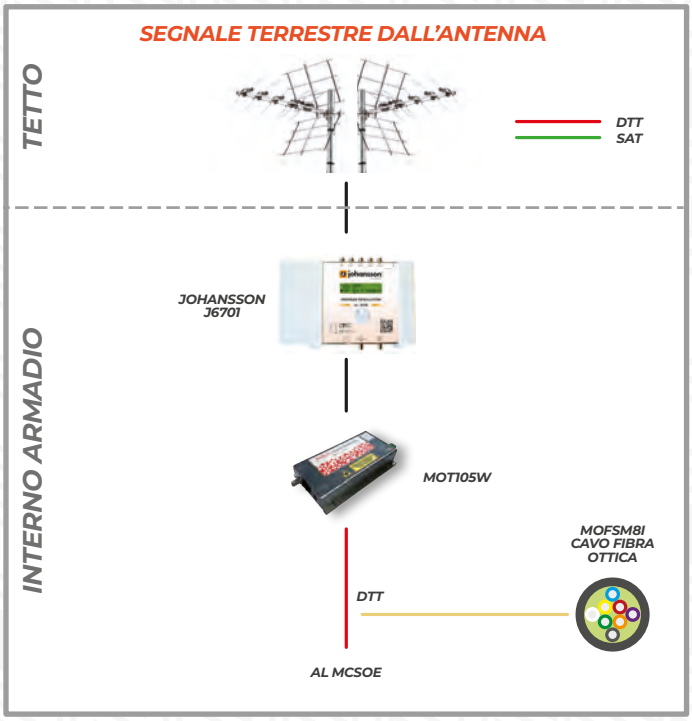
ACEO (Armadio Conversione Elettrico Ottica)

CEI 306-22 COMPLIANT

SEGNALE SATELLITE DALLA PARABOLA



SEGNALE TERRESTRE DALL'ANTENNA



SAT DTT

I DUE SEGNALI CONFLUISCONO IN UN SINGOLO CAVO FIBRA OTTICA MOFSM8I

NOVATEC EUROPE

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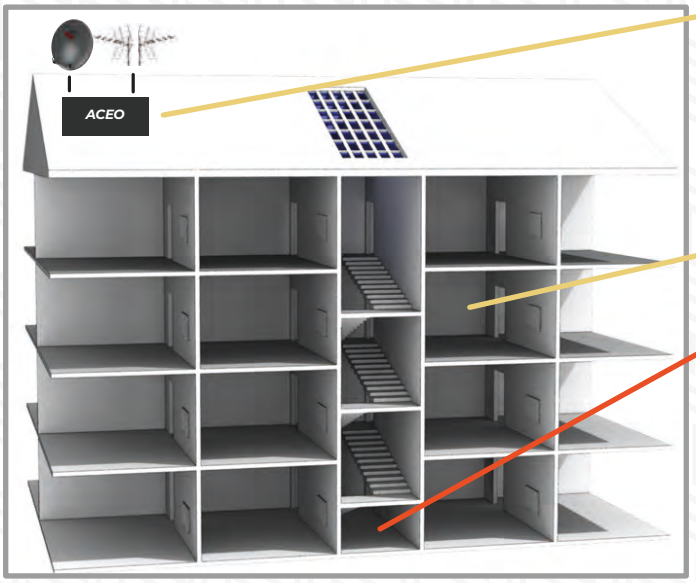
DISTRIBUZIONE FIBRA OTTICA IN CONDOMINIO CEI 306-22

(CSOE Centro Servizi Ottico di Edificio - LOCALE TECNICO)



TETTO

ACEO (Armadio Conversione Elettrico Ottica)

APPARTAMENTI

La STOA (scatola di terminazione ottica di appartamento) viene usata all'interno delle abitazioni: installazione all'interno del MQDSA

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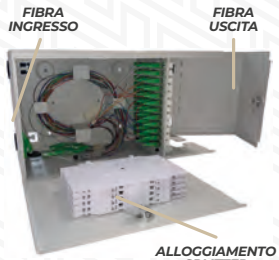
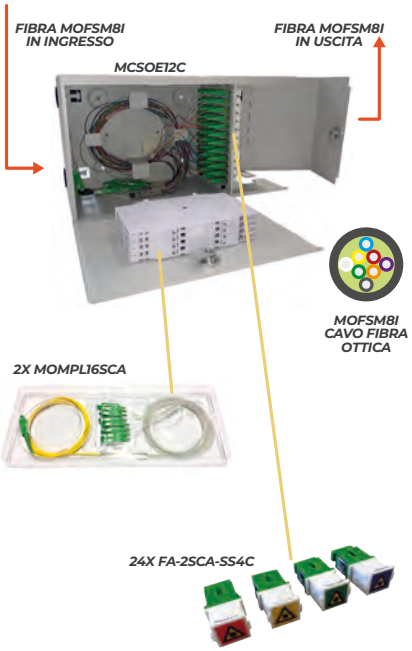
MCSOE12C

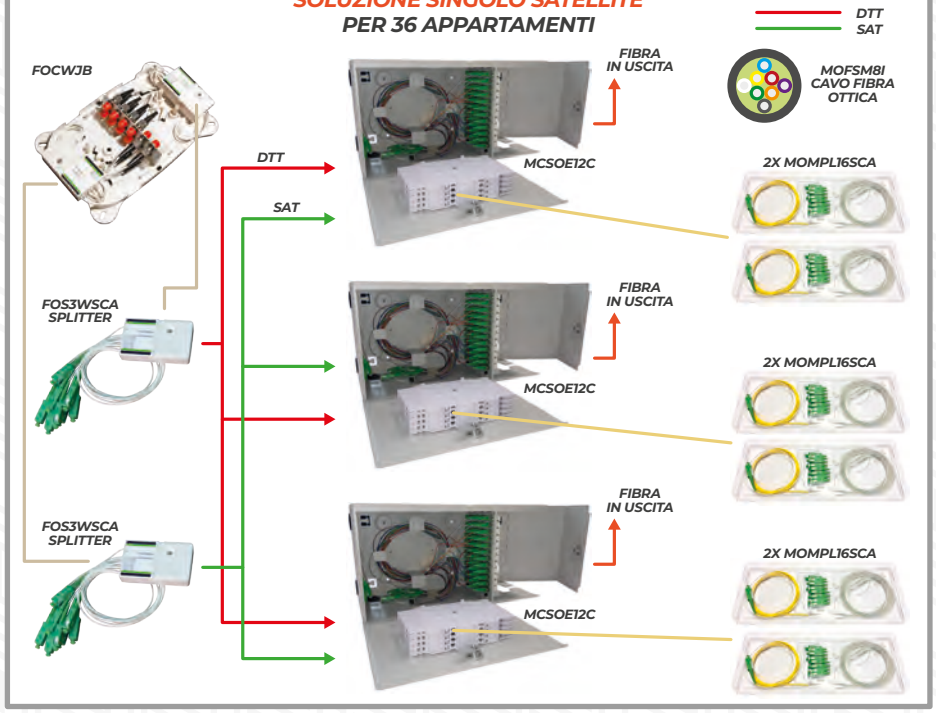


CEI 306-22 COMPLIANT

SOLUZIONE SINGOLO SATELLITE PER 12 APPARTAMENTI



SOLUZIONE SINGOLO SATELLITE PER 36 APPARTAMENTI



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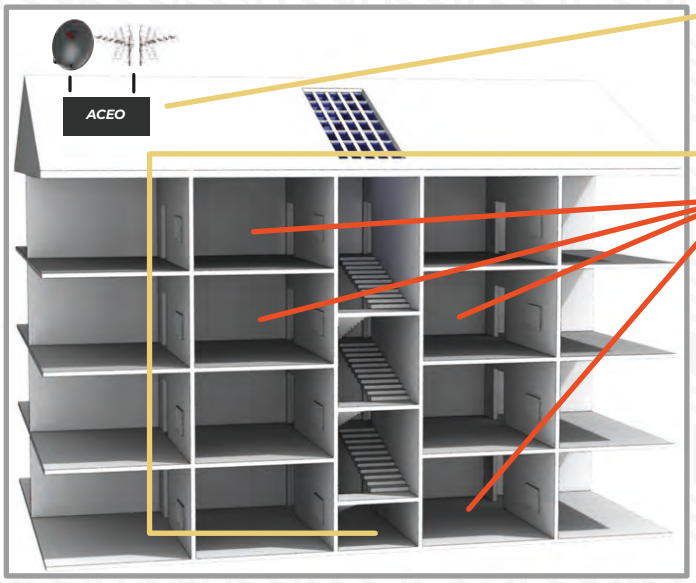
DISTRIBUZIONE FIBRA OTTICA IN APPARTAMENTO CEI 306-22

(QDSA Quadro Distributore Segnali di Appartamento - ABITAZIONE)



TETTO

ACEO (Armadio Conversione Elettrico Ottica)

LOCALE TECNICO

Nello scantinato o locale tecnico è presente il CSOE (Centro Servizio Ottico di Edificio) che connette le fibre provenienti da ogni STOA di appartamento alla fibra degli operatori.

APPARTAMENTI

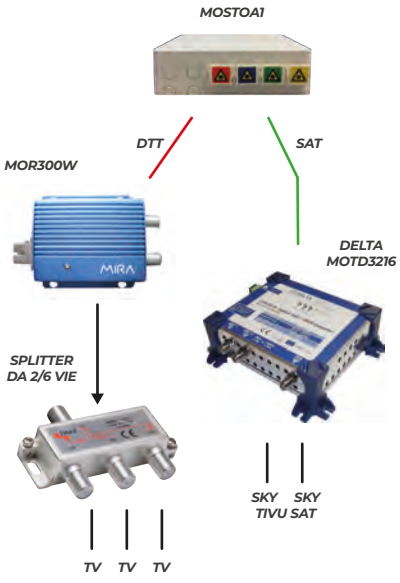
La STOA (scatola di terminazione ottica di appartamento) viene usata all'interno delle abitazioni: installazione all'interno del MQDSA

APPARTAMENTO

WTMS101

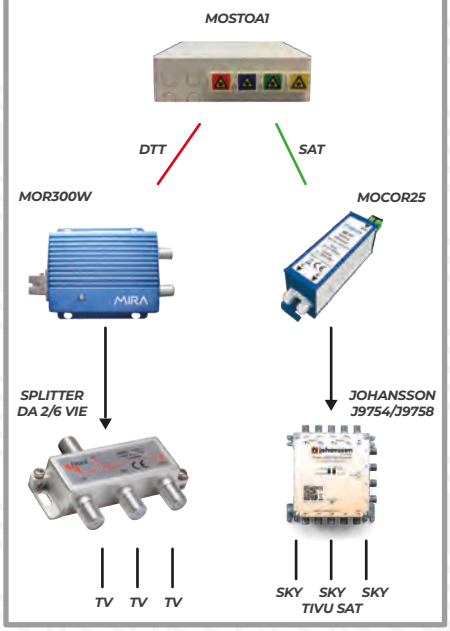
CEI 306-22 COMPLIANT

SOLUZIONE SINGOLO SATELLITE
4x DTT + 2x DECODER SKY Q 4x DECODER SAT SCR + 2x DECODER SAT



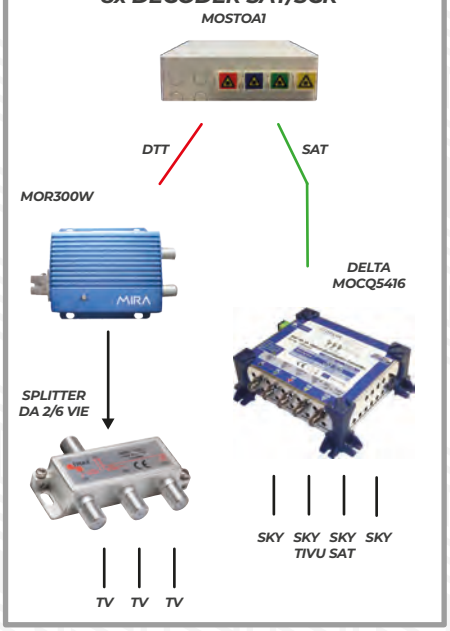
Compatibile con SKY Q, SKY HD, MY SKY HD, TIVU SAT, FTA

SOLUZIONE SINGOLO SATELLITE
4x DTT + 8x DECODER SAT SCR/DCSS



Compatibile con MY SKY HD, SKY HD, TIVU SAT, FTA

SOLUZIONE SINGOLO SATELLITE
4x DTT + 4x DECODER SAT/DCSS + 8x DECODER SAT/SCR



Compatibile con MY SKY HD, SKY HD, TIVU SAT, FTA

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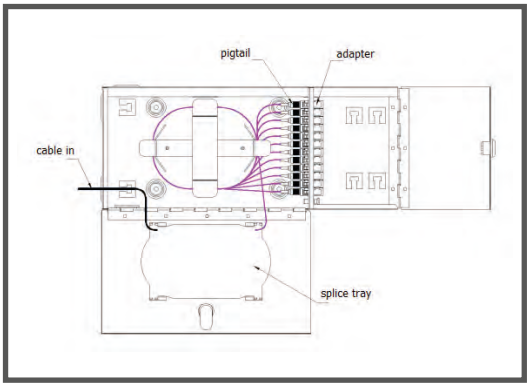
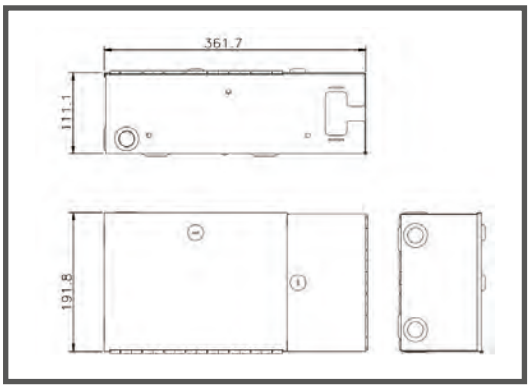
Fibra Ottica / Apparati Passivi
2023 - Q2

INDICE

MCSOE12C, MCSOE8C - Centro Stella Ottico Edificio

CEI 306-22
COMPLIANT





MCOSE12C:
- cablato x 12 unità immobiliari;
- doppia apertura con chiusura a chiave;
- 2x 16 vie splitter + 48 adattatori SC/APC.

MCOSE8C:
- cablato x 8 unità immobiliari;
- doppia apertura con chiusura a chiave;
- 2x 8 vie splitter + 32 adattatori SC/APC.

PRODOTTO CORRELATO:
NVC4SCA50STOA

PRODOTTI CORRELATI:
MOSTOA1
MOSTOA8
MOSTOA12DIN

Kit assemblato STOA Single Mode 4 Fibre

CEI 306-22
COMPLIANT

KIT ASSEMBLATO STOA + FIBRA 4 CORE LSZH SINGLE MODE 9/125 COLORE BIANCO	
NVC4SCA15STOA	Kit preassemblato STOA + 15 m Fibra G657A2 con anello in Kevlar per trazione
NVC4SCA30STOA	Kit preassemblato STOA + 30 m Fibra G657A2 con anello in Kevlar per trazione
NVC4SCA40STOA	Kit preassemblato STOA + 40 m Fibra G657A2 con anello in Kevlar per trazione
NVC4SCA50STOA	Kit preassemblato STOA + 50 m Fibra G657A2 con anello in Kevlar per trazione
NVC4SCA70STOA	Kit preassemblato STOA + 70 m Fibra G657A2 con anello in Kevlar per trazione
NVC4SCA100STOA	Kit preassemblato STOA + 100 m Fibra G657A2 con anello in Kevlar per trazione

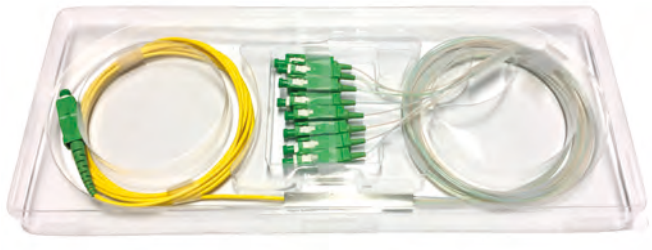
Fibra con STOA collegata

Kevlar per trazione

MOR-WDM A, MOR-WDM B

ACCOPPIATORI SINGLE MODE	
MOR-WDM A	Accoppiatore SM, 2 ingressi: 1310nm FC/PC / 1550 nm SC/APC, uscita FC/PC
MOR-WDM B	Accoppiatore SM, 2 ingressi: 1310nm FC/PC - 1490+1550 nm SC/APC, uscita FC/PC

SPLITTER PLC SC/APC - FC/PC - SC/PC



CEI 306-22
COMPLIANT

SPLITTER PLC – SC/APC	
MOMPL2SCA	Splitter PLC 1x2, Mini Module, tubo in acciaio, 0.9 mm, 1 m, SC/APC
MOMPL4SCA	Splitter PLC 1x4, Mini Module, tubo in acciaio, 0.9 mm, 1 m, SC/APC
MOMPL8SCA	Splitter PLC 1x8, Mini Module, tubo in acciaio, 0.9 mm, 1 m, SC/APC
MOMPL16SCA	Splitter PLC 1x16, Mini Module, tubo in acciaio, 0.9 mm, 1 m, SC/APC
MOMPL32SCA	Splitter PLC 1x32, Mini Module, tubo in acciaio, 0.9 mm, 1 m, SC/APC
MOMPL64SCA	Splitter PLC 1x64, Mini Module, tubo in acciaio, 0.9 mm, 1 m, SC/APC
MOMPL2FC	Splitter PLC 1x2, Mini Module, tubo in acciaio, 0.9 mm, 1 m, FC/PC
MOMPL4FC	Splitter PLC 1x4, Mini Module, tubo in acciaio, 0.9 mm, 1 m, FC/PC
MOMPL8FC	Splitter PLC 1x8, Mini Module, tubo in acciaio, 0.9 mm, 1 m, FC/PC
MOMPL16FC	Splitter PLC 1x16, Mini Module, tubo in acciaio, 0.9 mm, 1 m, FC/PC
MOMPL32FC	Splitter PLC 1x32, Mini Module, tubo in acciaio, 0.9 mm, 1 m, FC/PC
MOMPL64FC	Splitter PLC 1x64, Mini Module, tubo in acciaio, 0.9 mm, 1 m, FC/PC
MOMPL2SC	Splitter PLC 1x2, Mini Module, tubo in acciaio, 0.9 mm, 1 m, SC/PC
MOMPL4SC	Splitter PLC 1x4, Mini Module, tubo in acciaio, 0.9 mm, 1 m, SC/PC

PARAMETERS	1x2	1x4	1x8	1x16	1x32	1x64
OPERATING WAVELENGTH (nm)	1260 ~ 1650					
FIBER TYPE	G657A1					
INSERTION LOSS (dB) (P/S Grade)	3.8	7.1	10.2	13.7	16.9	21.0
LOSS UNIFORMITY (dB)	0.4	0.6	0.8	1.2	1.5	2.0
POLARIZATION DEPENDENT LOSS (dB)	0.2			0.25	0.3	0.35
RETURN LOSS (dB) (P/S Grade)	55 / 50					
DIRECTIVITY (dB)	55					
WAVELENGTH DEPENDENT LOSS (dB)	0.3			0.5		
TEMPERATURE STABILITY (-40~85°C) (dB)	0.4			0.5		
OPERATING TEMPERATURE (C)	-40 ~ +85°					
STORAGE TEMPERATURE (C)	-40 ~ +85°					
DEVICE DIMENSION (mm)	40 x 4 x 4			50 x 4 x 4	50 x 7 x 4	60 x 12 x 4
ABS MODULE DIMENSION (mm)	100 x 80 x 10			120 x 80 x 18		140 x 115 x 18
STEEL TUBE DIMENSION (mm)	60 x 7 x 4			60 x 12 x 4	80 x 20 x 6	100 x 40 x 6

1. Specified without connectors.
2. Add an additional 0.15 dB loss per connector.

Splitter Single Mode, connettore SC-/PC

SPLITTER SINGLE MODE SC/APC	
FOS2WSCA	DW splitter 2 vie SM, con 30 cm preterminati SC/APC, 3.90 dB
FOS3WSCA	DW splitter 3 vie SM, con 30 cm preterminati SC/APC, 6.50 dB
FOS4WSCA	DW splitter 4 vie SM, con 30 cm preterminati SC/APC, 7.20 dB
FOS5WSCA	DW splitter 5 vie SM, con 30 cm preterminati SC/APC, 8.70 dB
FOS6WSCA	DW splitter 6 vie SM, con 30 cm preterminati SC/APC, 11.60 dB
FOS7WSCA	DW splitter 7 vie SM, con 30 cm preterminati SC/APC, 12.20 dB
FOS8WSCA	DW splitter 8 vie SM, con 30 cm preterminati SC/APC, 12.90 dB

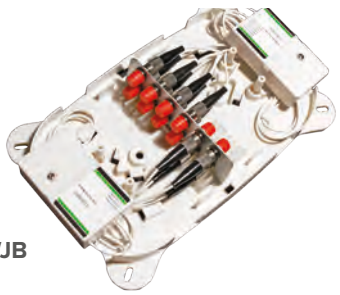
Coupler Single Mode preterminati SC/APC

COUPLER SINGLE MODE SC/APC	
FOC951X5SCA	Coupler SM 1 via 95/5, conn. SC-/PC, uscita ≤ 0.70 dB, ≤ 15.70 dB
FOC901X10SCA	Coupler SM 1 via 95/10, conn. SC/APC, uscita ≤ 0.95 dB, ≤ 12.30 dB
FOC801X20SCA	Coupler SM 1 via 80/20, conn. SC/APC, uscita ≤ 1.65 dB, ≤ 8.60 dB
FOC701X30SCA	Coupler SM 1 via 70/30, conn. SC/APC, uscita ≤ 2.35 dB, ≤ 6.50 dB
FOC651X35SCA	Coupler SM 1 via 70/30, conn. SC/APC, uscita ≤ 2.55 dB, ≤ 5.60 dB
FOC902X5SCA	Coupler SM 2 vie 95/5/5, conn. SC/APC, uscita ≤ 0.95 dB, 2x ≤ 15.70 dB
FOC802X10SCA	Coupler SM 2 vie 80/10/10, conn. SC/APC, uscita ≤ 1.65 dB, 2x ≤ 12.30 dB
FOC702X15SCA	Coupler SM 2 vie 70/15/15, conn. SC/APC, uscita ≤ 2.35 dB, 2x ≤ 9.90 dB
FOC602X20SCA	Coupler SM 2 vie 60/20/20, conn. SC/APC, uscita ≤ 3.15 dB, 2x ≤ 8.60 dB
FOC502X25SCA	Coupler SM 2 vie 50/25/25, conn. SC/APC, uscita ≤ 3.95 dB, 2x ≤ 7.20 dB
FOC704X7SCA	Coupler SM 4 via 70/7.5/7.5/7.5/7.5, conn. SC/APC, usc. ≤ 1.65 dB, 4x ≤15.80 dB
FOC804X5SCA	Coupler SM 4 vie 70/7.5/7.5/7.5/7.5, conn. SC/APC, usc. ≤ 1.65 dB, 4x ≤ 15.80 dB
FOC604X10SCA	Coupler SM 4 vie 70/10/10/10/10, conn. SC/APC, usc. ≤ 3.25 dB, 4x ≤ 12.50 dB
FOC504X12SCA	Coupler SM 4 vie 50/12.5/12.5/12.5/12.5, conn. SC/APC, usc. ≤ 3.95 dB, 4x ≤ 11.90 dB

Splitter Single Mode, connettore FC/PC

SPLITTER SINGLE MODE FC/PC	
FOS2WFC	DW splitter 2 vie SM, con 30 cm preterminati FC/PC, 3.90 dB
FOS3WFC	DW splitter 3 vie SM, con 30 cm preterminati FC/PC, 6.50 dB
FOS4WFC	DW splitter 4 vie SM, con 30 cm preterminati FC/PC, 7.20 dB
FOS5WFC	DW splitter 5 vie SM, con 30 cm preterminati FC/PC, 8.70 dB
FOS6WFC	DW splitter 6 vie SM, con 30 cm preterminati FC/PC, 11.60 dB
FOS7WFC	DW splitter 7 vie SM, con 30 cm preterminati FC/PC, 12.20 dB
FOS8WFC	DW splitter 8 vie SM, con 30 cm preterminati FC/PC, 12.90 dB

Coupler Single Mode preterminati FC/PC



FOCWJB

COUPLER SINGLE MODE FC/PC	
FOC951X5FC	Coupler SM 1 via 95/5, conn. FC/PC, uscita ≤ 0.70 dB, ≤ 15.70 dB
FOC901X10FC	Coupler SM 1 via 95/10, conn. FC/C, uscita ≤ 0.95 dB, ≤ 12.30 dB
FOC801X20FC	Coupler SM 1 via 80/20, conn. FC/PC, uscita ≤ 1.65 dB, ≤ 8.60 dB
FOC701X30FC	Coupler SM 1 via 70/30, conn. FC/PC, uscita ≤ 2.35 dB, ≤ 6.50 dB
FOC651X35FC	Coupler SM 1 via 70/30, conn. FC/PC, uscita ≤ 2.55 dB, ≤ 5.60 dB
FOC902X5FC	Coupler SM 2 vie 95/5/5, conn. FC/PC, uscita ≤ 0.95 dB, 2x ≤ 15.70 dB
FOC802X10FC	Coupler SM 2 vie 80/10/10, conn. FC/PC, uscita ≤ 1.65 dB, 2x ≤ 12.30 dB
FOC702X15FC	Coupler SM 2 vie 70/15/15, conn. FC/PC, uscita ≤ 2.35 dB, 2x ≤ 9.90 dB
FOC602X20FC	Coupler SM 2 vie 60/20/20, conn. FC/PC, uscita ≤ 3.15 dB, 2x ≤ 8.60 dB
FOC502X25FC	Coupler SM 2 vie 50/25/25, conn. FC/PC, uscita ≤ 3.95 dB, 2x ≤ 7.20 dB
FOC804X5FC	Coupler SM 4 via 80/5/5/5/5, conn. FC/PC, uscita ≤1.65 dB, 4x ≤15.80 dB
FOC704X7FC	Coupler SM 4 via 70/7.5/7.5/7.5/7.5, conn. FC/PC, usc. ≤ 1.65 dB, 4x ≤15.80 dB
FOC604X10FC	Coupler SM 4 via 70/10/10/10/10, conn. FC/PC, usc. ≤ 3.25 dB, 4x ≤12.50 dB
FOC504X12FC	Coupler SM 4 via 50/12.5/12.5/12.5/12.5, conn. FC/PC, usc. ≤ 3.95 dB, 4x ≤11.90 dB

Contenitore slim da parete per splitter / coupler serie CQT / FOS / FOC, utlizzabile per connessione TV -SAT massima di 5 CSOE.

Splitter Single Mode, non terminati

CEI 306-22 COMPLIANT

SPLITTER SINGLE MODE - NON TERMINATI	
FOS2W	DW splitter 2 way SM, 3.90 dB
FOS3W	DW splitter 3 way SM, 6.50 dB
FOS4W	DW splitter 4 way SM, 7.20 dB
FOS5W	DW splitter 5 way SM, 8.70 dB
FOS6W	DW splitter 6 way SM, 11.60 dB
FOS7W	DW splitter 7 way SM, 12.20 dB
FOS8W	DW splitter 8 way SM, 12.90 dB

Coupler Single Mode, non terminati

CEI 306-22 COMPLIANT

COUPLER SINGLE MODE - NON TERMINATI	
FOC951X5FC	Coupler SM 1 via 95/5, uscita ≤ 0.70dB, ≤ 15.70 dB
FOC901X10FC	Coupler SM 1 via 95/10, uscita ≤ 0.95dB, ≤ 12.30 dB
FOC801X20FC	Coupler SM 1 via 80/20, uscita ≤ 1.65dB, ≤ 8.60 dB
FOC701X30FC	Coupler SM 1 via 70/30, uscita ≤ 2.35dB, ≤ 6.50 dB
FOC651X35FC	Coupler SM 1 via 70/30, uscita ≤ 2.55dB, ≤ 5.60 dB
FOC902X5FC	Coupler SM 2 vie 95/5/5, uscita ≤ 0.95dB, 2x ≤ 15.70 dB
FOC802X10FC	Coupler SM 2 vie 80/10/10, uscita ≤ 1.65dB, 2x ≤ 12.30 dB
FOC702X15FC	Coupler SM 2 vie 70/15/15, uscita ≤ 2.35dB, 2x ≤ 9.90 dB
FOC602X20FC	Coupler SM 2 vie 60/20/20, uscita ≤ 3.15dB, 2x ≤ 8.60 dB
FOC502X25FC	Coupler SM 2 vie 50/25/25, uscita ≤ 3.95dB, 2x ≤ 7.20 dB
FOC804X5FC	Coupler SM 4 vie 80/5/5/5/5, uscita ≤ 1.65dB, 4x ≤ 15.80 dB
FOC704X7FC	Coupler SM 4 vie 70/7.5/7.5/7.5/7.5, uscita ≤ 1.65dB, 4x ≤ 15.80 dB
FOC604X10FC	Coupler SM 4 vie 70/10/10/10/10, uscita ≤ 3.25dB, 4x ≤ 12.50 dB
FOC504X12FC	Coupler SM 4 vie 50/12.5/12.5/12.5/12.5, uscita ≤ 3.95dB, 4x ≤ 11.90 dB

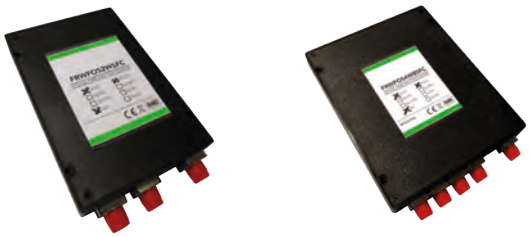
Splitter Single Mode, connettore 5M-PC

SPLITTER SINGLE MODE 5M-PC	
FOS2W5M	DW splitter 2 vie SM, con 30 cm preterminati 5M-PC, 3.90 dB
FOS3W5M	DW splitter 3 vie SM, con 30 cm preterminati 5M-PC, 6.50 dB
FOS4W5M	DW splitter 4 vie SM, con 30 cm preterminati 5M-PC, 7.20 dB
FOS5W5M	DW splitter 5 vie SM, con 30 cm preterminati 5M-PC, 8.70 dB
FOS6W5M	DW splitter 6 vie SM, con 30 cm preterminati 5M-PC, 11.60 dB
FOS7W5M	DW splitter 7 vie SM, con 30 cm preterminati 5M-PC, 12.20 dB
FOS8W5M	DW splitter 8 vie SM, con 30 cm preterminati 5M-PC, 12.90 dB

Coupler Single Mode preterminati 5M-PC

COUPLER SINGLE MODE 5M-PC	
FOC951X5-5M	Coupler SM 1 via 95/5, conn. 5M-PC, uscita ≤ 0.70dB, ≤ 15.70 dB
FOC901X10-5M	Coupler SM 1 via 95/10, conn. 5M-PC, uscita ≤ 0.95dB, ≤ 12.30 dB
FOC801X20-5M	Coupler SM 1 via 80/20, conn. 5M-PC, uscita ≤ 1.65dB, ≤ 8.60 dB
FOC701X30-5M	Coupler SM 1 via 70/30, conn. 5M-PC, uscita ≤ 2.35dB, ≤ 6.50 dB
FOC651X35-5M	Coupler SM 1 via 70/30, conn. 5M-PC, uscita ≤ 2.55dB, ≤ 5.60 dB
FOC902X5-5M	Coupler SM 2 vie 95/5/5, conn. 5M-PC, uscita ≤ 0.95dB, 2x ≤15.70 dB
FOC802X10-5M	Coupler SM 2 vie 80/10/10, conn. 5M-PC, uscita ≤1.65dB, 2x ≤ 12.30 dB
FOC702X15-5M	Coupler SM 2 vie 70/15/15, conn. 5M-PC, uscita ≤2.35dB, 2x ≤9.90 dB
FOC602X20-5M	Coupler SM 2 vie 60/20/20, conn. 5M-PC, uscita ≤ 3.15dB, 2x ≤8.60 dB
FOC502X25-5M	Coupler SM 2 vie 50/25/25, conn. 5M-PC, uscita ≤ 3.95dB, 2x ≤7.20 dB
FOC804X5-5M	Coupler SM 4 vie 80/5/5/5/5, conn. 5M-PC, uscita ≤ 1.65dB, 4x ≤15.80 dB
FOC704X7-5M	Coupler SM 4 vie 70/7.5/7.5/7.5/7.5, conn. 5M-PC, usc. ≤ 1.65dB, 4x ≤14.80 dB
FOC604X10-5M	Coupler SM 4 vie 70/10/10/10/10, conn. 5M-PC, uscita ≤ 3.25dB, 4x ≤12.50 dB
FOC504X12-5M	Coupler SM 4 vie 50/12.5/12.5/12.5/12.5, conn. 5M-PC, usc. ≤ 3.95dB, 4x ≤11.90 dB

Splitter ottici connettore FC femmina



SPLITTER OTTICI CONNETTORE FC FEMMINA	
FRWFOS2WBSFC	Splitter ottico DW a 2 vie, connettore tipo FC femmina
FRWFOS3WBSFC	Splitter ottico DW a 3 vie, connettore tipo FC femmina
FRWFOS4WBSFC	Splitter ottico DW a 4 vie, connettore tipo FC femmina
FRWFOS5WBSFC	Splitter ottico DW a 5 vie, connettore tipo FC femmina
FRWFOSBC90FC	Splitter ottico DW a 2 vie 90/10, connettore tipo FC femmina
FRWFOSBC80FC	Splitter ottico DW a 2 vie 80/20, connettore tipo FC femmina
FRWFOSBC70FC	Splitter ottico DW a 2 vie 70/30, connettore tipo FC femmina

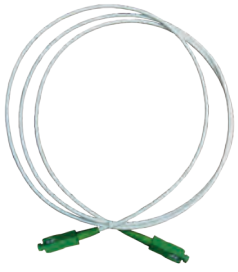
Splitter / coupler preterminati FC

SPLITTER COUPLER PRETERMINATI FC	
FRWFOS2WSFC	Splitter ottico DW a 2 vie, 50 cm fibra preterminata FC
FRWFOS3WSFC	Splitter Ottico DW a 3 Vie, 50 cm fibra preterminata FC
FRWFOS4WSFC	Splitter Ottico DW a 4 Vie, 50 cm fibra preterminata FC
FRWFOS5WSFC	Splitter Ottico DW a 5 Vie, 50 cm fibra preterminata FC
FRWFOS6WSFC	Splitter Ottico DW a 6 Vie, 50 cm fibra preterminata FC
FRWFOS8WSFC	Splitter Ottico DW a 8 Vie, 50 cm fibra preterminata FC
FRWFOSNC9010FC	Coupler Ottico DW a 2 Vie 90/10, 50 cm fibra preterminata FC
FRWFOSNC8020FC	Coupler Ottico DW a 2 Vie 80/20, 50 cm fibra preterminata FC
FRWFOSNC7030FC	Coupler Ottico DW a 2 Vie 70/30, 50 cm fibra preterminata FC
FRWFOSNC6040FC	Coupler Ottico DW a 2 Vie 60/40, 50 cm fibra preterminata FC
FRWFOSC8515FC	Coupler Ottico DW a 4 Vie 85/5/5/5, 50 cm fibra preterminata FC
FRWFOSC7030FC	Coupler Ottico DW a 4 Vie 70/10/10/10, 50 cm fibra preterminata FC
FRWFOSC5545FC	Coupler Ottico DW a 4 Vie 55/15/15/15, 50 cm fibra preterminata FC
FRWFOSC1090FC	Coupler Ottico DW a 4 Vie 10/30/30/30, 50 cm fibra preterminata FC

Bretelle ottiche Single Mode LSZH a doppia armatura, preterminate FC/FC (G6529)

BRETELLE DOPPIA ARMATURA FC/FC	
FOFAL001FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 1 m
FOFAL003FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 3 m
FOFAL005FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 5 m
FOFAL010FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 10 m
FOFAL015FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 15 m
FOFAL020FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 20 m
FOFAL025FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 25 m
FOFAL030FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 30 m
FOFAL040FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 40 m
FOFAL050FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 50 m
FOFAL075FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 75 m
FOFAL100FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 100 m
FOFAL150FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 150 m
FOFAL200FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 200 m
FOFAL250FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 250 m
FOFAL300FC	Bretella bianca LSZH SM doppia armatura, preterminata FC/FC, 300 m

Bretelle ottiche doppia armatura Single Mode SC/APC



CEI 306-22
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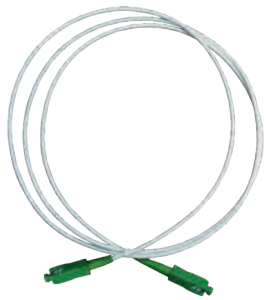
BRETELLE DOPPIA ARMATURA / SC-APC	
FOFAL 001SCA	Bretella Single Mode LSZH doppia armatura preterminata Colore Bianco SC/APC, 1 m
FOFAL 003SCA	Bretella Single Mode LSZH doppia armatura preterminata Colore Bianco SC/APC, 3 m
FOFAL 005SCA	Bretella Single Mode LSZH doppia armatura preterminata Colore Bianco SC/APC, 5 m
FOFAL 010SCA	Bretella Single Mode LSZH doppia armatura preterminata Colore Bianco SC/APC, 10 m
FOFAL 015SCA	Bretella Single Mode LSZH doppia armatura preterminata Colore Bianco SC/APC, 15 m
FOFAL 025SCA	Bretella Single Mode LSZH doppia armatura preterminata Colore Bianco SC/APC, 25 m
FOFAL 040SCA	Bretella Single Mode LSZH doppia armatura preterminata Colore Bianco SC/APC, 40 m
FOFAL 075SCA	Bretella Single Mode LSZH doppia armatura preterminata Colore Bianco SC/APC, 75 m
FOFAL 100SCA	Bretella Single Mode LSZH doppia armatura preterminata Colore Bianco SC/APC, 100 m

Bretelle ottiche LSZH rinforzate, preterminate SC/APC



BRETELLE OTTICHE LSZH 5/125 OM4 COLORE BIANCO	
FOFOAS005SCA	Bretella Single Mode SC/APC Simplex G657A2 LSZH Rinforzata colore bianco ø 3mm, 5 m
FOFOAS010SCA	Bretella Single Mode SC/APC Simplex G657A2 LSZH Rinforzata colore bianco ø 3mm, 10 m
FOFOAS015SCA	Bretella Single Mode SC/APC Simplex G657A2 LSZH Rinforzata colore bianco ø 3mm, 15 m
FOFOAS025SCA	Bretella Single Mode SC/APC Simplex G657A2 LSZH Rinforzata colore bianco ø 3mm, 25 m
FOFOAS050SCA	Bretella Single Mode SC/APC Simplex G657A2 LSZH Rinforzata colore bianco ø 3mm, 50 m
FOFOAS075SCA	Bretella Single Mode SC/APC Simplex G657A2 LSZH Rinforzata colore bianco ø 3mm, 75 m
FOFOAS100SCA	Bretella Single Mode SC/APC Simplex G657A2 LSZH Rinforzata colore bianco ø 3mm, 100 m
FOFOAS150SCA	Bretella Single Mode SC/APC Simplex G657A2 LSZH Rinforzata colore bianco ø 3mm, 150 m
FOFOAS250SCA	Bretella Single Mode SC/APC Simplex G657A2 LSZH Rinforzata colore bianco ø 3mm, 250 m

Bretelle ottiche LSZH rinforzate, preterminate LC/LC

BRETELLE OTTICHE LSZH 5/125 OM4 COLORE BIANCO	
FOFOAS005LC	Bretella Single Mode LC/PC Simplex G652 LSZH Rinforzata colore bianco ø 3 mm, 5 m
FOFOAS010LC	Bretella Single Mode LC/PC Simplex G652 LSZH Rinforzata colore bianco ø 3 mm, 10 m
FOFOAS015LC	Bretella Single Mode LC/PC Simplex G652 LSZH Rinforzata colore bianco ø 3 mm, 15 m
FOFOAS025LC	Bretella Single Mode LC/PC Simplex G652 LSZH Rinforzata colore bianco ø 3 mm, 25 m
FOFOAS050LC	Bretella Single Mode LC/PC Simplex G652 LSZH Rinforzata colore bianco ø 3 mm, 50 m
FOFOAS075LC	Bretella Single Mode LC/PC Simplex G652 LSZH Rinforzata colore bianco ø 3 mm, 75 m
FOFOAS100LC	Bretella Single Mode LC/PC Simplex G652 LSZH Rinforzata colore bianco ø 3 mm, 100 m
FOFOAS150LC	Bretella Single Mode LC/PC Simplex G652 LSZH Rinforzata colore bianco ø 3 mm, 150 m
FOFOAS250LC	Bretella Single Mode LC/PC Simplex G652 LSZH Rinforzata colore bianco ø 3 mm, 250 m
FOFOAS005LC2	Bretella Single Mode LC/PC Duplex G652 LSZH Rinforzata colore bianco ø 3 mm, 5 m
FOFOAS010LC2	Bretella Single Mode LC/PC Duplex G652 LSZH Rinforzata colore bianco ø 3 mm, 10 m
FOFOAS015LC2	Bretella Single Mode LC/PC Duplex G652 LSZH Rinforzata colore bianco ø 3 mm, 15 m
FOFOAS025LC2	Bretella Single Mode LC/PC Duplex G652 LSZH Rinforzata colore bianco ø 3 mm, 25 m
FOFOAS050LC2	Bretella Single Mode LC/PC Duplex G652 LSZH Rinforzata colore bianco ø 3 mm, 50 m
FOFOAS075LC2	Bretella Single Mode LC/PC Duplex G652 LSZH Rinforzata colore bianco ø 3 mm, 75 m
FOFOAS100LC2	Bretella Single Mode LC/PC Duplex G652 LSZH Rinforzata colore bianco ø 3 mm, 100 m
FOFOAS150LC2	Bretella Single Mode LC/PC Duplex G652 LSZH Rinforzata colore bianco ø 3 mm, 150 m
FOFOAS250LC2	Bretella Single Mode LC/PC Duplex G652 LSZH Rinforzata colore bianco ø 3 mm, 250 m

Bretelle ottiche, preterminate LC/LC OM4 duplex

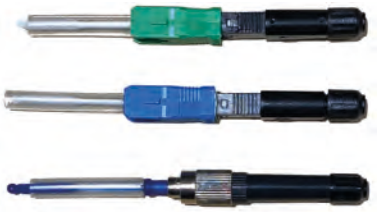
BRETELLE OTTICHE LC-LC OM4 DUPLEX	
NVCP2LC-3D4	Bretella Single mode LC/PC Duplex 50/125 OM4 preterminata, 3 m
NVCP2LC-5D4	Bretella Single mode LC/PC Duplex 50/125 OM4 preterminata, 5 m
NVCP2LC-10D4	Bretella Single mode LC/PC Duplex 50/125 OM4 preterminata, 10 m
NVCP2LC-30D4	Bretella Single mode LC/PC Duplex 50/125 OM4 preterminata, 30 m
NVCP2LC-50D4	Bretella Single mode LC/PC Duplex 50/125 OM4 preterminata, 50 m
NVCP2LC-100D4	Bretella Single mode LC/PC Duplex 50/125 OM4 preterminata, 100 m
NVCP2LC-200D4	Bretella Single mode LC/PC Duplex 50/125 OM4 preterminata, 200 m
NVCP2LC-300D4	Bretella Single mode LC/PC Duplex 50/125 OM4 preterminata, 300 m

Patch Cord fibra ottica - Single Mode

NVCPSC-15PGS

NVCP2SCA3MSW

NVCSCA-ADS



NVCSOC

NVCSCAREF1650

Nota: le foto dei prodotti sono di esempio. Colori e connettori personalizzabili a richiesta

PATCH CORD FIBRA OTTICA SINGLE MODE	
NVCP2SC-1MSW	SC/PC-SC/PC 1 m PATCH CORD SM G652 SIMPLEX
NVCP2SC-3MSW	SC/PC-SC/PC 3 m PATCH CORD SM G652 SIMPLEX
NVCP2SCA-1.5MSW	SC/APC-SC/APC 1,5 m PATCH CORD SM G657A2 SIMPLEX
NVCP2SCA-3MSW	SC/APC-SC/APC 3 m PATCH CORD SM G657 A2 SIMPLEX
NVCP2SCA-60MSW	SC/APC-SC/APC 60 m PATCH CORD WHITE SIMPLEX
NVCP2LC-3MDW	LC/PC-LC/PC 3 m PATCH CORD 9/125 SM G652 DUPLEX
NVCP2LC-3MSW	LC/PC-LC/PC 3 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCP2LC-5MSW	LC/PC-LC/PC 5 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCP2SC-3MSW	SC/PC-SC/PC 3 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCP2SC-5MSW	SC/PC-SC/PC 5 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCPLCSC-3MSW	LC/PC-SC/PC 3 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCPLCSC-5MSW	LC/PC-SC/PC 5 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCPLCSCA-3MSW	LC/PC-SC/APC 3 m PATCH CORD SM G657A2 SIMPLEX
NVCPLCSCA-3MDW	LC/PC-SC/APC 3 m PATCH CORD SM G657A2 DUPLEX
NVCPLCASC-3MSW	LC/APC-SC/PC 3 m PATCH CORD SM G657A2 SIMPLEX
NVCPFCSC-3MSW	FC/PC-SC/PC 3 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCPFCSCA-3MSW	FC/PC-SC/APC 3 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCPSCSCA-3MSW	SC/PC-SCA/PC 3 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCPSCST-3MSW	SC/PC-ST/PC 3 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCPFCLC-3MSW	FC/PC-LC/PC 3 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCP2LCA-3MSW	LC/APC-LC/APC 3 m PATCH CORD 9/125 SM G652 SIMPLEX
NVCPFCASCA-3MSW	FC/APC-SC/APC 3 m PATCH CORD 9/125 SM G652 SIMPLEX

PIGTAIL FIBRA OTTICA	
NVCPFC-15PGS	Pigtail FC/PC 1,5 m 9/125 SM
NVCPFCA-15PGS	Pigtail FC/APC 1,5 m 9/125 SM
NVCPLC-15PGS	Pigtail LC/PC 1,5 m 9/125 SM
NVCPSC-15PGS	Pigtail SC/PC 1,5 m 9/125 SM
NVCPSCA-15PGS	Pigtail SC/APC 1,5 m 9/125 SM
NVCPLCA-15PGS	Pigtail LC/APC 1,5 m 9/125 SM

ADATTATORI / CONNETTORI FIBRA OTTICA	
NVCADKEY-LCSC	Adattatore KEYSTONE per adattatori SC simplex / LC duplex
NVCADKEY-FCST	Adattatore KEYSTONE per adattatori FC / ST
NVCSOC-SCA	Connettore Rapido SC-APC Single mode
NVCSOC-SC	Connettore Rapido SC-PC Single mode
NVCSOC-FC	Connettore Rapido FC-PC Single mode
NVCFC-ADS	Adattatore FC/PC Single mode
NVCLC-ADD	Adattatore LC/PC Single mode Duplex
NVCSC-ADS	SC/PC - SC/PC SIMPLEX ADAPTOR
NVCSCA-ADS	SC/APC - SC/APC SIMPLEX ADAPTOR
NVCSCAREF1650	SC/APC REFLECTOR 1650nm

Patch Cord fibra ottica - Multi Mode

NVCPSC4-15PGS

NVCP2LC3-3D4

PATCH CORD FIBRA OTTICA MULTI MODE	
NVCP2LC-3D1	LC/PC-LC/PC 3 m PATCH CORD 50/125 OM1 DUPLEX
NVCP2LC-3D3	LC/PC-LC/PC 3 m PATCH CORD 50/125 OM3 DUPLEX
NVCP2LC-5D3	LC/PC-LC/PC 5 m PATCH CORD 50/125 OM3 DUPLEX
NVCP2LC-10D3	LC/PC-LC/PC 10 m PATCH CORD 50/125 OM3 DUPLEX
NVCP2LC-30D3	LC/PC-LC/PC 30 m PATCH CORD 50/125 OM3 DUPLEX
NVCP2LC-3D4	LC/PC-LC/PC 3 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2LC-5D4	LC/PC-LC/PC 5 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2LC-10D4	LC/PC-LC/PC 10 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2LC-30D4	LC/PC-LC/PC 30 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2LC-50D4	LC/PC-LC/PC 50 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2LC-100D4	LC/PC-LC/PC 100 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2LC-200D4	LC/PC-LC/PC 200 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2LC-300D4	LC/PC-LC/PC 300 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2SC-3D1	SC/PC-SC/PC 3 m PATCH CORD 50/125 OM1 DUPLEX
NVCP2SC-3D3	SC/PC-SC/PC 3 m PATCH CORD 50/125 OM3 DUPLEX
NVCP2SC-5D3	SC/PC-SC/PC 5 m PATCH CORD 50/125 OM3 DUPLEX
NVCP2SC-10D3	SC/PC-SC/PC 10 m PATCH CORD 50/125 OM3 DUPLEX
NVCP2SC-30D3	SC/PC-SC/PC 30 m PATCH CORD 50/125 OM3 DUPLEX
NVCP2SC-3D4	SC/PC-SC/PC 3 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2SC-5D4	SC/PC-SC/PC 5 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2SC-10D4	SC/PC-SC/PC 10 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2SC-30D4	SC/PC-SC/PC 30 m PATCH CORD 50/125 OM4 DUPLEX
NVCPLCSC-3D1	LC/PC-SC/PC 3 m PATCH CORD 50/125 OM1 DUPLEX
NVCPLCSC-3D3	LC/PC-SC/PC 3 m PATCH CORD 50/125 OM3 DUPLEX
NVCPLCSC-3D4	LC/PC-SC/PC 3 m PATCH CORD 50/125 OM4 DUPLEX
NVCPLCSC-10D3	LC/PC-SC/PC 10 m PATCH CORD 50/125 OM3 DUPLEX
NVCPLCSC-10D4	LC/PC-SC/PC 10 m PATCH CORD 50/125 OM4 DUPLEX
NVCP2ST-3D1	ST/PC-ST/PC 3 m PATCH CORD 50/125 OM1 DUPLEX
NVCP2ST-3D3	ST/PC-ST/PC 3 m PATCH CORD 50/125 OM3 DUPLEX
NVCP2ST-3D4	ST/PC-ST/PC 3 m PATCH CORD 50/125 OM4 DUPLEX
NVCPLCST-3D1	LC/PC-ST/PC 3 m PATCH CORD 50/125 OM1 DUPLEX
NVCPLCST-3D3	LC/PC-ST/PC 3 m PATCH CORD 50/125 OM3 DUPLEX
NVCPLCST-3D4	LC/PC-ST/PC 3 m PATCH CORD 50/125 OM4 DUPLEX
NVCPSCST-3D1	SC/PC-ST/PC 3 m PATCH CORD 50/125 OM1 DUPLEX
NVCPSCST-3D3	SC/PC-ST/PC 3 m PATCH CORD 50/125 OM3 DUPLEX
NVCPSCST-3D4	SC/PC-ST/PC 3 m PATCH CORD 50/125 OM4 DUPLEX

NVCPLC4-ADD

Nota: le foto dei prodotti sono di esempio.
Colori e connettori personalizzabili a richiesta

PIGTAIL FIBRA OTTICA	
NVCPSC1-15PGS	Pigtail SC/PC 1,5 m 50/125 OM1
NVCPLC1-15PGS	Pigtail LC/PC 1,5 m 50/125 OM1
NVCPST1-15PGS	Pigtail ST/PC 1,5 m 50/125 OM1
NVCPSC3-15PGS	Pigtail SC/PC 1,5 m 50/125 OM3
NVCPLC3-15PGS	Pigtail LC/PC 1,5 m 50/125 OM3
NVCPST3-15PGS	Pigtail ST/PC 1,5 m 50/125 OM3
NVCPSC4-15PGS	Pigtail SC/PC 1,5 m 50/125 OM4
NVCPLC4-15PGS	Pigtail LC/PC 1,5 m 50/125 OM4
NVCPST4-15PGS	Pigtail ST/PC 1,5 m 50/125 OM4

ADATTATORI FIBRA OTTICA	
NVCLC3-ADD	LC/PC - LC/PC OM3 DUPLEX ADAPTOR
NVCSC3-ADS	SC/PC - SC/PC OM3 SIMPLEX ADAPTOR
NVCLC4-ADD	LC/PC - LC/PC OM4 DUPLEX ADAPTOR
NVCSC4-ADS	SC/PC - SC/PC OM4 SIMPLEX ADAPTOR
NVCST-ADS	ST/PC-ST/PC OM4 SIMPLEX ADAPTOR

Attenuatori ottici single mode

FXATFCPC5, FXATFCPC10, FXATFCPC15

Attenuatore fisso ottico professionale, preterminato FC.

Disponibile da 5 / 10 / 15 dB.

FXATSCAPC5, FXATSCAPC10, FXATSCAPC10

Attenuatore fisso ottico professionale, preterminato SC/APC.

Disponibile da 5 / 10 / 15 dB.

F700251

Bussola adattatrice FC/PC a SC/PC.

NVCADKEY-FCST, NVCADKEY-LCSC

Adattatore KEYSTONE per bussola FC - ST
Adattatore KEYSTONE per bussola SC simplex / LC duplex.

FA-SCA-SS

CEI 306-22 COMPLIANT

Bussola adattatrice da SC/APC a SC/APC.

FA-2SCA-SSBL

CEI 306-22 COMPLIANT

Bussola adattatrice da SC/APC a SC/APC.
Shutter **blu.**

FA-2SCA-SSRS

CEI 306-22 COMPLIANT

Bussola adattatrice da SC/APC a SC/APC.
Shutter **rosso.**

FA-2SCA-SSVE

CEI 306-22 COMPLIANT

Bussola adattatrice da SC/APC a SC/APC.
Shutter **verde.**

FA-2SCA-SSGI

CEI 306-22 COMPLIANT

Bussola adattatrice da SC/APC a SC/APC.
Shutter **giallo.**

FA-FCP-SS

Bussola adattatrice FC/PC a FC/PC.

FA-FCA-SS

Bussola adattatrice FC/APC a FC/APC.

FA-STP-SS

Bussola adattatrice ST/PC a ST/PC.

FASCPSS

Bussola adattatrice SC/PC a SC/PC.

FA-2SC-SS

Doppia bussola adattatrice SC/PC a SC/PC.

FA-2SCA-SS

Doppia bussola adattatrice SC/APC a SC/APC.

FA-LCP-SS

Bussola adattatrice SM LC/PC a LC/PC.

FA-LCP-SD

Bussola adattatrice Duplex LC/PC a LC/PC.

FA-LCA-SS

Bussola adattatrice LC/APC a LC/APC.

FA-SCP-MS3

Bussola SC-SC MM OM3 colore Aqua.

FA-SCP-MD3

Bussola SC-SC duplex MM OM3 colore Aqua.

FA-LCP-MD3

Bussola LC-LC duplex MM OM3 colore Aqua.

FA-SCP-MS4

Bussola SC-SC MM OM4 colore Violet.

FA-SCP-MD4

Bussola SC-SC duplex MM OM4 colore Violet.

FA-LCP-MD4

Bussola LC-LC duplex MM OM4 colore Violet.

MCORMP1U24

Patch panel **estraibile** 19”rack 1U per 24 adattatori SC - SC/APC simplex e LC duplex (non inclusi).

MCORMP1UE12, MCORMP1UE

MCORMP1UE12

MCORMP1UE

Universal patch panel 19”rack 1U per 12/24 adattatori SC - SC/APC simplex e LC duplex (non inclusi).

MSTR24

Ordinatore 24 fibre.
Dimensioni: 159 x 105 x 18 mm.

MSTR12

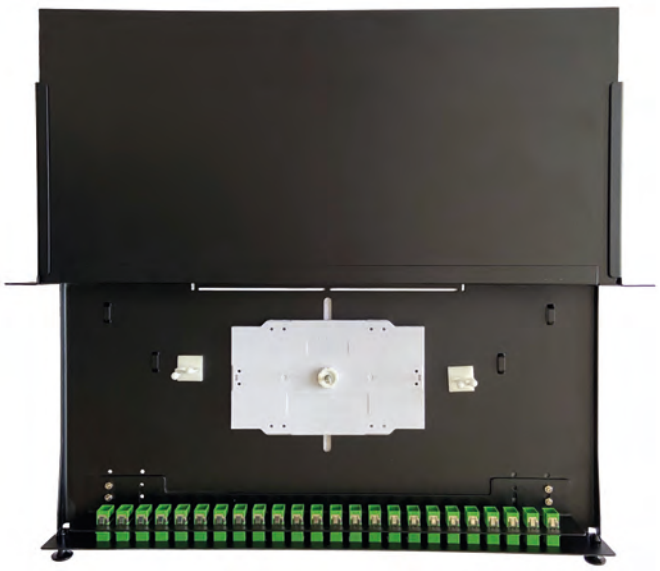
Ordinatore 12 fibre.
Dimensioni: 101 x 165 x 17 mm.

MSTR6

Ordinatore 6 fibre.
Dimensioni: 97 x 84 x 13 mm.

NVCR1U12XXX, NVCR1U24XXX

Universal patch panel 19”rack 1U per 12/24 adattatori SC - SC/APC simplex e LC duplex (non inclusi nei modelli **NVCCR1U12U** e **NVCCR1U24U**).



NVCCR1U24SCA

UNIVERSAL PATCH PANEL 19” RACK 1U	
NVCCR1U12SCA	1U Fiber Panel 12ports, with 1 pc 12 cores white tray. Loaded with 12 pcs SC/APC (Green) simplex adapters. With Mira Stickers
NVCCR1U12SC	1U Fiber Panel 12ports, with 1 pc 12 cores white tray. Loaded with 12 pcs SC/PC (Blue) simplex adapters. With Mira Stickers
NVCCR1U12LC	1U Fiber Panel 12ports, with 2 pc 12 cores white tray. Loaded with 12 pcs LC/PC (Blue) duplex adapters. With Mira Stickers
NVCCR1U12LC4	1U Fiber Panel 12ports, with 2 pc 12 cores white tray. Loaded with 12 pcs LC/PC OM4 (Purple) duplex adapters. With Mira Stickers
NVCCR1U12SC4	1U Fiber Panel 12ports, with 2 pc 12 cores white tray. Loaded with 12 pcs SC/PC OM4 (Purple) simplex adapters. With Mira Stickers
NVCCR1U24SCA	1U Fiber Panel 24ports, with 2 pc 12 cores white tray. Loaded with 24 pcs SC/APC (Green) simplex adapters. With Mira Stickers
NVCCR1U24LC4	1U Fiber Panel 24ports, with 2 pc 24 cores white tray. Loaded with 24 pcs LC/PC OM4 (Purple) duplex adapters. With Mira Stickers
NVCCR1U24SC4	1U Fiber Panel 12ports, with 2 pc 12 cores white tray. Loaded with 24 pcs SC/PC OM4 (Purple)simplex adapters. With Mira Stickers
NVCCR1U24LC	1U Fiber Panel 24ports, with 2 pc 24 cores white tray. Loaded with 24 pcs LC/PC (Blue) duplex adapters. With Mira Stickers
NVCCR1U24SC	1U Fiber Panel 24ports, with 2 pc 12 cores white tray. Loaded with 24 pcs SC/PC (Blue) simplex adapters. With Mira Stickers
NVCCR1U12U	1U Fiber Panel 12ports, SC simplex ports with 2 pc 12 cores white tray. Loaded with 12 pcs hole plastic cover. With Mira Stickers
NVCCR1U24U	1U Fiber Panel 24ports, SC simplex ports with 2 pc 12 cores white tray. Loaded with 24 pcs hole plastic cover. With Mira Stickers

MOSTOA1

CEI 306-22 COMPLIANT

Contenitore STOA completo di 4 adattatori SC-APC, con shutter a 4 colori. Dimensioni: 100 x 80 x 29 mm.

MOSTOA8

CEI 306-22 COMPLIANT

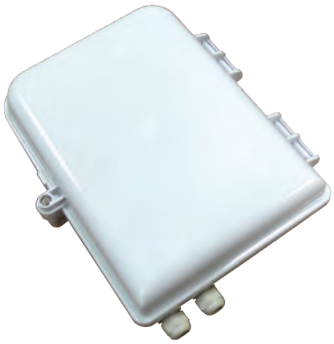
Contenitore STOA completo di 8 adattatori SC-APC standard. Dimensioni: 130 x 199 x 28.5 mm.

MOSTOA12DIN

CEI 306-22 COMPLIANT

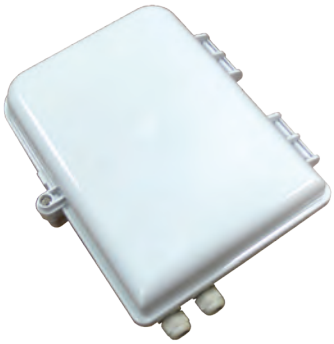
Contenitore STOA da barra din vuoto, permette utilizzo di 12 adattatori SC/APC - SC/PC - LC/PC Duplex. Standard CEI 306-22.
Dimensioni: 35 x 133 x 130 mm

MOWB216FC



Contenitore a parete per splitter da esterno:
con 2 ingressi, completo di 16 bussole FC/PC.
Dimensioni: 260x320x90 mm

MOWB208SCA, MOWB216SCA



Contenitore a parete per splitter da esterno:
MOWB208SCA con 2 ingressi, completo di 8 bussole SC/APC
MOWB216SCA con 2 ingressi, completo di 16 bussole SC/APC.
Dimensioni: 260x320x90 mm

FMIWB202FC

Contenitore a parete, completo di 2 bussole FC/PC.
Dimensioni: 86 x 86 x 22 mm.

FMIWB202SCA

Contenitore a parete, completo di 2 bussole SC-SC/APC.
Dimensioni: 86 x 86 x 22 mm.

MOWB104R

Box a parete per splitter da esterno: 1 ingresso per 4 bussole tipo SC Simplex, con chiusura a chiave. Dimensioni 120 x 190 x 40 mm.

MOWB208R, MOWB216R

Box a parete per splitter da esterno:
MOWB208R 3 ingressi x 8 bussole SC Simplex. Dim. 180x210x45mm
MOWB216R 2 ingressi x 16 bussole SC Simplex. Dim. 260x320x100mm

MOWB4SC, MOWB12SC

Contenitore a chiave di distribuzione a parete:
MOWB4SC per 4 bussole SC-SC/APC, dimensioni 145x153x50mm
MOWB12SC per 12 bussole SC-SC/APC dimensioni 200x200x50mm

MCPOR48

CEI 306-22
COMPLIANT

Contenitore Servizi SAT / TV di distribuzione a parete, doppia apertura con chiave, pronto per 24 adattatori SC/APC - SC/APC.
Dimensioni: 421 x 316 x 64 mm.

FOCWJB

Contenitore per fibra ottica.

Coperchio di chiusura.

PRODOTTO CORRELATO: MOMPLXXXX

Con splitter/coupler 5M.

Con splitter/coupler FC/PC.

Con splitter/coupler SC/APC.

Con splitter/coupler non terminato.

FMIWMB148SCA

For splitting: 1 - 3 pcs standard slot position for splitter, for 1:8, 1:16. 1:32 splitter.
For distribution: 1 - 72 ports of adapters panel.
Maximum 2 pcs of slice trays (expandible) for satisfying kinds of connection.
Dimensions: 350 x 340 x 120 mm.

WTSM101, WTSM110

WTSM101

WTSM110

WTSM101 QDSA da incasso vuoto per cablaggio FIBRA
Dimensioni 372 x 432 x 90 mm
Dimensioni 360 x 420 x 90 mm (incluso la flangia)

WTSM110 QDSA da appoggio vuoto per cablaggio FIBRA
Dimensioni: 300 x 420 x 90 mm

FMGOB248

Contenitore per splitter,
da esterno / interramento:
ingressi cavo 2 x 16 mm o 4 x 12 mm
Dimensioni: 280 x 200 x 90 mm

SPECIFICHE	FMGOB248
Appearance size	280 × 200 × 90 mm
Cable ports	2 - 5
Core capacity per tray	12 - 24
Max capacity (fibers)	96
Cable Diameter	Ø 14 mm
Weight Unit	2.6 - 2.8 Kg

Main Features:
- Holds up to 96 fibers.
- Easy to re-enter
- Cable entry/exit ports
- Pressure testing valve and earth deriving device
- Intergrated seal, air tight and water proof
- Ideal for cable repair
- RoHS compliant
- Can be used in through, branch or mid span splice locations
- Suitable for aerial, underground duct or direct burial applications

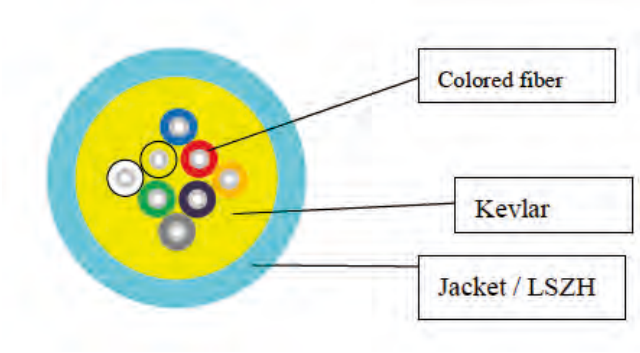
FMGOB436

SPECIFICHE	FMGOB436
Size	260 × 210 × 90 mm
Weight	4.2 - 4.8 kg
Port quantity	3 (2 ports are for single bunch fiber cable, 1 port is for cable which is uncut)
Suit cable diameter	Small port Ø 8 ~ 12 mm Direct output cable Ø 10 ~ 17.5 mm
Tray quantity	3 pcs
Max. Capacity (single fiber)	36 F
Sealing	Mechanical
Tray capacity	12 F
IP rate	68

Type FMGOB436 is one type of dome closure, which can connect and protect fiber cable and splices piont in straight-through and branching applications. With IP 65 level. Has two small ports and one uncut port. Use vulcanization molding rubber and direct pressure mechanical sealing.

MOFSMxI - Micro cavo ottico Single Mode (EN 60794-2-50)

Sezione



MOFSM4I: 4 core
MOFSM8I: 8 core

CEI 306-22
COMPLIANT

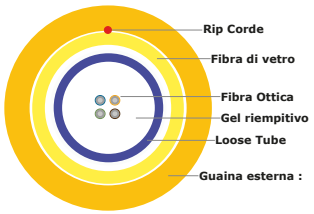
SPECIFICHE	MOFSM4I	MOFSM8I
CABLE PARAMETERS		
Fiber Count	4	8
Cable Weight	2.8 Kg / Km	
Fiber Type	G657-A2	
Colored Coating Fiber		
Dimension	250 ±15 µm	
Color	Blue, Yellow Red, White, Green, Violet, Orange, Grey According to CEI EN 60793-2-50 standard	
Jacket		
Dimension	2.8 ±0.1 mm	
Material	LSZH	
Color	White	

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS	
Tension (Long Term)	60 N
Tension (Short Term)	100 N
Crush (Long Term)	100 N / 10 cm
Crush (Short Term)	500 N / 10 cm
Min. Bend Radius (Dynamic)	60 mm
Min. Bend Radius (Static)	30 mm
Installation Temperature	0° ~ +70° C
Operating Temperature	-20° ~ +70° C
Storage Temperature	-20° ~ +70° C

PRODOTTO CORRELATO: MOSTOA1

PRODOTTO CORRELATO: MCSOE12C

Fibra Ottica multimodale con armatura dielettrica



A. Conduttori : Fibra ottica
B. Riempitivo : Gel Riempitivo
C. Loose Tube : PBT
D. Fibra di vetro : Filato in fibra di vetro
E. Rip Corde :
F. Guaina esterna : Duraflam+® LSZH
Colorazione guaina : Giallo

CODICE PRODOTTO	TIPOLOGIA	N DI FIBRE	MAX. CARICO DI TRAZIONE (N)	INSTALLAZIONE INTERNA / ESTERNA	DIAMETRO ESTERNO (MM)	PESO (KG/KM)	MATERIALE E COLORE GUAINA ESTERNA	CPR CLASSIFICAZIONE REAZIONE AL FUOCO
FOFO2Z04	OM2	4	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b, d1, a1
FOFO2Z08	OM2	8	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b, d1, a1
FOFO2Z12	OM2	12	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b ,d1 ,a1
FOFO2Z24	OM2	24	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b, d1, a1
FOFO3Z04	OM3	4	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b, d1 ,a1
FOFO3Z08	OM3	8	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b ,d1 ,a1
FOFO3Z12	OM3	12	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b ,d1 ,a1
FOFO3Z24	OM3	24	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b ,d1 ,a1
FOFO4Z04	OM4	4	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b, d1 ,a1
FOFO4Z08	OM4	8	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b, d1, a1
FOFO4Z12	OM4	12	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b, d1, a1
FOFO4Z24	OM4	24	1200 / 800	• / •	6,40	48,0	LSZH Giallo	Cca s1b, d1, a1

SCHEMA COLORI FIBRE												
NO.	1	2	3	4	5	6	7	8	9	10	11	12
COLOR	Blu	Arancio	Verde	Marrone	Grigio	Bianco	Rosso	Nero	Giallo	Viola	Rosa	Acqua
NO.	13	14	15	16	17	18	19	20	21	22	23	24
COLOR	Blu*	Arancio*	Verde*	Marrone*	Grigio*	Bianco*	Rosso*	Nero*	Giallo*	Viola*	Rosa*	Acqua*

* tratteggiatura nera circolare di riconoscimento ogni 50mm

CARATTERISTICHE MECCANICHE E PERFORMANCE		
CARATTERISTICA	SPECIFICA	VALORE
Max Carico di Trazione	Breve termine Lungo termine	1200 N 800 N
Max Resistenza allo schiacciamento	Breve termine Lungo termine	1500 N / 100 mm 30% del valore a breve termine
Min. Raggio di curvatura	Fase di installazione In utilizzo	20 volte il diametro 10 volte il diametro
Range di temperatura	Temperatura di esercizio Temperatura di posa Temperatura di stoccaggio e trasporto	-30° ~ +70° C -5° ~ +55° C -30° ~ +70° C

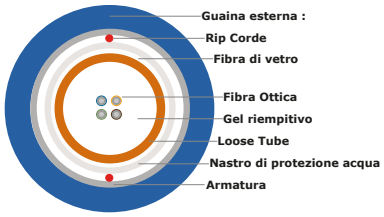
CARATTERISTICHE MECCANICHE PRINCIPALI E PERFORMANCE TEST		
CARATTERISTICA	METODO DI PROVA	CONDIZIONI DI ACCETTAZIONE
Resistenza alla Trazione IEC 60794-1-2-E1	- Carico: Tensione temporanea - Lunghezza del cavo: 50 m - Tempo di carico: 1 min	- Deformazione fibra ≤ 0.6% - Nessuna rottura di fibre e nessun danno alla guaina
Prova di schiacciamento IEC 60794-1-2-E3	- Carico: Per breve periodo - Tempo di carico: 1 min	- Nessuna rottura di fibre e nessun danno alla guaina

"Nessun cambio di attenuazione" considerato se l'attenuazione varia ≤ 0.05 db.

FIBRA MULTIMODALE				LARGHEZZA DI BANDA (MHZ. KM)			ATTENUAZIONE (DB/KM)	
NOMENCLATURA	TIA FIBER STANDARD	DIAMETRO CORE (MICRON)	DIAMETRO CLADDING (MICRON)	OFL A 850 NM	OFL A 1300 NM	EMB 850 NM	A 850 NM	A 1300 NM
OM2	492-AAAB	50	125	≥700	≥500	- -	≤3.5	≤1.5
OM3	492-AAAC	50	125	≥1500	≥500	≥2000	≤3.5	≤1.5
OM4	492-AAAD	50	125	≥3500	≥500	≥4700	≤3.5	≤1.5

RIF. CPR UE 305/11 CLASSIFICAZIONE REAZIONE AL FUOCO
Cavi ottici per impianti dati installati in opere d'ingegneria civile soggetti a prescrizione di reazione al fuoco **Classificazione secondo reazione al fuoco:** Euroclasse Cca s1b d1 a1

Fibra Ottica multimodale con armatura acciaio termosaldato



A. **Conduttori :** Fibra ottica
B. **Riempitivo :** Gel Riempitivo
C. **Loose Tube :** PBT
D. **Fibra di vetro :** Filato in fibra di vetro
E. **Nastro di protezione acqua:** Duralit®
F. **Rip Corde :**
G. **Armatura :** Acciaio Corrugato
H. **Guaina esterna :** Duraflam+® LSZH
Colorazione guaina : Blu

CODICE PRODOTTO	TIPOLOGIA	N DI FIBRE	MAX. CARICO DI TRAZIONE (N)	INSTALLAZIONE INTERNA / ESTERNA	DIAMETRO ESTERNO (MM)	PESO (KG/KM)	MATERIALE E COLORE GUAINA ESTERNA	CPR CLASSIFICAZIONE REAZIONE AL FUOCO
FOFO2R04	OM2	4	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO2R08	OM2	8	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO2R12	OM2	12	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO2R24	OM2	24	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO3R04	OM3	4	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO3R08	OM3	8	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO3R12	OM3	12	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO3R24	OM3	24	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO4R04	OM4	4	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO4R08	OM4	8	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO4R12	OM4	12	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1
FOFO4R24	OM4	24	1200 / 800	• / •	8,70	98,0	LSZH Blu	Cca s1b, d1, a1

SCHEMA COLORI FIBRE												
NO.	1	2	3	4	5	6	7	8	9	10	11	12
COLOR	Blu	Arancio	Verde	Marrone	Grigio	Bianco	Rosso	Nero	Giallo	Viola	Rosa	Acqua
NO.	13	14	15	16	17	18	19	20	21	22	23	24
COLOR	Blu*	Arancio*	Verde*	Marrone*	Grigio*	Bianco*	Rosso*	Nero*	Giallo*	Viola*	Rosa*	Acqua*

* tratteggiatura nera circolare di riconoscimento ogni 50mm

CARATTERISTICHE MECCANICHE E PERFORMANCE		
CARATTERISTICA	SPECIFICA	VALORE
Max Carico di Trazione	Breve termine Lungo termine	1200 N 800 N
Max Resistenza allo schiacciamento	Breve termine Lungo termine	2000 N / 100 mm 30% del valore a breve termine
Min. Raggio di curvatura	Fase di installazione In utilizzo	20 volte il diametro 10 volte il diametro
Range di temperatura	Temperatura di esercizio Temperatura di posa Temperatura di stoccaggio e trasporto	-30° ~ +70° C -5° ~ +55° C -30° ~ +70° C

CARATTERISTICHE MECCANICHE PRINCIPALI E PERFORMANCE TEST		
CARATTERISTICA	METODO DI PROVA	CONDIZIONI DI ACCETTAZIONE
Resistenza alla Trazione IEC 60794-1-2-E1	- Carico: Tensione temporanea - Lunghezza del cavo: 50 m - Tempo di carico: 1 min	- Deformazione fibra ≤ 0.6% - Nessuna rottura di fibre e nessun danno alla guaina
Prova di schiacciamento IEC 60794-1-2-E3	- Carico: Per breve periodo - Tempo di carico: 1 min	- Nessuna rottura di fibre e nessun danno alla guaina

"Nessun cambio di attenuazione" considerato se l'attenuazione varia ≤ 0.05 db.

FIBRA MULTIMODALE				LARGHEZZA DI BANDA (MHZ. KM)			ATTENUAZIONE (DB/KM)	
NOMENCLATURA	TIA FIBER STANDARD	DIAMETRO CORE (MICRON)	DIAMETRO CLADDING (MICRON)	OFL A 850 NM	OFL A 1300 NM	EMB 850 NM	A 850 NM	A 1300 NM
OM2	492-AAAB	50	125	≥700	≥500	- -	≤3.5	≤1.5
OM3	492-AAAC	50	125	≥1500	≥500	≥2000	≤3.5	≤1.5
OM4	492-AAAD	50	125	≥3500	≥500	≥4700	≤3.5	≤1.5

RIF. CPR UE 305/11 CLASSIFICAZIONE REAZIONE AL FUOCO
Cavi per impianti di videosorveglianza IP, impianti dati, installati in opere d'ingegneria civile soggetti a prescrizione di reazione al fuoco **Classificazione secondo reazione al fuoco:** Euroclasse Cca s1b d1 a1

NOVATEC™
EUROPE

FIBER OPTIC CABLES

PRODUCT CATALOG

OPTIX®

Table of Contents

FIBER OPTIC CABLES

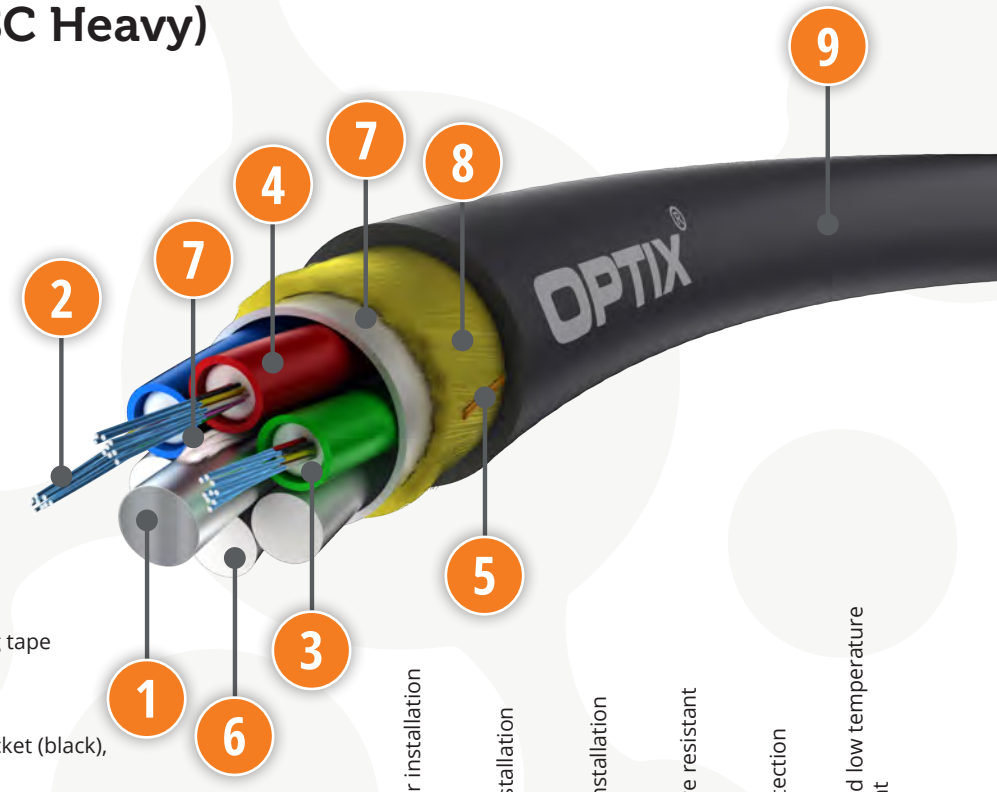
OPTIX Cable ADSS-XOTKtsdD 2.7kN (up to 50m SPAN - NESC Heavy)

Cod. Z3FAC105-Cable version*

9/125 ITU-T G.652D

FEATURES:

- Cable for aerial installation
- Span (NESC Heavy) up to 50 meters (2.7kN)
- Fully dielectric construction
- Additional water blocking construction
- Resistance to high and low temperatures
- Enhanced by high quality aramid yarns
- Solid HDPE jacket



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Hydrophobic jelly
4. Loose tube
5. Ripcords to tear the outer jacket
6. Filler
7. Water blocking tape / yarns
8. Aramid yarns
9. HDPE outer jacket (black), UV stabilized

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±5%)	Ø Tube [mm] (±0.1)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (nom.)	Temp. range installation	Temp. range operating, transport	Minimum bending radius
2T6F	12	81	10.0	1.5/2.1	Aramid yarns	FRP (2.25)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D
1T12F	12	85	10.2	1.6/2.2	Aramid yarns	FRP (2.30)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D
2T12F	24	85	10.2	1.6/2.2	Aramid yarns	FRP (2.30)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D
4T6F	24	81	10.0	1.5/2.1	Aramid yarns	FRP (2.25)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D
4T12F	48	85	10.2	1.6/2.2	Aramid yarns	FRP (2.30)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D
6T12F	72	85	10.2	1.6/2.2	Aramid yarns	FRP (2.30)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D
8T12F	96	108	11.6	1.6/2.2	Aramid yarns	FRP in PE coat (2.8/3.7)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D
12T12F	144	166	14.6	1.6/2.2	Aramid yarns	FRP in PE coat (3.5/6.7)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D
12T24F	192	170	15.4	1.6/2.2	Aramid yarns	FRP (2.50)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D
12T24F	216	170	15.4	1.6/2.2	Aramid yarns	FRP (2.50)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D
12T24F	288	218	17.4	1.6/2.2	Aramid yarns	FRP in PE coat (3.5/4.5)	HDPE (1.5)	-30° to +60° C	-40° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12-24F	48F	72F	96-288F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	2700N	2700N	2700N	2700N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	1500N	1500N	1500N	1500N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N/10 cm			
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]			

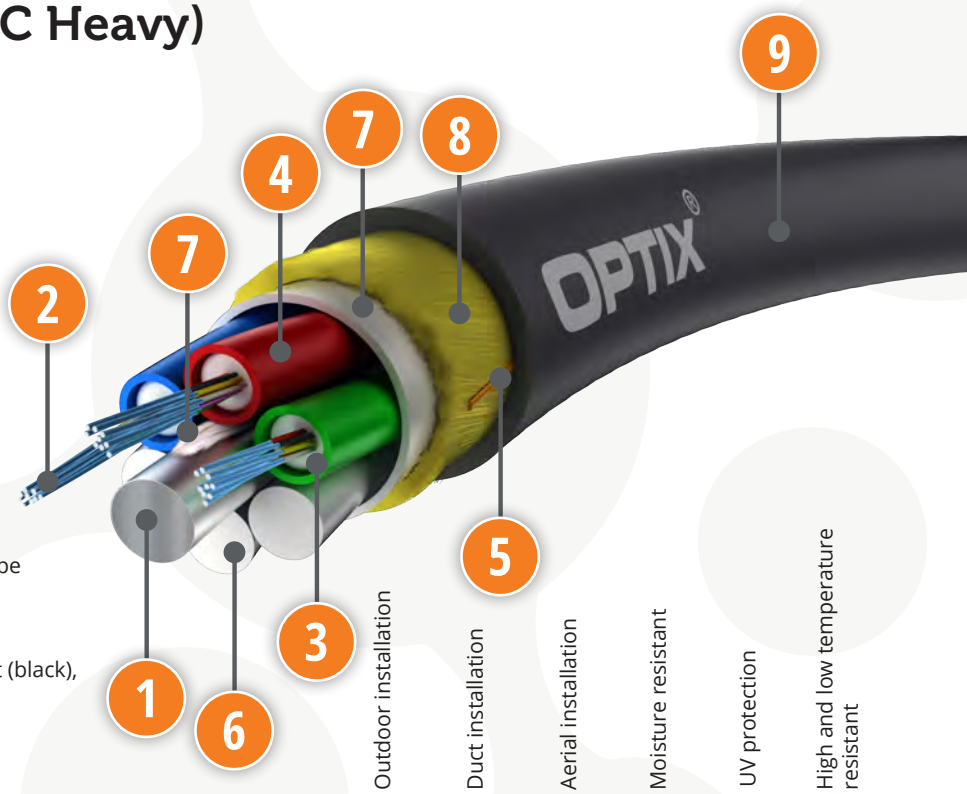
OPTIX Cable ADSS-XOTKtsdD 4.0kN (up to 100m SPAN - NESC Heavy)

Cod. Z3FAC206-Cable version*

9/125 ITU-T G.652D

FEATURES:

- Cable for aerial installation
- Span (NESC Heavy) up to 100 meters (4kN)
- Fully dielectric construction
- Additional water blocking construction
- Resistance to high and low temperatures
- Enhanced by high quality aramid yarns
- Solid HDPE jacket



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Hydrophobic jelly
4. Loose tube
5. Ripcords to tear the outer jacket
6. Filler
7. Water blocking tape / yarns
8. Aramid yarns
9. HDPE outer jacket (black), UV stabilized

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±5%)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (min.)	Temp. range installation	Temp. range operating, transport	Minimum bending radius
1T12F	12	89	10.5	1.6/2.2	Aramid yarns	FRP (2.5)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
2T6F	12	83	10.1	1.5/2.1	Aramid yarns	FRP (2.25)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
4T6F	24	83	10.1	1.5/2.1	Aramid yarns	FRP (2.25)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
2T12F	24	89	10.5	1.6/2.2	Aramid yarns	FRP (2.5)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
4T12F	48	89	10.5	1.6/2.2	Aramid yarns	FRP (2.5)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
6T12F	72	89	10.5	1.6/2.2	Aramid yarns	FRP (2.5)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
8T12F	96	110	11.7	1.6/2.2	Aramid yarns	FRP in PE coat (3.0/3.7)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
12T12F	144	170	14.7	1.6/2.2	Aramid yarns	FRP in PE coat (3.5/6.7)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
6T24F	144	118	12.2	2.0/2.8	Aramid yarns	FRP (3.0)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
16T12F	192	175	15.5	1.6/2.2	Aramid yarns	FRP (2.5)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
8T24F	192	153	13.9	2.0/2.8	Aramid yarns	FRP in PE coat (3.5/4.7)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
18T12F	216	175	15.5	1.6/2.2	Aramid yarns	FRP (2.5)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D
24T12F	288	223	17.5	1.6/2.2	Aramid yarns	FRP in PE coat (3.5/4.5)	HDPE (1.5)	-20° to +60° C	-40° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12-24F	48F	72F	96-288F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	4000N	4000N	4000N	4000N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	2400N	2000N	2000N	2000N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N			
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	25 cycles [(20xD), 1Kg]			

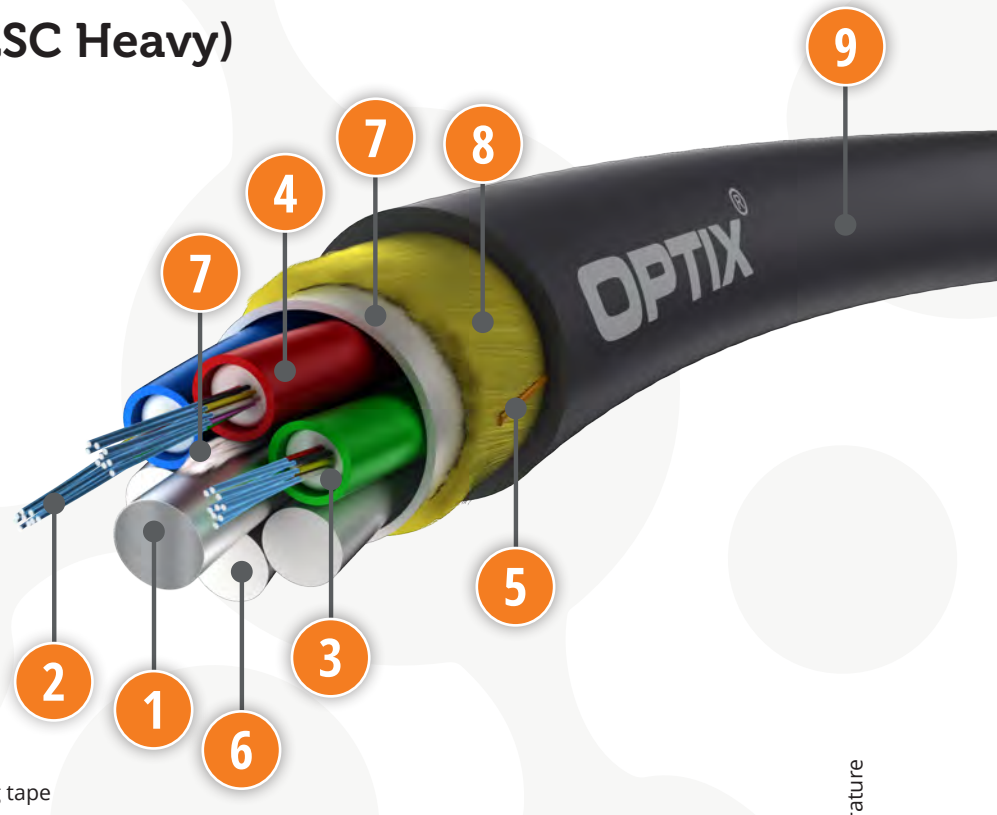
OPTIX Cable ADSS-XOTKtsdD 6.0kN (up to 150m SPAN - NESC Heavy)

9/125 ITU-T G.652D

Cod. Z3FAC301-Cable version*

FEATURES:

- Cable for aerial installation
- Span (NESC Heavy) up to 150 meters (6kN)
- Fully dielectric construction
- Additional water blocking construction
- Resistance to high and low temperatures
- Enhanced by high quality aramid yarns
- Solid HDPE jacket



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Hydrophobic jelly
4. Loose tube
5. Ripcords to tear the outer jacket
6. Filler
7. Water blocking tape / yarns
8. Aramid yarns
9. HDPE outer jacket (black), UV stabilized

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±5%)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (nom.)	Temp. range installation	Temp. range operating, transport	Minimum bending radius
2T6F	12	106	11.3	1.8/2.5	Aramid yarns	FRP (2.6)	HDPE (1.4)	-30° to +60° C	-40° to +70° C	20D/10D
4T6F	24	106	11.3	1.8/2.5	Aramid yarns	FRP (2.6)	HDPE (1.4)	-30° to +60° C	-40° to +70° C	20D/10D
2T12F	24	106	11.3	1.8/2.5	Aramid yarns	FRP (2.6)	HDPE (1.4)	-30° to +60° C	-40° to +70° C	20D/10D
4T12F	48	106	11.3	1.8/2.5	Aramid yarns	FRP (2.6)	HDPE (1.4)	-30° to +60° C	-40° to +70° C	20D/10D
6T12F	72	106	11.3	1.8/2.5	Aramid yarns	FRP (2.6)	HDPE (1.4)	-30° to +60° C	-40° to +70° C	20D/10D
8T12F	96	140	12.9	1.8/2.5	Aramid yarns	FRP in PE coat (3.5/4.3)	HDPE (1.4)	-30° to +60° C	-40° to +70° C	20D/10D
12T12F	144	201	16.2	1.8/2.5	Aramid yarns	FRP in PE coat (3.5/7.5)	HDPE (1.4)	-30° to +60° C	-40° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12-144F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	6000N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	3000N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1500N (100x100mm)
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	25 cycles [(20xD), 1Kg]

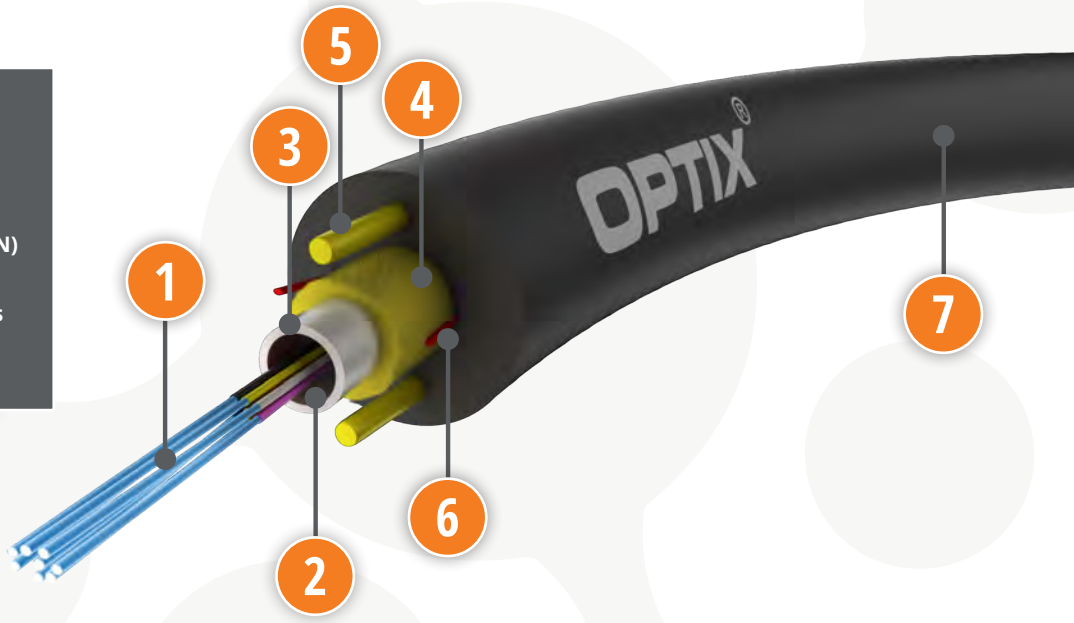
OPTIX Cable ARAMID Z-XOTKtcdD 1.2kN (up to 80m SPAN - NESC Heavy)

Cod. Z3FNV301-Cable version*

9/125 ITU-T G.652D/G.657A1/G.657A2

FEATURES:

- Universal cable for aerial / canalization installation
- Universal cable for aerial / canalization
- Span (NESC Heavy) up to 80 meters (1.2kN)
- Fully dielectric construction
- Resistance to high and low temperatures
- Enhanced by high quality aramid yarns
- Solid HDPE jacket



CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Hydrophobic jelly
3. Loose tube
4. Aramid yarns
5. ARP rods / FRP rods
6. Ripcords to tear the outer jacket
7. HDPE outer jacket (black), UV stabilized

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.4)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T2F	2	22	5.3	1.4/2.0	Aramid yarns	ARP (2x0.5)/ FRP (2x0.5)	HDPE (1.5)	-10° to +50° C	-40° to +70° C	20D/10D
1T4F	4	22	5.3	1.4/2.0	Aramid yarns	ARP (2x0.5)/ FRP (2x0.5)	HDPE (1.5)	-10° to +50° C	-40° to +70° C	20D/10D
1T8F	8	22	5.3	1.4/2.0	Aramid yarns	ARP (2x0.5)/ FRP (2x0.5)	HDPE (1.5)	-10° to +50° C	-40° to +70° C	20D/10D
1T12F	12	22	5.3	1.4/2.0	Aramid yarns	ARP (2x0.5)/ FRP (2x0.5)	HDPE (1.5)	-10° to +50° C	-40° to +70° C	20D/10D
1T24F	24	25	5.8	1.6/2.4	Aramid yarns	ARP (2x0.5)/ FRP (2x0.5)	HDPE (1.5)	-10° to +50° C	-40° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	1-8F	12F	24F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	1200N	1200N	1200N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	600N	600N	600N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]		

OPTIX Cable STEEL Z-XOTKtc 1.2kN (up to 60m SPAN - NESC Heavy)

9/125 ITU-T G.652D

Cod. Z3FNV309-Cable version*

FEATURES:

- Universal cable for aerial/canalization installation
- Span (NESC Heavy) up to 60 meters (1.2kN)
- Better structural strength
- Resistance to high and low temperatures
- Water blocking construction
- Solid HDPE jacket

CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Hydrophobic jelly
3. Loose tube
4. Water blocking yarns
5. Steel rods
6. Ripcords to tear the outer jacket
7. HDPE outer jacket (black), UV stabilized

Aerial installation
Outdoor installation
Duct installation
Moisture resistant
UV protection
High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.4)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T4F	4	40	6.5	1.4/2.0	None	Steel (2x0.9)	HDPE (2.0)	-10° to +50° C	-40° to +70° C	20D/15D
1T8F	8	40	6.5	1.4/2.0	None	Steel (2x0.9)	HDPE (2.0)	-10° to +50° C	-40° to +70° C	20D/15D
1T12F	12	40	6.5	1.4/2.0	None	Steel (2x0.9)	HDPE (2.0)	-10° to +50° C	-40° to +70° C	20D/15D
1T24F	24	50	7.0	1.6/2.4	None	Steel (2x0.9)	HDPE (2.0)	-10° to +50° C	-40° to +70° C	20D/15D

Mechanical parameters	EN standard	IEC standard	1-8F	12F	24F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	1200N	1200N	1200N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	600N	600N	600N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]		

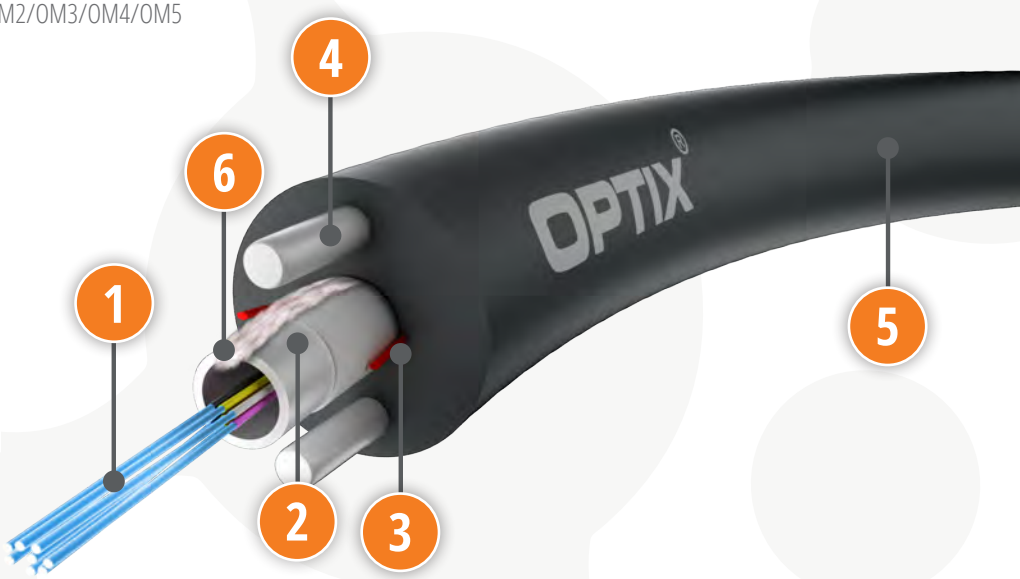
OPTIX Cable
FRP Z-XOTKtcd 1.2kN
(up to 35m SPAN - NESC Heavy)

9/125 ITU-T G.652D, 62.5/125 ITU-T OM1, 50/125 ITU-T OM2/OM3/OM4/OM5

Cod. Z3FUC501-Cable version*

FEATURES:

- **Universal cable for aerial / canalization installation**
- **Span (NESC Heavy) up to 35 meters (1.2kN)**
- **Fully dielectric construction**
- **Resistance to high and low temperatures**
- **Water blocking construction**
- **Solid HDPE jacket**



CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Loose tube
3. Ripcords to tear the outer jacket
4. FRP rods
5. HDPE outer jacket (black), UV stabilized
6. Water blocking yarns

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T4F	4	40	6.5	1.4/2.0	None	FRP (2x0.9)	HDPE (2.0)	-10° to +50° C	-40° to +70° C	20D/15D
1T8F	8	40	6.5	1.4/2.0	None	FRP (2x0.9)	HDPE (2.0)	-10° to +50° C	-40° to +70° C	20D/15D
1T12F	12	40	6.5	1.4/2.0	None	FRP (2x0.9)	HDPE (2.0)	-10° to +50° C	-40° to +70° C	20D/15D
1T24F	24	50	7.0	1.6/2.4	None	FRP (2x0.9)	HDPE (2.0)	-10° to +50° C	-40° to +70° C	20D/15D

Cod. Z3FUC301-Cable version*

Mechanical parameters	EN standard	IEC standard	1-8F	12F	24F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	1200N	1200N	1200N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	600N	600N	600N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]		

OPTIX Cable GLASS Z-XOTKtcdDb 1.0kN NV101 (up to 40m SPAN - NESC Heavy)

Cod. Z3FNV101-Cable version*

9/125 ITU-T G.652D/G.657A1/G.657A2

FEATURES:

- Universal cable for aerial / canalization installation
- Span (NESC Heavy) up to 40 meters (1kN)
- Fully dielectric construction
- Resistance to high and low temperatures
- Enhanced by high quality glass yarns
- Solid HDPE jacket

CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Loose tube
3. Ripcords to tear the outer jacket
4. ARP rods
5. HDPE outer jacket (black), UV stabilized
6. Glass yarns

Aerial installation
Outdoor installation
Duct installation
Moisture resistant
UV protection
High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.4)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T2F	2	25	5.5	1.4/2.0	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D
1T4F	4	25	5.5	1.4/2.0	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D
1T8F	8	25	5.5	1.4/2.0	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D
1T12F	12	25	5.5	1.4/2.0	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D
1T24F	24	30	6.0	1.9/2.5	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	1-8F	12F	24F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	1000N	1000N	1000N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	500N	500N	500N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]		

OPTIX Cable GLASS PLUS Z-XOTKtcdDb 1.2kN (up to 50m SPAN - NESC Heavy)

Cod. Z3FNV103-Cable version*

9/125 ITU-T G.652D

FEATURES:

- Universal cable for aerial / canalization installation
- Span (NESC Heavy) up to 50 meters (1.2kN)
- Fully dielectric construction
- Resistance to high and low temperatures
- Enhanced by high quality glass yarns
- Solid HDPE jacket

CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Loose tube
3. Ripcords to tear the outer jacket
4. ARP rods
5. HDPE outer jacket (black), UV stabilized
6. Glass yarns

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.4)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T1F	1	28	6.0	1.4/2.0	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D
1T2F	2	28	6.0	1.4/2.0	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D
1T4F	4	28	6.0	1.4/2.0	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D
1T8F	8	28	6.0	1.4/2.0	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D
1T12F	12	28	6.0	1.4/2.0	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D
1T24F	24	33	6.5	1.9/2.5	Glass yarns	ARP (2x0.5)	HDPE (1.5)	-20° to +70° C	-20° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	1-8F	12F	24F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	1200N	1200N	1200N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	600N	600N	600N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]		

OPTIX Cable FLAT Z-XOTKtcdp FC101 1.0kN (up to 70m SPAN - NESC Heavy)

9/125 ITU-T G.652D

Cod. Z3FNV401-Cable version*

FEATURES:

- **Universal cable for aerial / canalization installation**
- **Span (NESC Heavy) up to 70 meters (1.0kN)**
- **Fully dielectric construction**
- **Resistance to high and low temperatures**
- **Practical, flat design**
- **Solid HDPE jacket**

CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Hydrophobic jelly
3. Loose tube
4. FRP rods
5. HDPE outer jacket (black), UV stabilized

Aerial installation | Indoor installation | Duct installation | Crushproof | UV protection | High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T8F	8	35	8.1x4.1	1.7/2.5	None	FRP (2x1.8)	HDPE	-30° to +70° C	-30° to +70° C	20D/10D
1T12F	12	35	8.1x4.1	1.7/2.5	None	FRP (2x1.8)	HDPE	-30° to +70° C	-30° to +70° C	20D/10D
1T24F	24	45	8.6x4.6	2.0/3.0	None	FRP (2x1.8)	HDPE	-30° to +70° C	-30° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	8F	12F	24F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	1000N	1000N	1000N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	600N	600N	600N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]		

OPTIX Cable FLAT Z-XOTKtsdp FC201 1.0kN (up to 70m SPAN - NESC Heavy)

Cod. Z3FNV402-Cable version*

9/125 ITU-T G.652D

FEATURES:

- Universal cable for aerial / canalization installation
- Span (NESC Heavy) up to 70 meters (1.0kN)
- Fully dielectric construction
- Resistance to high and low temperatures
- Practical, flat design
- Solid HDPE jacket

CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Hydrophobic jelly
3. Loose tube
4. FRP rods
5. HDPE outer jacket (black), UV stabilized

Aerial installation | Indoor installation | Duct installation | Crushproof | UV protection | High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
2T12F	24	30	8.8x3.4	1.2/1.7	None	FRP (2x1.8)	HDPE	-30° to +70° C	-30° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	24F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	1000N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	600N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	2000N (100x100mm) for 60 sec.
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]

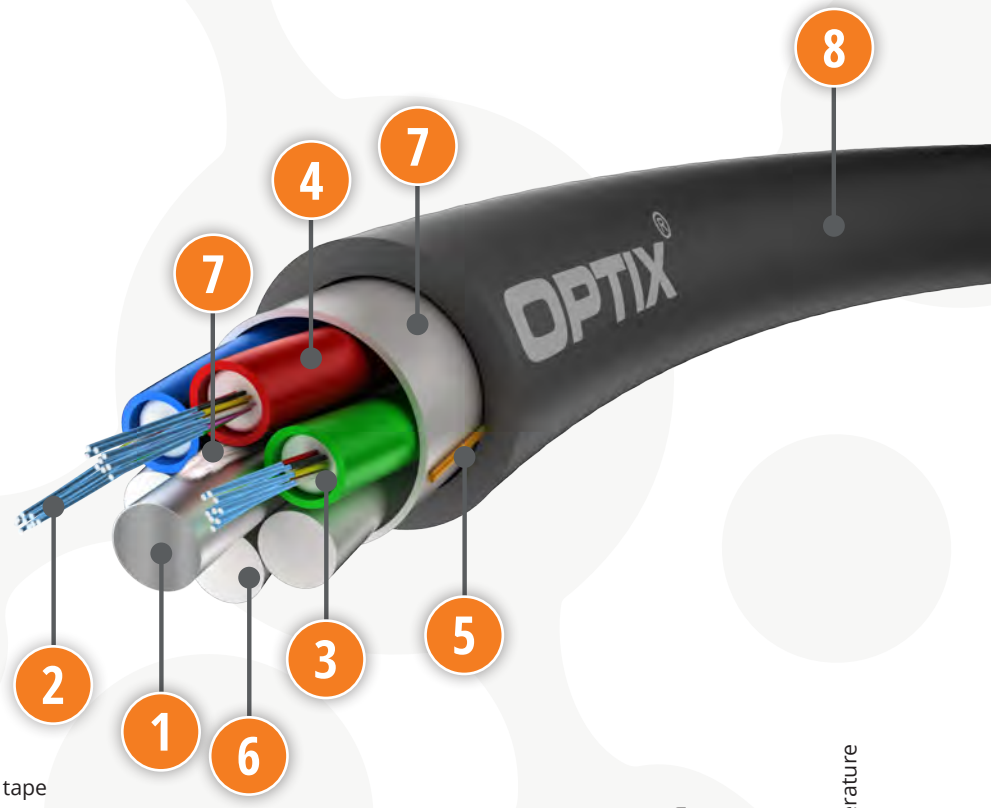
OPTIX Cable LSZH ZW-NOTKtsd 1.2kN

9/125 ITU-T G.652D

Cod. Z3FNV507-Cable version*

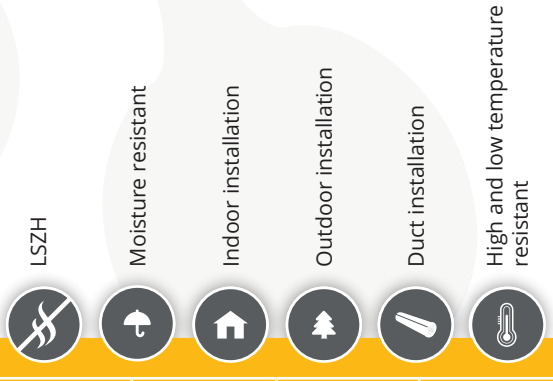
FEATURES:

- Fully dielectric construction
- Solid LSZH jacket
- Additional water blocking construction
- Resistance to high and low temperatures
- Practical and thin Ripcord



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Hydrophobic jelly
4. Loose tube
5. Ripcords to tear the outer jacket
6. Filler
7. Water blocking tape / yarns
8. LSZH outer jacket (black)



Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.2)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
2T6F	12	105	10.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6)	-40° to +60° C	-40° to +70° C	20D/10D
2T12F	24	105	10.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6)	-40° to +60° C	-40° to +70° C	20D/10D
4T6F	24	105	10.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6)	-40° to +60° C	-40° to +70° C	20D/10D
4T12F	48	105	10.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6)	-40° to +60° C	-40° to +70° C	20D/10D
6T12F	72	105	10.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6)	-40° to +60° C	-40° to +70° C	20D/10D
8T12F	96	130	11.5	1.4/2.0	None	FRP (2.0)	LSZH (1.6)	-40° to +60° C	-40° to +70° C	20D/10D
12T12F	144	195	14.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6)	-40° to +60° C	-40° to +70° C	20D/10D
12T24F	288	250	16.5 (± 1.0)	1.4/2.0	None	FRP (2.0)	LSZH (1.6)	-40° to +60° C	-40° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12-24F	48F	72F	96-288F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	1200N	1200N	1200N	1200N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	500N	500N	500N	500N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	2000N (100x100mm) for 60 sec.			
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	25 cycles (20xD)			

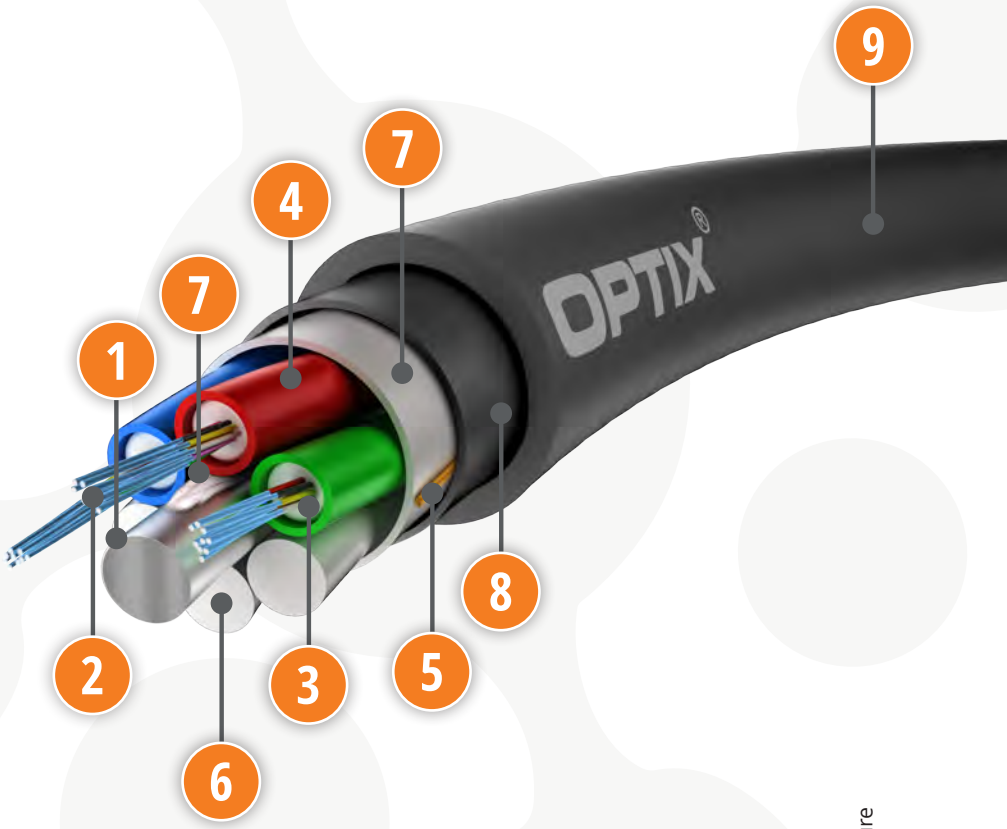
OPTIX Cable ZW-(NV)OTKtsd 1.2kN

9/125 ITU-T G.652D

Cod. Z3FNV509-Cable version*

FEATURES:

- Fully dielectric construction
- solid LSZH outer jacket and nylon (PA) inner jacket
- Additional water blocking construction
- Resistance to high and low temperatures
- Practical and thin Ripcord



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Hydrophobic jelly
4. Loose tube
5. Ripcords to tear the outer jacket
6. Filler
7. Water blocking tape / yarns
8. Nylon (PA) inner jacket (black)
9. LSZH outer jacket (black)

Indoor installation | Outdoor installation | Duct installation | LSZH | Moisture resistant | Rodent resistant | High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius
1T12F	12	120	11.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6) + PA (0.5)	-15° to +60° C	-40° to +70° C	20D
2T12F	24	120	11.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6) + PA (0.5)	-15° to +60° C	-40° to +70° C	20D
3T12F	36	120	11.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6) + PA (0.5)	-15° to +60° C	-40° to +70° C	20D
4T12F	48	120	11.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6) + PA (0.5)	-15° to +60° C	-40° to +70° C	20D
6T12F	72	120	11.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6) + PA (0.5)	-15° to +60° C	-40° to +70° C	20D
8T12F	96	150	12.5	1.4/2.0	None	FRP (2.0)	LSZH (1.6) + PA (0.5)	-15° to +60° C	-40° to +70° C	20D
12T12F	144	220	15.2	1.4/2.0	None	FRP (2.0)	LSZH (1.6) + PA (0.5)	-15° to +60° C	-40° to +70° C	20D
24T12F	288	280	17.5 (± 1.0)	1.4/2.0	None	FRP (2.0)	LSZH (1.6) + PA (0.5)	-15° to +60° C	-40° to +70° C	20D

Mechanical parameters	EN standard	IEC standard	12-24F	36-48F	72F	96-288F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	1200N	1200N	1200N	1200N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	500N	500N	500N	500N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	2000N (100x100mm) for 60 sec.			
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 5Kg]			

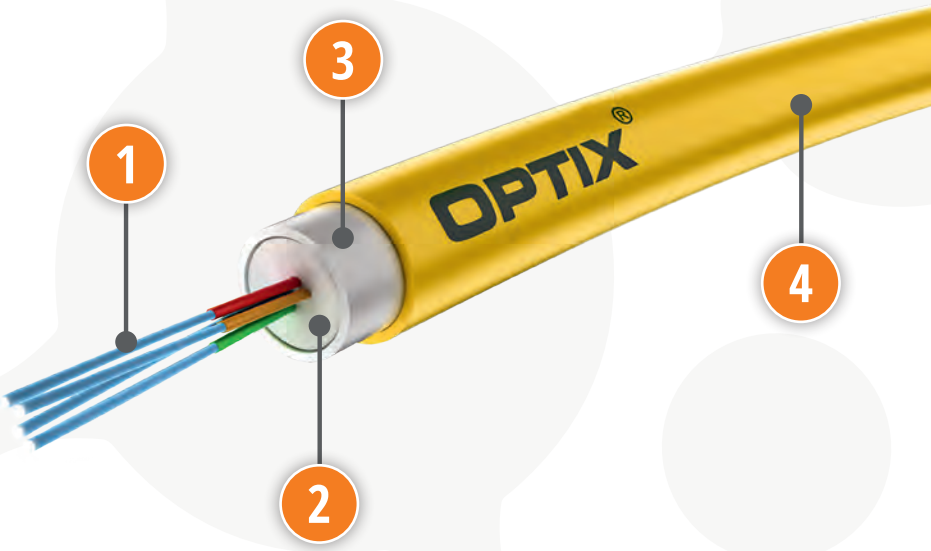
OPTIX Cable MICRO EPFU ZW-XOTKtcd 0.05kN

9/125 ITU-T G.657A2

Cod. Z3FMC101-Cable version*

FEATURES:

- Cable for microduct installation
- Solid yellow outer jacket
- Small reduced diameter
- Designed for cable blowing
- Resistance to high and low temperatures
- Fully dielectric construction



CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Resin
3. Loose tube
4. Outer jacket (yellow)

Microduct installation
Outdoor installation
Indoor installation
Reduced diameter
Blowing installation
High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±0.5)	Ø Cable [mm] (±0.1)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating thickness [mm] (±0.1)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T2F	2	1.0	1.10	0.75	None	None	0.15	-10° to +50° C	-40° to +70° C	20D/10D
1T4F	4	1.0	1.10	0.75	None	None	0.15	-10° to +50° C	-40° to +70° C	20D/10D
1T6F	6	1.6	1.35	0.75	None	None	0.15	-10° to +50° C	-40° to +70° C	20D/10D
1T8F	8	1.6	1.35	0.75	None	None	0.15	-10° to +50° C	-40° to +70° C	20D/10D
1T12F	12	2.2	1.60	0.75	None	None	0.15 (±0.05)	-10° to +50° C	-40° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	2-12F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	50N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	25N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	100N (100x100mm)
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles (20xD)

OPTIX Cable MICRO ZW-XOTKtcdD 0.15kN

9/125 ITU-T G.652D

Cod. Z3FMC201-Cable version*

FEATURES:

- Cable for microduct installation
- Solid HDPE jacket
- Small reduced diameter
- Designed for cable blowing
- Reinforced by aramid yarns
- Resistance to high and low temperatures
- Fully dielectric construction

CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Thixotropic jelly
3. Loose tube
4. Aramid yarns
5. Ripcords to tear the outer jacket
6. HDPE outer jacket (black), UV stabilized

Microduct installation
Outdoor installation
Indoor installation
Reduced diameter
UV protection
Blowing Installation
High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.2)	Ø Tube [mm] (±0.1)	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material & thickness [mm] (±5%)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T2F	2	5.2	2.5	1.1/1.6	Aramid yarns		HDPE (0.3)	-20° to +70° C	-20° to +70° C	20D/15D
1T4F	4	5.2	2.5	1.1/1.6	Aramid yarns		HDPE (0.3)	-20° to +70° C	-20° to +70° C	20D/15D
1T6F	6	5.2	2.5	1.1/1.6	Aramid yarns		HDPE (0.3)	-20° to +70° C	-20° to +70° C	20D/15D
1T8F	8	5.2	2.5	1.1/1.6	Aramid yarns		HDPE (0.3)	-20° to +70° C	-20° to +70° C	20D/15D
1T12F	12	5.2	2.5	1.1/1.6	Aramid yarns		HDPE (0.3)	-20° to +70° C	-20° to +70° C	20D/15D

Mechanical parameters	EN standard	IEC standard	2-12F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	150N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	75N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	50N (100x100mm) for 60 sec.
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 0.5Kg]

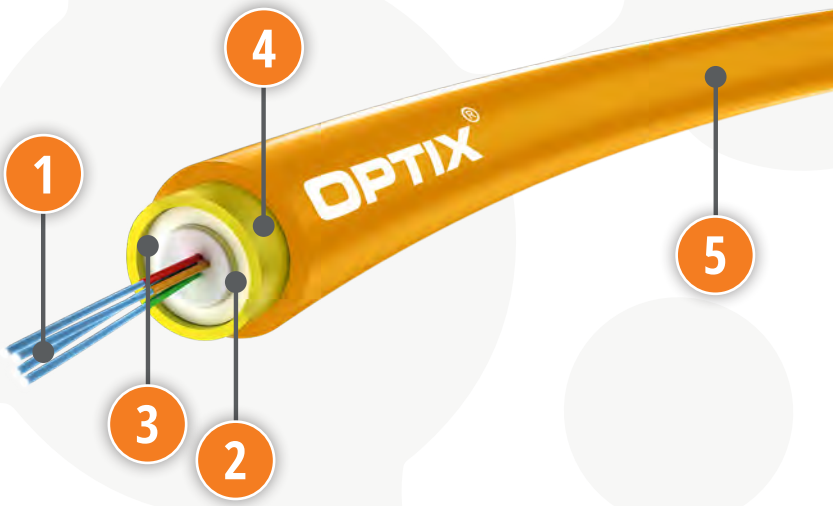
OPTIX Cable MICRO ZW-VOTKtcdD 0.25kN

9/125 ITU-T G.657A1

Cod. Z3FMC205-Cable version*

FEATURES:

- Cable for microduct installation
- Solid PA-12 jacket
- Small reduced diameter
- Designed for cable blowing
- Reinforced by aramid yarns
- Resistance to high and low temperatures
- Fully dielectric construction



CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Thixotropic jelly
3. Loose tube
4. Aramid yarns
5. PA-12 outer jacket (orange)

Microduct installation
Outdoor installation
Indoor installation
Reduced diameter
UV protection
Blowing Installation
High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.1)	Ø Tube [mm] (±0.2)	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material & thickness [mm] (±0.1)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T2F	2	5.5	2.5	1.8	Aramid yarns		PA-12 (0.3)	-10° to +60° C	-20° to +70° C	15D
1T4F	4	5.5	2.5	1.8	Aramid yarns		PA-12 (0.3)	-10° to +60° C	-20° to +70° C	15D
1T6F	6	5.5	2.5	1.8	Aramid yarns		PA-12 (0.3)	-10° to +60° C	-20° to +70° C	15D
1T8F	8	5.5	2.5	1.8	Aramid yarns		PA-12 (0.3)	-10° to +60° C	-20° to +70° C	15D
1T12F	12	5.5	2.5	1.8	Aramid yarns		PA-12 (0.3)	-10° to +60° C	-20° to +70° C	15D
1T24F	24	11.0	3.5	2.1	Aramid yarns		PA-12 (0.3)	-10° to +60° C	-20° to +70° C	15D

Mechanical parameters	EN standard	IEC standard	2-24F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	250N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	150N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	100N (100x100mm)
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	25 cycles (20xD)

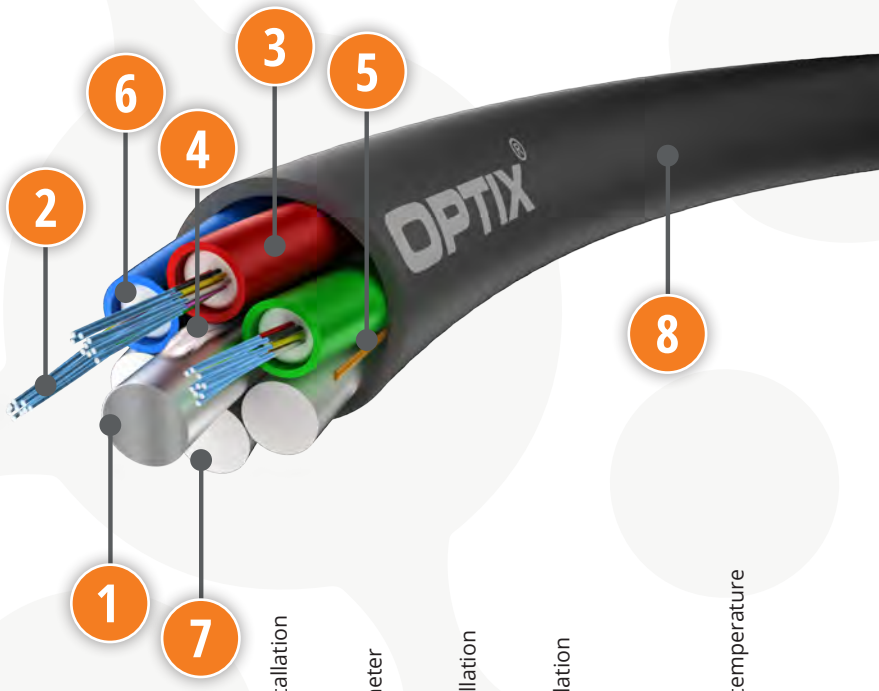
OPTIX Cable MICRO Z-XOTKtmd 0.65 - 1.0kN

9/125 ITU-T G.652D

Cod. Z3FMC301-Cable version*

FEATURES:

- Cable for microduct installation
- Solid HDPE jacket
- Small reduced diameter
- Designed for cable blowing
- Water blocking construction
- Reinforced with FRP central strengthening element
- Resistance to high and low temperatures
- Fully dielectric construction



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Loose tube
4. Water blocking yarns
5. Ripcord to tear the outer jacket
6. Hydrophobic jelly
7. Filler
8. HDPE outer jacket (black), UV stabilized

Microduct installation
Reduced diameter
Outdoor installation
Blowing installation
UV protection
High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.3)	Ø Tube [mm] (±0.1)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.1)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
2T6F	12	26	5.4	1.15/1.45	None	FRP 1.60	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
1T12F	12	26	5.4	1.15/1.45	None	FRP 1.60	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
2T12F	24	26	5.4	1.15/1.45	None	FRP 1.60	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
4T6F	24	26	5.4	1.15/1.45	None	FRP 1.60	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
3T12F	36	26	5.4	1.15/1.45	None	FRP 1.60	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
4T12F	48	26	5.4	1.15/1.45	None	FRP 1.60	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
6T12F	72	26	5.4	1.15/1.45	None	FRP 1.60	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
8T12F	96	36	6.1	1.15/1.45	None	FRP 2.4	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
12T12F	144	52	7.9	1.15/1.45	None	FRP in PE coat (2.4/4.1)	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
24T6F	144	80	9.3	1.15/1.45	None	FRP 2.80	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
16T12F	192	52	7.9	1.15/1.45	None	FRP 1.60	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
18T12F	216	52	7.9	1.15/1.45	None	FRP 1.60	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
24T12F	288	80	9.3	1.15/1.45	None	FRP 2.80	HDPE (0.5)	-10° to +50° C	-30° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12-72F	96-144F	192-216F	288F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	650N	800N	650N	1000N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	450N	550N	450N	700N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec..			
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	25 cycles (20xD)			

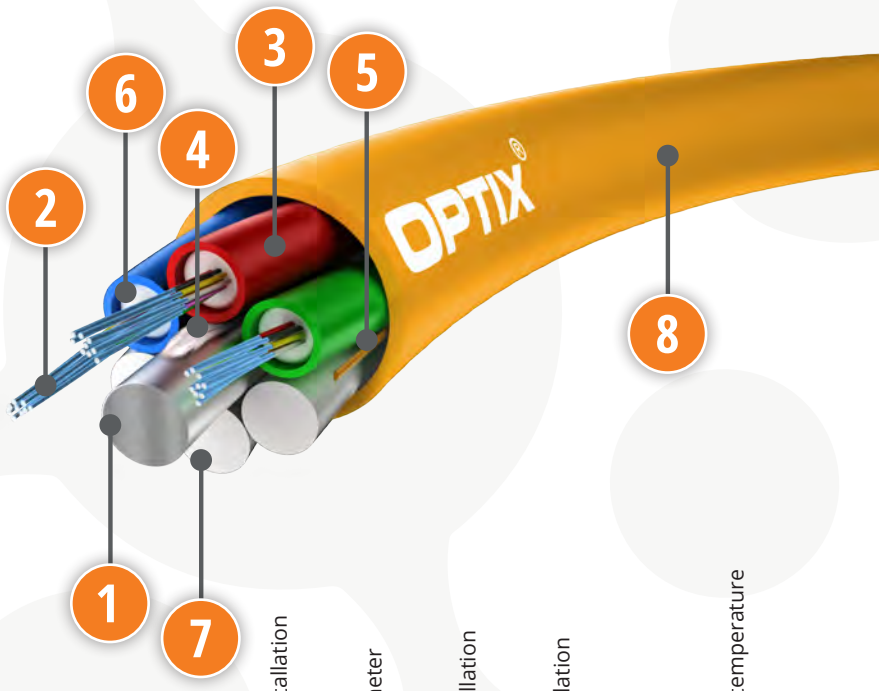
OPTIX Cable MICRO Z-VOTKtmd 0.65 - 1.0kN

9/125 ITU-T G.652D

Cod. Z3FMC302-Cable version*

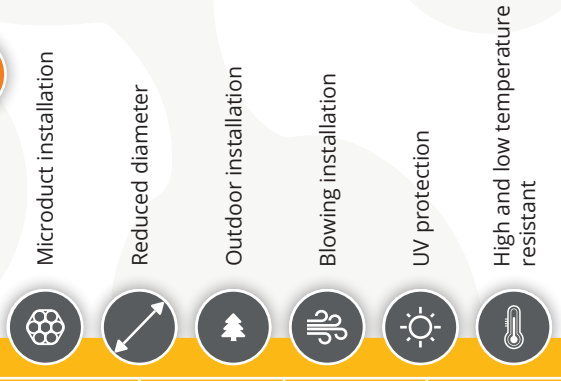
FEATURES:

- Cable for microduct installation
- Solid PA-12 jacket
- Small reduced diameter
- Designed for cable blowing
- Water blocking construction
- Reinforced with FRP central strengthening element
- Resistance to high and low temperatures
- Fully dielectric construction



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Loose tube
4. Water blocking yarns
5. Ripcord to tear the outer jacket
6. Hydrophobic jelly
7. Filler
8. PA-12 outer jacket (orange)



Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.3)	Ø Tube [mm] (±0.1)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.1)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
2T6F	12	26	5.4	1.15/1.45	None	FRP 1.60	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
1T12F	12	26	5.4	1.15/1.45	None	FRP 1.60	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
2T12F	24	26	5.4	1.15/1.45	None	FRP 1.60	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
4T6F	24	26	5.4	1.15/1.45	None	FRP 1.60	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
3T12F	36	26	5.4	1.15/1.45	None	FRP 1.60	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
4T12F	48	26	5.4	1.15/1.45	None	FRP 1.60	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
6T12F	72	26	5.4	1.15/1.45	None	FRP 1.60	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
8T12F	96	36	6.1	1.15/1.45	None	FRP 2.4	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
12T12F	144	52	7.9	1.15/1.45	None	FRP in PE coat (2.4/4.1)	PA-12 (0.5±0.2)	-10° to +50° C	-30° to +70° C	20D/10D
24T6F	144	80	9.3	1.15/1.45	None	FRP 2.80	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
16T12F	192	52	7.9	1.15/1.45	None	FRP 1.60	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
18T12F	216	52	7.9	1.15/1.45	None	FRP 1.60	PA-12 (0.5)	-10° to +50° C	-30° to +70° C	20D/10D
24T12F	288	80	9.3	1.15/1.45	None	FRP 2.80	PA-12 (0.5±0.2)	-10° to +50° C	-30° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12-72F	96-144F	192-216F	288F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	650N	800N	650N	1000N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	450N	550N	450N	700N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec..			
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	25 cycles (20xD)			

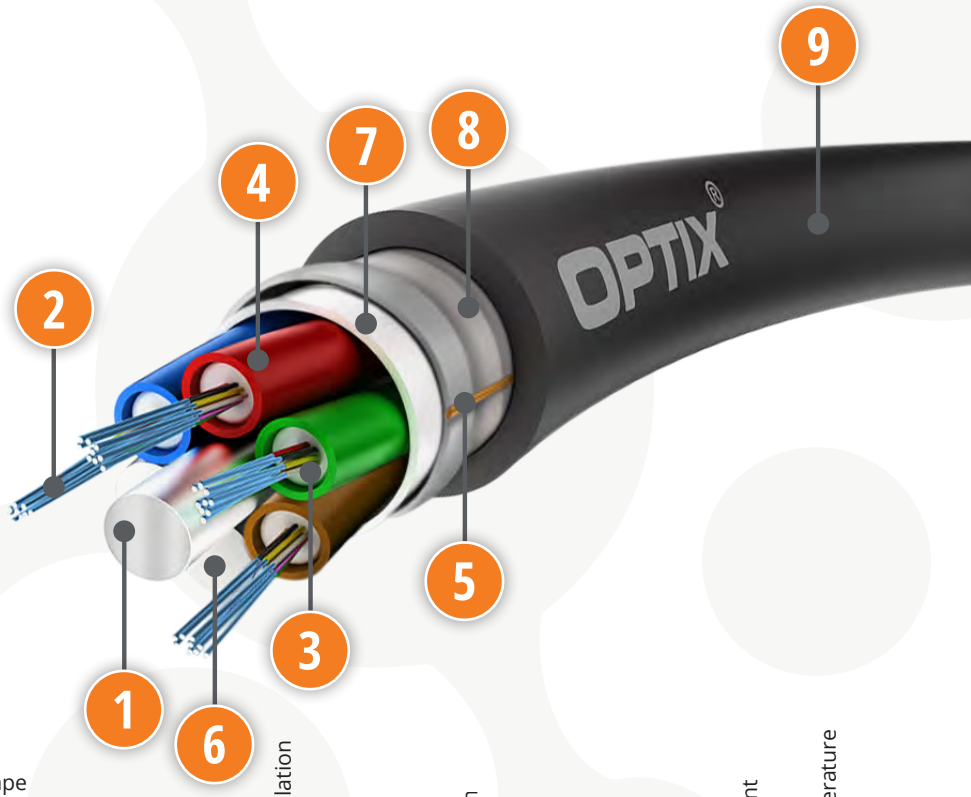
OPTIX Cable STRONG ZKS-XOTKtsFf 2.5kN

9/125 ITU-T G.652D

Cod. Z3FNV701-Cable version*

FEATURES:

- Improved rodent protection
- Solid HDPE jacket
- Water blocking construction
- Designed for direct access in the ground
- Resistance to high and low temperatures
- Enhanced by corrugated steel tape
- Practical and thin Ripcord



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Hydrophobic jelly
4. Loose tube
5. Ripcords to tear the outer jacket
6. Filler
7. Water blocking tape
8. Corrugated steel tape
9. HDPE outer jacket (black)

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T12F	12	150	11.3	1.5/2.1	Steel tape	FRP 2.3	HDPE (1.5)	-30° to +70° C	-20° to +70° C	20D/10D
2T6F	12	150	11.3	1.5/2.1	Steel tape	FRP 2.3	HDPE (1.5)	-30° to +70° C	-20° to +70° C	20D/10D
2T12F	24	150	11.3	1.5/2.1	Steel tape	FRP 2.3	HDPE (1.5)	-30° to +70° C	-20° to +70° C	20D/10D
4T6F	24	150	11.3	1.5/2.1	Steel tape	FRP 2.3	HDPE (1.5)	-30° to +70° C	-20° to +70° C	20D/10D
4T12F	48	150	11.3	1.5/2.1	Steel tape	FRP 2.3	HDPE (1.5)	-30° to +70° C	-20° to +70° C	20D/10D
6T12F	72	150	11.3	1.5/2.1	Steel tape	FRP 2.3	HDPE (1.5)	-30° to +70° C	-20° to +70° C	20D/10D
8T12F	96	185	12.5	1.5/2.1	Steel tape	FRP in PE coat (2.5/3.5)	HDPE (1.5)	-30° to +70° C	-20° to +70° C	20D/10D
12T12F	144	260	15.0	1.5/2.1	Steel tape	FRP in PE coat (2.5/6.3)	HDPE (1.5)	-30° to +70° C	-20° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12-144F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	2500N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	1250N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	3000N (100x100mm) for 60 sec.
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]

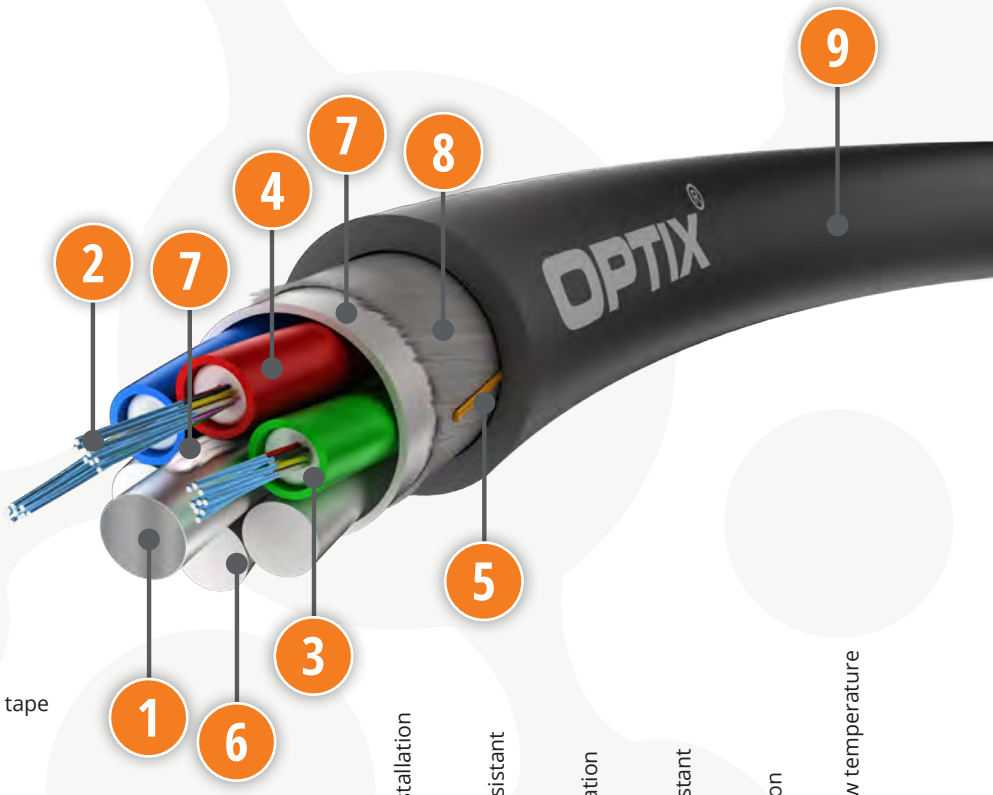
OPTIX Cable DUCT Z-XOTKtsdDb 3.0kN

9/125 ITU-T G.652D

Cod. Z3FNV703-Cable version*

FEATURES:

- Fully dielectric construction
- Solid HDPE jacket
- Additional water blocking construction
- Resistance to high and low temperatures
- Enhanced by high quality glass yarns
- Practical and thin Ripcord



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Hydrophobic jelly
4. Loose tube
5. Ripcords to tear the outer jacket
6. Filler
7. Water blocking tape / yarns
8. Glass yarns
9. HDPE outer jacket (black), UV stabilized

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T12F	12	85	10.1	1.4/2.0	Glass yarns	FRP (2.25)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D
2T6F	12	85	10.1	1.4/2.0	Glass yarns	FRP (2.25)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D
2T12F	24	85	10.1	1.4/2.0	Glass yarns	FRP (2.25)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D
4T6F	24	85	10.1	1.4/2.0	Glass yarns	FRP (2.25)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D
4T12F	48	85	10.1	1.4/2.0	Glass yarns	FRP (2.25)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D
6T12F	72	85	10.1	1.4/2.0	Glass yarns	FRP (2.25)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D
8T12F	96	110	11.4	1.4/2.0	Glass yarns	FRP in PE coat (2.5/3.5)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D
12T12F	144	160	14.0	1.4/2.0	Glass yarns	FRP in PE coat (3.5/6.0)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D
16T12F	192	160	14.0	1.4/2.0	Glass yarns	FRP (2.25)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D
18T12F	216	160	14.0	1.4/2.0	Glass yarns	FRP (2.25)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D
24T12F	288	210	15.8	1.4/2.0	Glass yarns	FRP in PE coat (3.0/4.0)	HDPE (1.5)	-5° to +40° C	-40° to +70° C	20D/15D

Mechanical parameters	EN standard	IEC standard	12-24F	48F	72F	96-288F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	3000N	3000N	3000N	3000N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	2000N	2000N	2000N	2000N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	2000N (100x100mm) for 60 sec.			
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]			

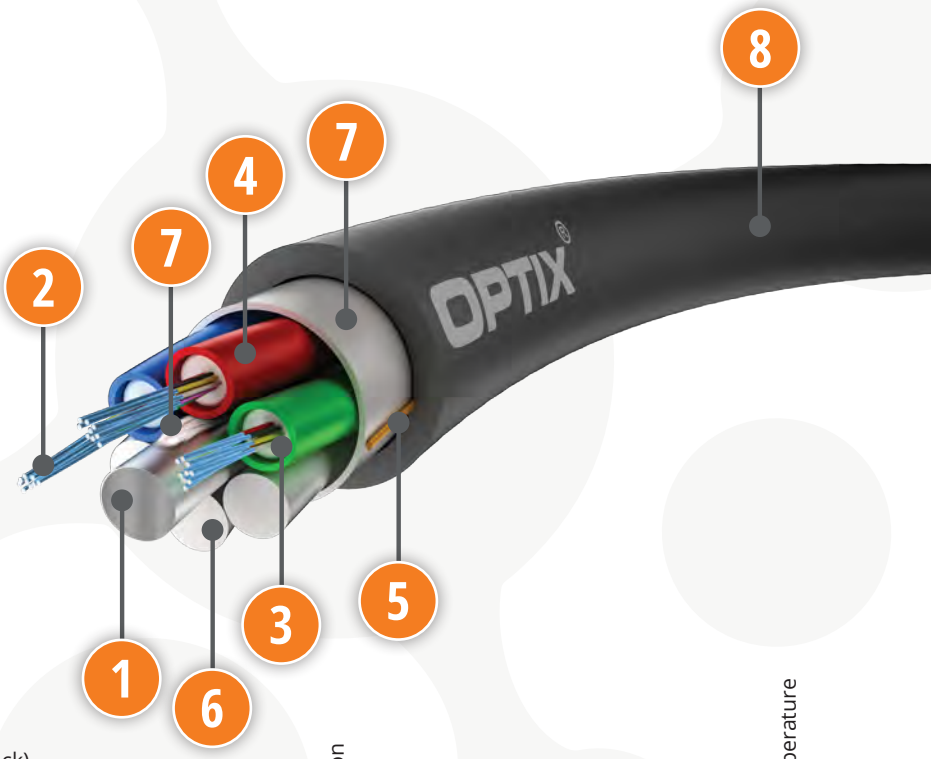
OPTIX Cable LIGHT Z-XOTKtsd 1.5kN

9/125 ITU-T G.652D

Cod. Z3FNV705-Cable version*

FEATURES:

- Reduced diameter 8mm
- Fully dielectric construction
- Solid HDPE Jacket
- Additional water blocking construction
- Resistance to high and low temperatures
- Practical and thin Ripcord



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Hydrophobic jelly
4. Loose tube
5. Ripcords to tear the outer jacket
6. Filler
7. Water blocking tape / yarns
8. HDPE outer jacket (black), UV stabilized

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.1)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm]	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
2T6F	12	50	8.3	1.3/1.8	None	FRP (1.8)	HDPE (min. 1.1)	-10° to +70° C	-20° to +70° C	20D/10D
1T12F	12	50	8.3	1.3/1.80	None	FRP (1.8)	HDPE (min. 1.1)	-10° to +70° C	-20° to +70° C	20D/10D
2T12F	24	50	8.3	1.3/1.8	None	FRP (1.8)	HDPE (min. 1.1)	-10° to +70° C	-20° to +70° C	20D/10D
4T6F	24	50	8.3	1.3/1.8	None	FRP (1.8)	HDPE (min. 1.1)	-10° to +70° C	-20° to +70° C	20D/10D
3T12F	36	50	8.3	1.3/1.8	None	FRP (1.8)	HDPE (min. 1.1)	-10° to +70° C	-20° to +70° C	20D/10D
6T6F	36	50	8.3	1.3/1.8	None	FRP (1.8)	HDPE (min. 1.1)	-10° to +70° C	-20° to +70° C	20D/10D
4T12F	48	50	8.3	1.3/1.8	None	FRP (1.8)	HDPE (min. 1.1)	-10° to +70° C	-20° to +70° C	20D/10D
6T12F	72	50	8.3	1.3/1.8	None	FRP (1.8)	HDPE (min. 1.1)	-10° to +70° C	-20° to +70° C	20D/10D
8T12F	96	72	9.2	1.3/1.8	None	FRP (3.0)	HDPE (min. 1.1)	-10° to +70° C	-20° to +70° C	20D/10D
12T12F	144	105	11.5	1.3/1.8	None	FRP in PE coat (2.5/5.4)	HDPE (min. 1.1)	-10° to +70° C	-20° to +70° C	20D/10D
12T24F	288	165	14.8	1.6/2.0	None	FRP in PE coat (3.0/4.0)	HDPE (min. 1.0)	-10° to +70° C	-20° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12-72F	96-288F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	1500N	1500N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	1000N	1000N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N (100x100mm) for 60 sec.	
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]	

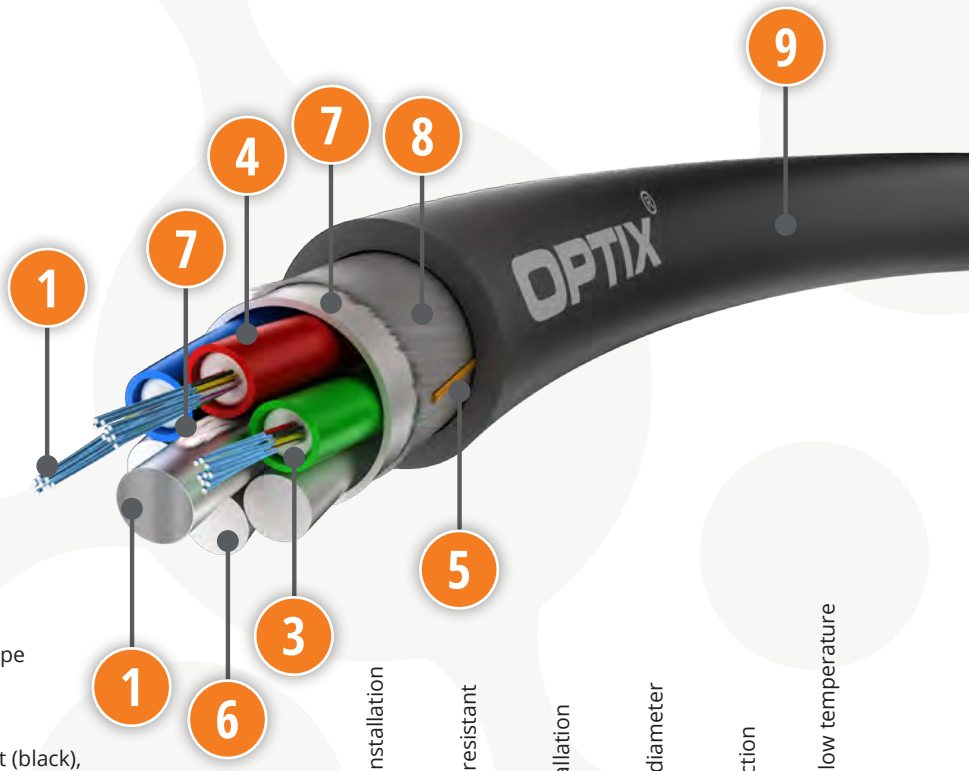
OPTIX Cable SAVER Z-XOTKtsdDb 1.8kN

9/125 ITU-T G.652D

Cod. Z3FNV707-Cable version*

FEATURES:

- Fully dielectric construction
- Solid HDPE Jacket
- Additional water blocking construction
- Resistance to high and low temperatures
- Enhanced by high quality glass yarns
- Practical and thin Ripcord



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm colored coating
3. Hydrophobic jelly
4. Loose tube
5. Ripcords for tear the outer-sheath
6. Filler
7. Water blocking tape / yarns
8. Glass yarns
9. HDPE outer jacket (black), UV stabilized

Outdoor installation
Moisture resistant
Duct installation
Reduced diameter
UV protection
High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (min.)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
2T6F	12	65	8.5	1.4/1.8	Glass yarns	FRP 1.8	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
1T12F	12	65	8.5	1.4/1.8	Glass yarns	FRP 1.8	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
2T12F	24	65	8.5	1.4/1.8	Glass yarns	FRP 1.8	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
4T6F	24	65	8.5	1.4/1.8	Glass yarns	FRP 1.8	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
4T12F	48	65	8.5	1.4/1.8	Glass yarns	FRP 1.8	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
6T12F	72	65	8.5	1.4/1.8	Glass yarns	FRP 1.8	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
8T12F	96	78	9.6	1.4/1.8	Glass yarns	FRP in PE coat (2.25/3.0)	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
12T12F	144	115	11.9	1.4/1.8	Glass yarns	FRP in PE coat (2.8/5.4)	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
16T12F	192	130	13.2	1.4/2.0	Glass yarns	FRP 2.25	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
18T12F	216	130	13.2	1.4/2.0	Glass yarns	FRP 2.25	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
24T12F	288	165	14.8	1.4/2.0	Glass yarns	FRP in PE coat (3.0/4.0)	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D
12T24F	288	185	15.4	1.7/2.5	Glass yarns	FRP in PE coat (3.0/7.5)	HDPE (1.0)	-30° to +60° C	-40° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12-24F	48F	72F	96-288F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	1800N	1800N	1800N	1800N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	1200N	1200N	1200N	1200N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N (100x100mm) for 60 sec.			
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	25 cycles [(20xD), 1Kg]			

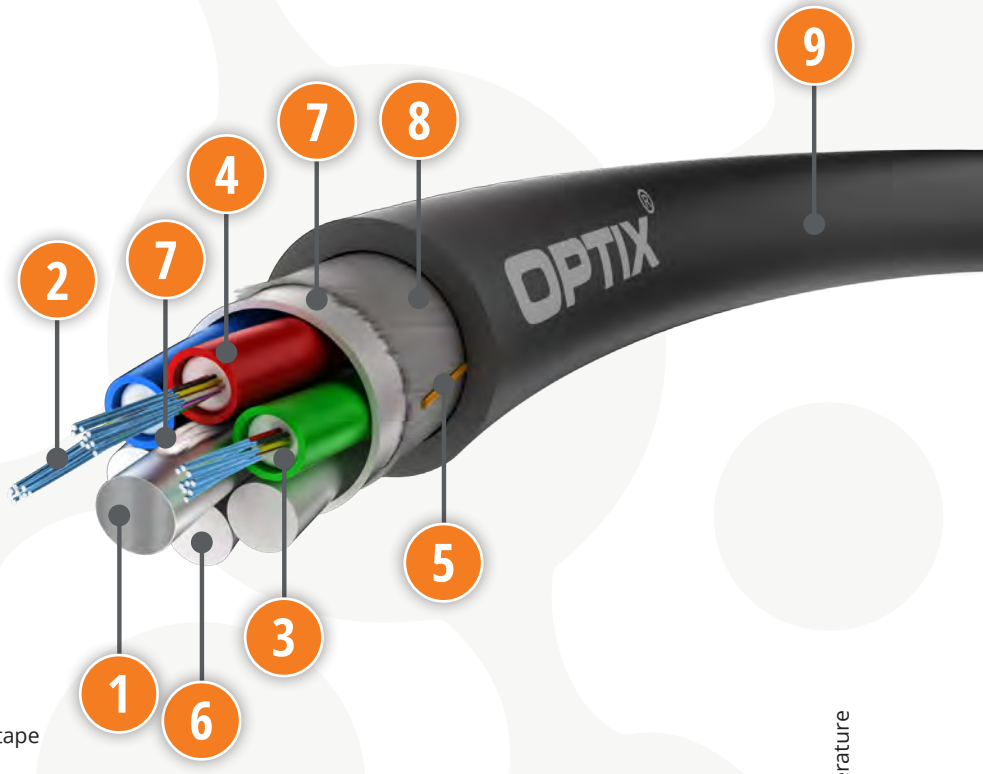
OPTIX Cable SAVER PLUS Z-XOTKtsdDb 2.7kN

9/125 ITU-T G.652D

Cod. Z3FNV709-Cable version*

FEATURES:

- Fully dielectric construction
- Solid HDPE jacket
- Additional water blocking construction
- Resistance to high and low temperatures
- Enhanced by high quality glass yarns
- Practical and thin Ripcord



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Hydrophobic jelly
4. Loose tube
5. Ripcords to tear the outer jacket
6. Filler
7. Water blocking tape / yarns
8. Glass yarns
9. HDPE outer jacket (black), UV stabilized

Outdoor installation | Moisture resistant | Duct installation | Rodent resistant | UV protection | High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
2T6F	12	75	9.0	1.1/1.7	Glass yarns	FRP (1.8)	HDPE (1.2)	-10° to +50° C	-40° to +70° C	20D/15D
4T6F	24	75	9.0	1.1/1.7	Glass yarns	FRP (1.8)	HDPE (1.2)	-10° to +50° C	-40° to +70° C	20D/15D
2T12F	24	75	9.0	1.1/1.7	Glass yarns	FRP (1.8)	HDPE (1.2)	-10° to +50° C	-40° to +70° C	20D/15D
4T12F	48	75	9.0	1.1/1.7	Glass yarns	FRP (1.8)	HDPE (1.2)	-10° to +50° C	-40° to +70° C	20D/15D
6T12F	72	75	9.0	1.1/1.7	Glass yarns	FRP (1.8)	HDPE (1.2)	-10° to +50° C	-40° to +70° C	20D/15D
8T12F	96	85	9.5	1.1/1.7	Glass yarns	FRP (1.8)	HDPE (1.2)	-10° to +50° C	-40° to +70° C	20D/15D
12T12F	144	115	11.7	1.1/1.7	Glass yarns	FRP in PE coat (2.8/5.0)	HDPE (1.2)	-10° to +50° C	-40° to +70° C	20D/15D
8T24F	192	145	12.5	1.6/2.4	Glass yarns	FRP in PE coat (3.5/6.0)	HDPE (1.2)	-10° to +50° C	-40° to +70° C	20D/15D
12T24F	288	165	15.5	1.6/2.4	Glass yarns	FRP in PE coat (3.5/6.0)	HDPE (1.2)	-10° to +50° C	-40° to +70° C	20D/15D

Mechanical parameters	EN standard	IEC standard	12-24F	48F	72F	96-288F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	2700N	2700N	2700N	2700N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	1250N	1250N	1250N	1250N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.			
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]			

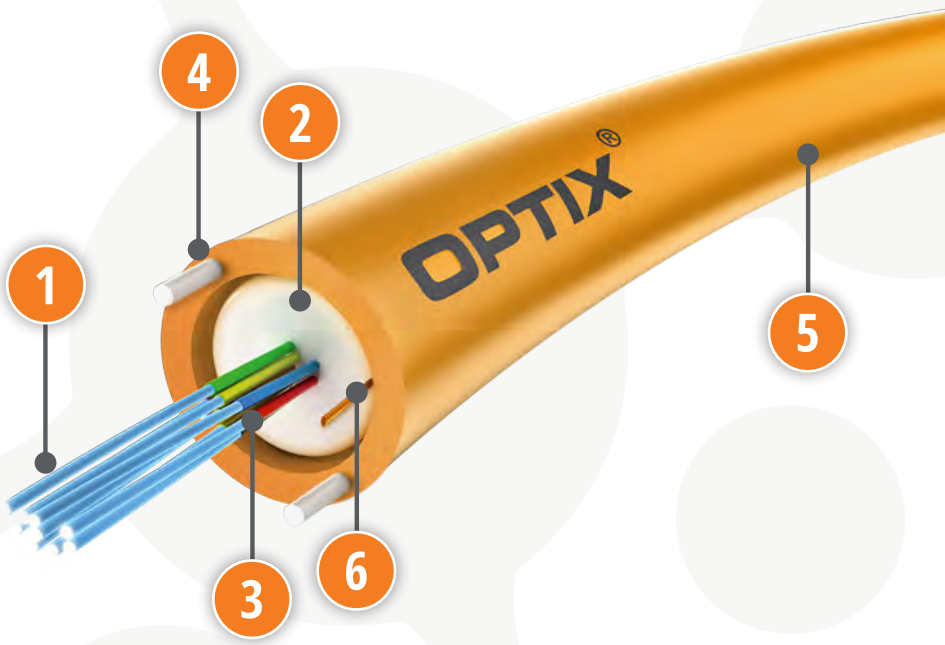
OPTIX Cable DAC (Direct Access Cable) Z-XOTKtcd 1.2kN

9/125 ITU-T G.652D/G.657A1/G.657A2

Cod. Z3FNV201-Cable version*

FEATURES:

- Designed for direct access in the ground
- Fully dielectric construction
- Resistance to high and low temperatures
- Solid HDPE jacket (orange)



CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Hydrophobic jelly
3. Loose tube
4. FRP rods
5. HDPE outer jacket (orange)
6. Ripcords to tear the outer jacket

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1T2F	2	30	6.0	1.4/2.0	None	FRP (2x0.9)	HDPE (1.8)	-20° to +70° C	-20° to +70° C	20D/15D
1T4F	4	30	6.0	1.4/2.0	None	FRP (2x0.9)	HDPE (1.8)	-20° to +70° C	-20° to +70° C	20D/15D
1T8F	8	30	6.0	1.4/2.0	None	FRP (2x0.9)	HDPE (1.8)	-20° to +70° C	-20° to +70° C	20D/15D
1T12F	12	30	6.0	1.4/2.0	None	FRP (2x0.9)	HDPE (1.8)	-20° to +70° C	-20° to +70° C	20D/15D
1T24F	24	32	6.5	1.6/2.4	None	FRP (2x0.9)	HDPE (1.8)	-20° to +70° C	-20° to +70° C	20D/15D

Mechanical parameters	EN standard	IEC standard	1-8F	12F	24F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	1200N	1200N	1200N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	600N	600N	600N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles (20xD)		

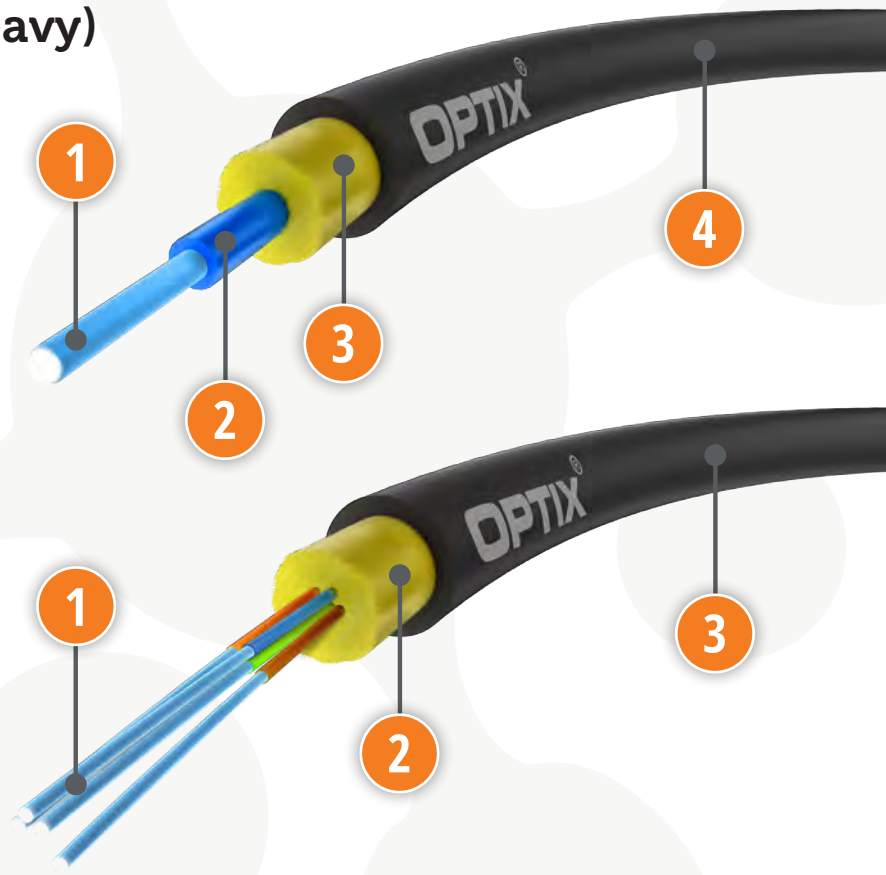
OPTIX Cable AIRFLOW S-QOTKSdD 0.8kN (up to 80m SPAN - NESC Heavy)

Cod. Z3FNV601-Cable version*

9/125 ITU-T G.657A2

FEATURES:

- Cable for outdoor / indoor installation
- Span (NESC Heavy) up to 80 meters (0.8kN)
- Fully dielectric construction
- Resistance to high and low temperatures
- Enhanced by high quality aramid yarns
- Small diameter ~3mm
- Reduced bend radius - G.657A2 fibers
- Solid flame retardant polyurethane jacket with UV protection



CABLE CONSTRUCTION 1F

1. Optical fibers in 0.25mm coating
2. Coloured buffer 0.9mm (semi-tight buffer)
3. Aramid yarns
4. FR PU outer jacket, UV Stabilized

CABLE CONSTRUCTION 2-12F

1. Optical fibers in 0.25mm coloured coating
2. Aramid yarns
3. FR PU outer jacket, UV Stabilized

Indoor installation · Outdoor installation · Duct installation · Aerial installation · Reduced diameter · UV protection · High and low temperature resistant · Fireproof · Moisture resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.1)	Ø Tube	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material & thickness [mm] (±0.1)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
0T1F	1	8.7	3.05	None	Aramid yarns		FR PU (0.75)	-30° to +70° C	-30° to +70° C	15D/10D
0T2F	2	7.5	3.00	None	Aramid yarns		FR PU (0.75)	-30° to +70° C	-30° to +70° C	15D/10D
0T4F	4	7.5	3.00	None	Aramid yarns		FR PU (0.75)	-30° to +70° C	-30° to +70° C	15D/10D
0T6F	6	8.0	3.20	None	Aramid yarns		FR PU (0.75)	-30° to +70° C	-30° to +70° C	15D/10D
0T8F	8	8.3	3.40	None	Aramid yarns		FR PU (0.70)	-30° to +70° C	-30° to +70° C	15D/10D
0T12F	12	8.5	3.40	None	Aramid yarns		FR PU (0.70)	-30° to +70° C	-30° to +70° C	15D/10D

Mechanical parameters	EN standard	IEC standard	1F	2-4F	6-12F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	800N	800N	800N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	250N	250N	250N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	25 cycles [(20xD), 1Kg]		

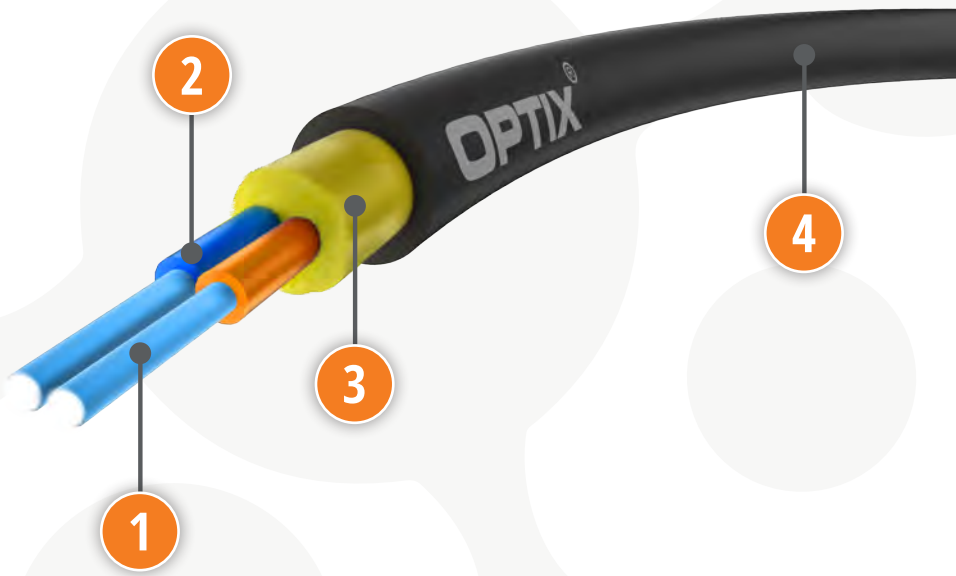
OPTIX Cable AIRFLOW S-QOTKSdD 2F (2x 0.9mm) 0.8kN (up to 80m SPAN - NESC Heavy)

Cod. Z3FNV602-Cable version*

9/125 ITU-T G.657A2

FEATURES:

- Cable for outdoor / indoor installation
- Span (NESC Heavy) up to 80 meters (0.8kN)
- Fully dielectric construction
- Resistance to high and low temperatures
- Enhanced by high quality aramid yarns
- Solid PU jacket
- Small diameter ~3.7mm
- Reduced bend radius - G.657A2 fibers



CABLE CONSTRUCTION 2F

1. Optical fibers in 0.25mm coating
2. Coloured buffer 0.9mm (semi-tight buffer)
3. Aramid yarns
4. FR Polyurethane, UV Stabilized

Indoor installation
Outdoor installation
Duct installation
Aerial installation
Reduced diameter
UV protection
High and low temperature resistant
Fireproof
Moisture resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±5%)	Ø Tube	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material & thickness [mm] (±5%)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
0T2F	2	11.0	3.7	None	Aramid yarns		PU (0.75)	-10° to +50° C	-40° to +70° C	20D/15D

Mechanical parameters	EN standard	IEC standard	2F
Tensile Strength Installation	EN 187000	IEC 794-1-E1	800N
Tensile Strength Operation	EN 187000	IEC 794-1-E1	500N
Crushing resistance	EN 187000, m. 504	IEC 794-1-E3	500N (100x100mm) for 60 sec.
Repeated bending	EN 187000, m. 507	IEC 794-1-E6	30 [cycles (20xD)]

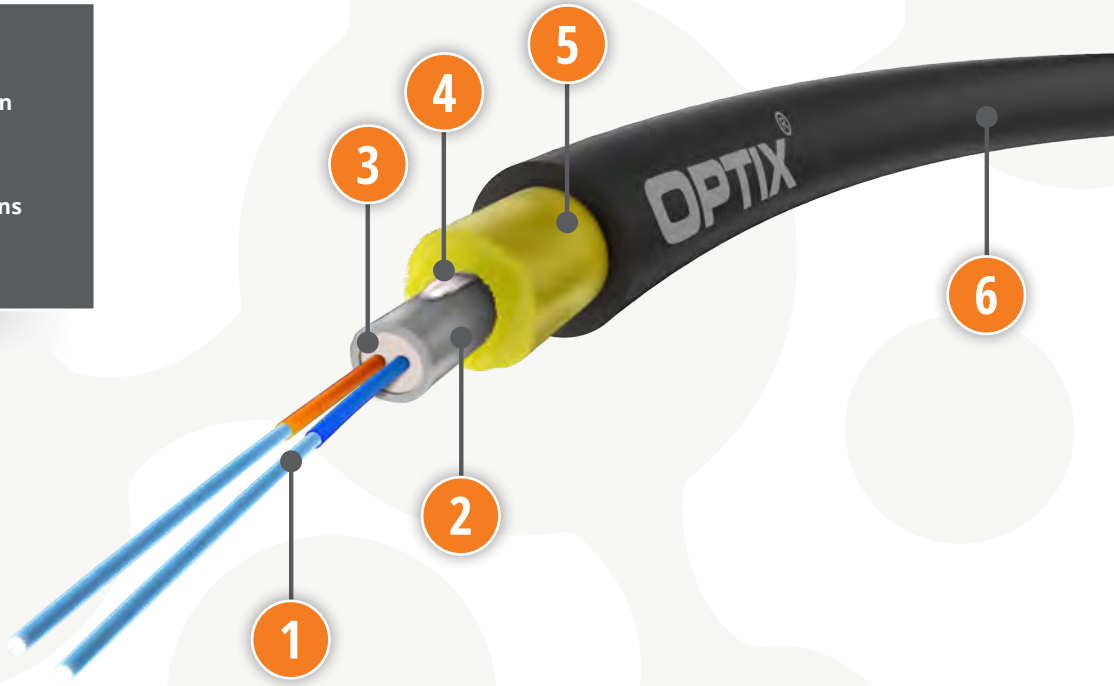
OPTIX Cable AirTube S-XOTKtmdD 0.6kN (up to 50m SPAN - NESC Heavy)

Cod. Z3FNV607-Cable version*

9/125 ITU-T G.657A2

FEATURES:

- Cable for outdoor / indoor installation
- Span (NESC Heavy) up to 50 meters
- Fully dielectric construction
- Enhanced by high quality aramid yarns
- Solid HDPE jacket
- Water blocking construction



CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Loose tube PBT
3. Hydrophobic jelly
4. Water blocking yarns
5. Aramid yarns
6. HDPE outer jacket (black), UV stabilized

Indoor installation
Outdoor installation
Duct installation
Aerial installation
Reduced diameter
UV protection
High and low temperature resistant
Moisture resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (nom.)	Ø Cable [mm] (±0.2)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material & thickness [mm] (nom.)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/permanent
1T1F	1	8.3	3.2	0.9/1.4	Aramid yarns		HDPE (0.75)	-20° to +50° C	-30° to +60° C	20D/10D
1T2F	2	8.3	3.2	0.9/1.4	Aramid yarns		HDPE (0.75)	-20° to +50° C	-30° to +60° C	20D/10D
1T4F	4	8.3	3.2	0.9/1.4	Aramid yarns		HDPE (0.75)	-20° to +50° C	-30° to +60° C	20D/10D
1T6F	6	9.4	3.4	0.9/1.4	Aramid yarns		HDPE (0.75)	-20° to +50° C	-30° to +60° C	20D/10D
1T8F	8	9.4	3.4	1.0/1.6	Aramid yarns		HDPE (0.75)	-20° to +50° C	-30° to +60° C	20D/10D
1T12F	12	9.4	3.4	1.0/1.6	Aramid yarns		HDPE (0.75)	-20° to +50° C	-30° to +60° C	20D/10D

Mechanical parameters	EN standard	IEC standard	1F	2-4F	6-12F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	600N	600N	600N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	250N	250N	250N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm)		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	25 cycles [(20xD), 1Kg]		

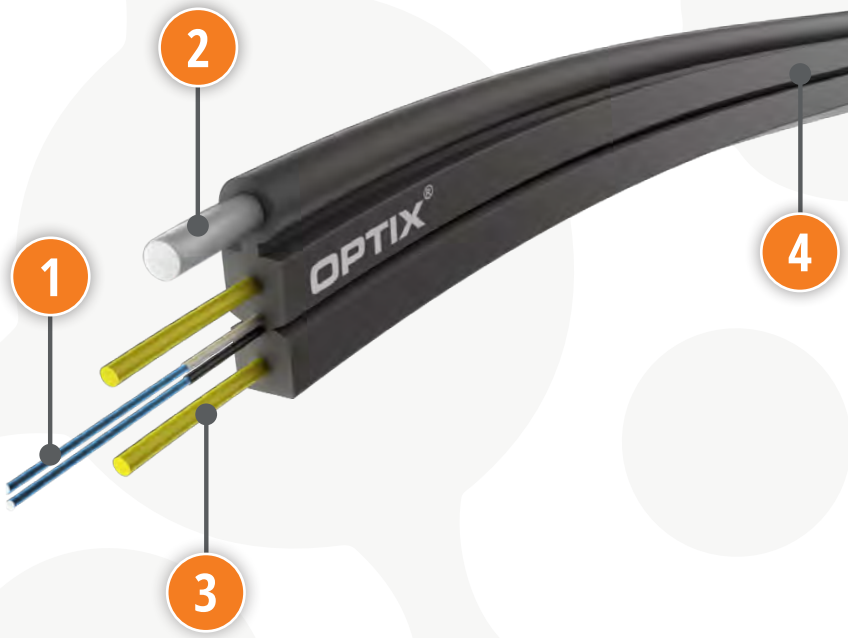
OPTIX Cable S-NOTKSdp 0.6kN (up to 50m SPAN - NESC Heavy)

Cod. Z3FNV451-Cable version*

9/125 ITU-T G.657A2

FEATURES:

- Cable for outdoor / indoor installation
- Span (NESC Heavy) up to 50 meters (0.6kN)
- Fully dielectric construction
- Resistance to high and low temperatures
- Practical, flat design
- Solid FR LSZH jacket



CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. FRP rod
3. ARP rods
4. FR LSZH outer jacket (black), UV stabilized

Indoor installation | Aerial installation | Outdoor installation | LSZH | Fireproof | UV protection | High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±5%)	Ø Tube	Supporting element / Peripheral reinforcement [mm] (±0.1)	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±5%)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
0T1F	1	21.5	5.2x2.0	None	FRP (1.0)	ARP (2x0.5)	LSZH (0.75)	-10° to +50° C	-40° to +70° C	20D/15D
0T2F	2	21.5	5.2x2.0	None	FRP (1.0)	ARP (2x0.5)	LSZH (0.75)	-10° to +50° C	-40° to +70° C	20D/15D
0T4F	4	21.5	5.2x2.0	None	FRP (1.0)	ARP (2x0.5)	LSZH (0.75)	-10° to +50° C	-40° to +70° C	20D/15D

Mechanical parameters	EN standard	IEC standard	1F	2F	4F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	600N	600N	600N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	-	-	-
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]		

OPTIX Cable S-NOTKSp 0.6kN (up to 50m SPAN - NESC Heavy)

Cod. Z3FNV453-Cable version*

9/125 ITU-T G.657A2

FEATURES:

- Cable for outdoor / indoor installation
- Span (NESC Heavy) up to 50 meters (0.6kN)
- Resistance to high and low temperatures
- Practical, flat design
- Solid FR LSZH jacket

CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. Galvanised steel rod
3. ARP rods
4. FR LSZH outer jacket (white or black), UV stabilized

Indoor installation
Aerial installation
Outdoor installation
LSZH
Fireproof
UV protection
High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±5%)	Ø Tube	Supporting element / Peripheral reinforcement [mm] (±0.1)	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±5%)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
0T1F	1	21.5	5.2x2.0	None	Galvanised steel(1.0)	ARP (2x0.5)	LSZH (0.75)	-10° to +50° C	-40° to +70° C	20D/15D
0T2F	2	21.5	5.2x2.0	None	Galvanised steel(1.0)	ARP (2x0.5)	LSZH (0.75)	-10° to +50° C	-40° to +70° C	20D/15D
0T4F	4	21.5	5.2x2.0	None	Galvanised steel(1.0)	ARP (2x0.5)	LSZH (0.75)	-10° to +50° C	-40° to +70° C	20D/15D

Mechanical parameters	EN standard	IEC standard	1F	2F	4F
Tensile Strength Installation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	600N	600N	600N
Tensile Strength Operation (NESC Heavy)	EN 187000	IEC 60794-1-2-E1	-	-	-
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]		

OPTIX Cable ARP ZW-NOTKSdp 0.08kN

9/125 ITU-T G.657A2

Cod. Z3FNV457-Cable version*

FEATURES:

- Cable for outdoor / indoor installation
- Practical, flat design
- Fully dielectric construction
- Resistance to high and low temperatures
- Reduced bend radius - G.657A2 fibers
- Small diameter ~3mm
- Solid FR LSZH jacket

CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coloured coating
2. ARP rods
3. FR LSZH outer jacket, UV stabilized (available: white or black)

Indoor installation
Aerial installation
Outdoor installation
LSZH
Fireproof
Reduced diameter
UV protection
High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±5%)	Ø Tube	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±5%)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
0T1F	1	9.4	3.0x2.0	None	None	ARP (2x0.5)	LSZH (0.75)	-10° to +50° C	-40° to +70° C	20D/15D
0T2F	2	9.6	3.0x2.0	None	None	ARP (2x0.5)	LSZH (0.75)	-10° to +50° C	-40° to +70° C	20D/15D
0T4F	4	9.8	3.0x2.0	None	None	ARP (2x0.5)	LSZH (0.75)	-10° to +50° C	-40° to +70° C	20D/15D

Mechanical parameters	EN standard	IEC standard	1F	2F	4F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	80N	80N	80N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	-	-	-
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]		

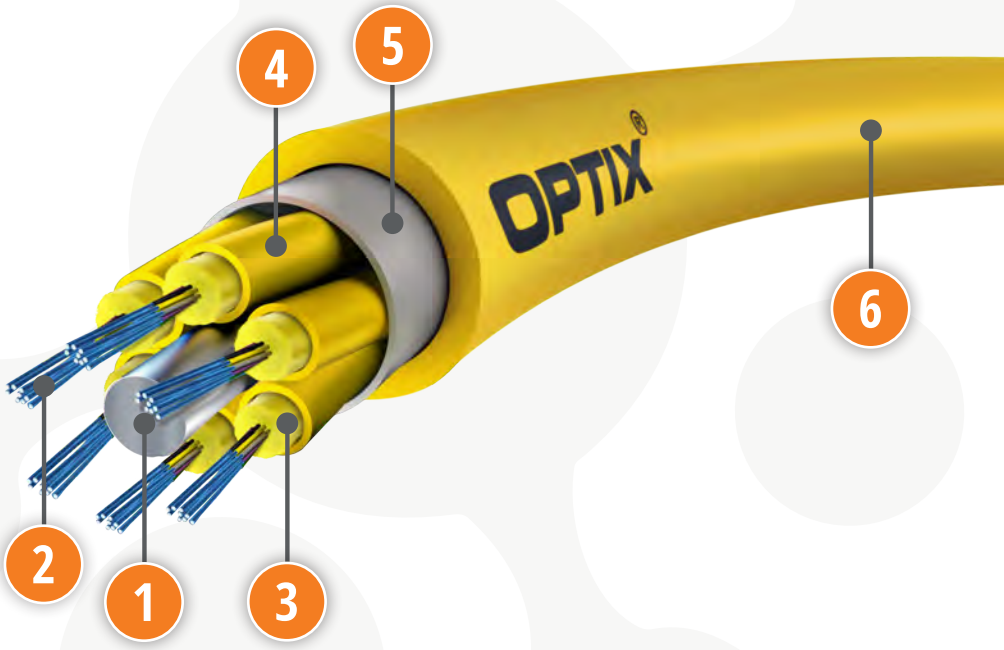
OPTIX Cable BREAKOUT W-NNOTKSd 0.15 - 1.0kN

9/125 ITU-T G.652D

Cod. Z3FNV801-Cable version*

FEATURES:

- Indoor cable for FTTB/FTTH installation
- Reinforced with FRP central strengthening element
- Water blocking construction
- Special "breakout" design
- Solid LSZH jacket (yellow)



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Aramid yarns
4. FR LSZH micro modules (yellow)
5. Water blocking tape
6. FR LSZH outer jacket (yellow)

Fireproof
Indoor installation
Outdoor installation
Moisture resistant
Duct installation

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
1x12	12	7.8	3.0	2.9	None	None	LSZH	-20° to +60° C	-40° to +70° C	20D/10D
2x12	24	72	9.0	2.9	None	FRP	LSZH	-20° to +60° C	-40° to +70° C	20D/10D
4x12	48	79	9.0	2.9	None	FRP	LSZH	-20° to +60° C	-40° to +70° C	20D/10D
6x12	72	126	11.2	2.9	None	FRP	LSZH	-20° to +60° C	-40° to +70° C	20D/10D
8x12	96	178	13.5	2.9	None	FRP	LSZH	-20° to +60° C	-40° to +70° C	20D/10D
12x12	144	285	17.5	2.9	None	FRP	LSZH	-20° to +60° C	-40° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12F	24F	48F	72-96F	144F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	150N	300N	600N	1000N	1000N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	80N	150N	200N	300N	500N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N (100x100mm) for 60 sec.				
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]				

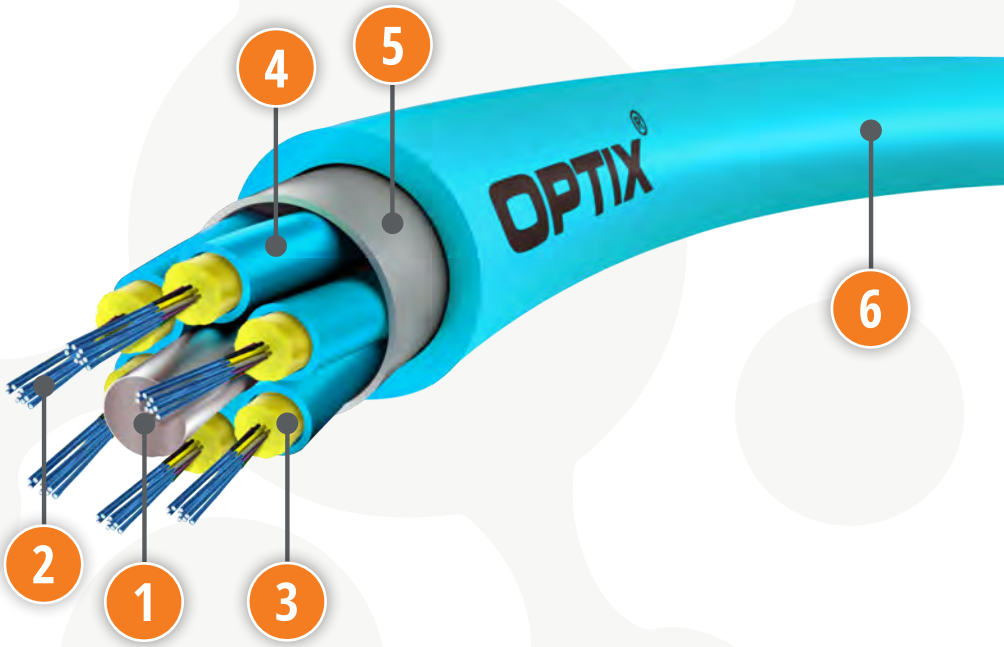
OPTIX Cable BREAKOUT W-NNOTKSd 1.5kN

50/125 ITU-T OM3

Cod. Z3FNV803-Cable version*

FEATURES:

- Indoor cable for FTTB/FTTH installation
- Reinforced with FRP central strengthening element
- Water blocking construction
- Special "breakout" design
- Solid LSZH jacket



CABLE CONSTRUCTION

1. FRP rod
2. Optical fibers in 0.25mm coloured coating
3. Aramid yarns
4. LSZH micro modules (aqua)
5. Water blocking tape
6. LSZH outer jacket (aqua)

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±1.0)	Ø Tube [mm] (±0.1)	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
12x12	144	120	12.0	1.8	None	FRP in PE coat	LSZH	-10° to +60° C	-30° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	144F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	1500N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	800N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N (100x100mm)
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]

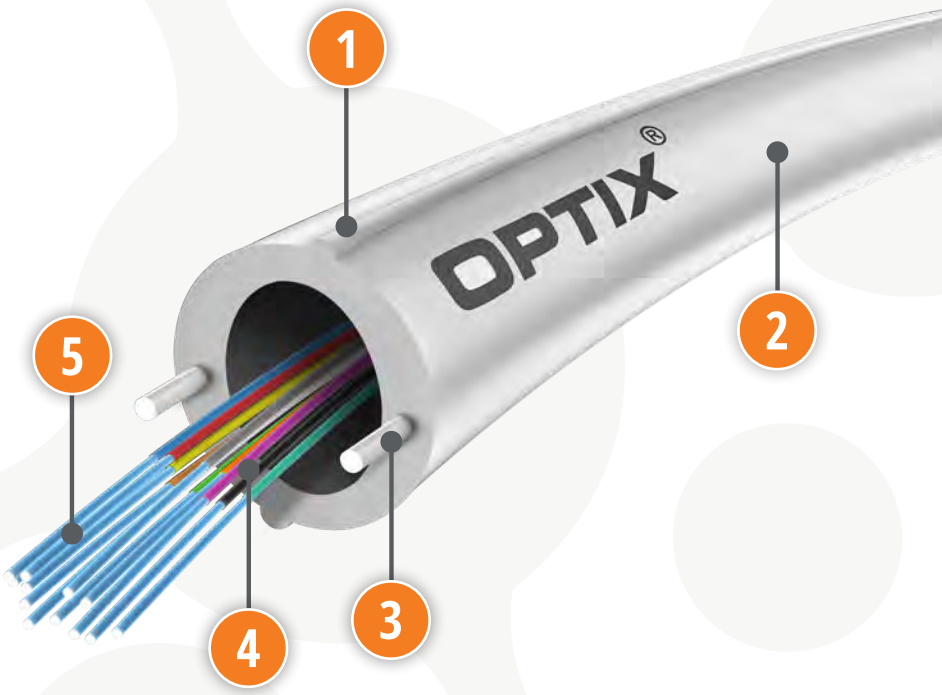
OPTIX Cable VERTICAL W-NOTKSd 1.0kN

9/125 ITU-T G.657A2

Cod. Z3FNV875-Cable version*

FEATURES:

- Easy access cable
- Best for installation in multi-family buildings / offices
- Fiber colour standard: EIA/TIA-598
- High quality LSZH jacket
- Reduced bend radius - G.657A2 fibers
- Cutting windows in jacket



CABLE CONSTRUCTION

1. Cable opening marker
2. LSZH outer jacket (white)
3. FRP rods
4. Coloured buffer 0.9mm (semi-tight buffer)
5. Optical fibers in 0.25mm coating

Indoor installation | LSZH | Easy access | Semi - tight | Fireproof

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
0T12F	12	70	8.5	None	None	FRP (2x1.0)	LSZH (1.5-2.0)	-20° to +60° C	-20° to +60° C	20D/10D
0T16F	16	85	10.0	None	None	FRP (2x1.0)	LSZH (1.5-2.0)	-20° to +60° C	-20° to +60° C	20D/10D
0T24F	24	90	10.0	None	None	FRP (2x1.0)	LSZH (1.5-2.0)	-20° to +60° C	-20° to +60° C	20D/10D
0T36F	36	139	13.5	None	None	FRP (2x1.0)	LSZH (1.5-2.0)	-20° to +60° C	-20° to +60° C	20D/10D
0T48F	48	151	13.5	None	None	FRP (2x1.0)	LSZH (1.5-2.0)	-20° to +60° C	-20° to +60° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12F	16-24F	36-48F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	1000N	1000N	1000N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	500N	500N	500N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N (100x100mm) for 60 sec.		
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]		

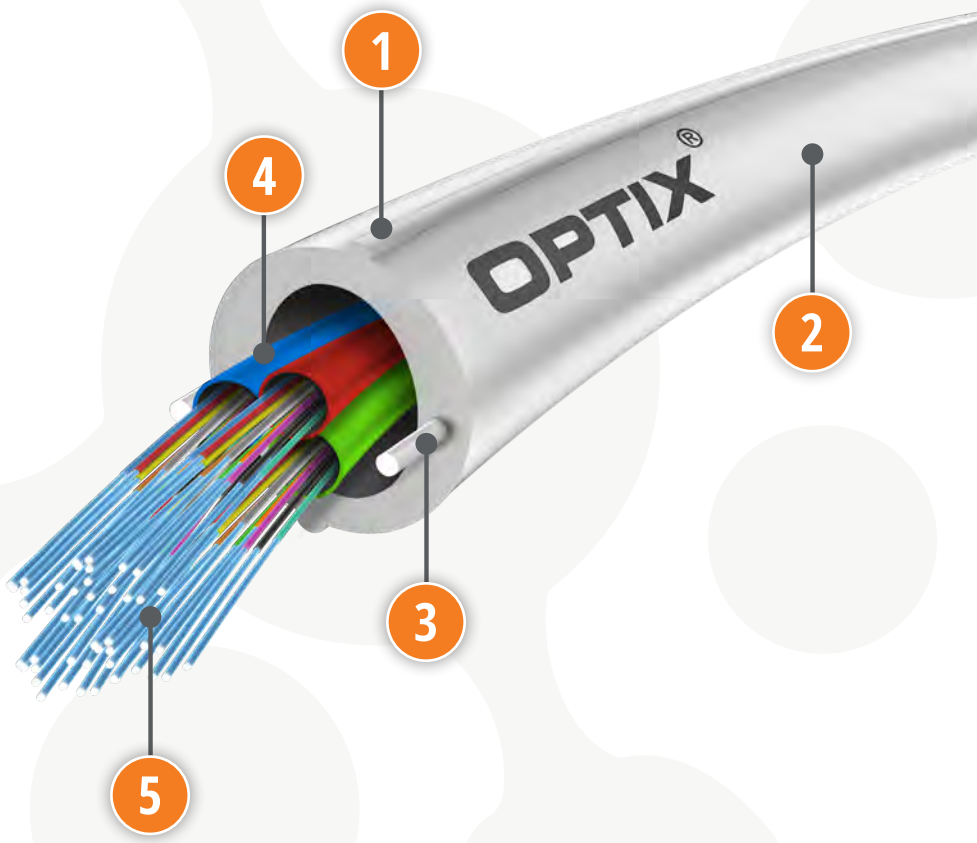
OPTIX Cable VERTICAL MULTI W-NNOTKSd 1.0kN

9/125 ITU-T G.657A2

Cod. Z3FNV879-Cable version*

FEATURES:

- Easy access cable
- Best for installation in multi-family buildings / offices
- Fiber and micro modules colour standard: EIA/TIA-598
- High quality LSZH jacket
- Reduced bend radius - G.657A2 fibers
- Cutting windows in jacket



CABLE CONSTRUCTION

1. Cable opening marker
2. LSZH outer jacket (white)
3. FRP rods
4. Micro modules in coloured LSZH coating
5. Optical fibers in 0.25mm coloured coating

Indoor installation | LSZH | Easy access | Fireproof

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.5)	Ø Tube / Subunit [mm] (±0.2)	Supporting element / Peripheral reinforcement	Reinforcing element [mm] (±0.1)	Coating material & thickness [mm] (±0.2)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
2T6F	12	60	7.5	1.0	None	FRP (2x1.0)	LSZH (1.5-2.0)	-15° to +60° C	-20° to +60° C	20D/10D
2T12F	24	60	8.0	1.2	None	FRP (2x1.0)	LSZH (1.5-2.0)	-15° to +60° C	-20° to +60° C	20D/10D
3T12F	36	61	8.0	1.2	None	FRP (2x1.0)	LSZH (1.5-2.0)	-15° to +60° C	-20° to +60° C	20D/10D
4T12F	48	67	8.0	1.2	None	FRP (2x1.0)	LSZH (1.5-2.0)	-15° to +60° C	-20° to +60° C	20D/10D
6T12F	72	110	10.5	1.4	None	FRP (2x1.0)	LSZH (1.5-2.0)	-15° to +60° C	-20° to +60° C	20D/10D
8T12F	96	110	10.5	1.4	None	FRP (2x1.0)	LSZH (1.5-2.0)	-15° to +60° C	-20° to +60° C	20D/10D
12T12F	144	130	10.5	1.4	None	FRP (2x1.0)	LSZH (1.5-2.0)	-15° to +60° C	-20° to +60° C	20D/10D
12T24F	288	210	13.5	2.4	None	FRP (2x1.0)	LSZH (1.5-2.0)	-15° to +60° C	-20° to +60° C	20D/10D

Mechanical parameters	EN standard	IEC standard	12-48F	72-288F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	1000N	1000N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	500N	500N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N (100x100mm) for 60 sec.	
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]	

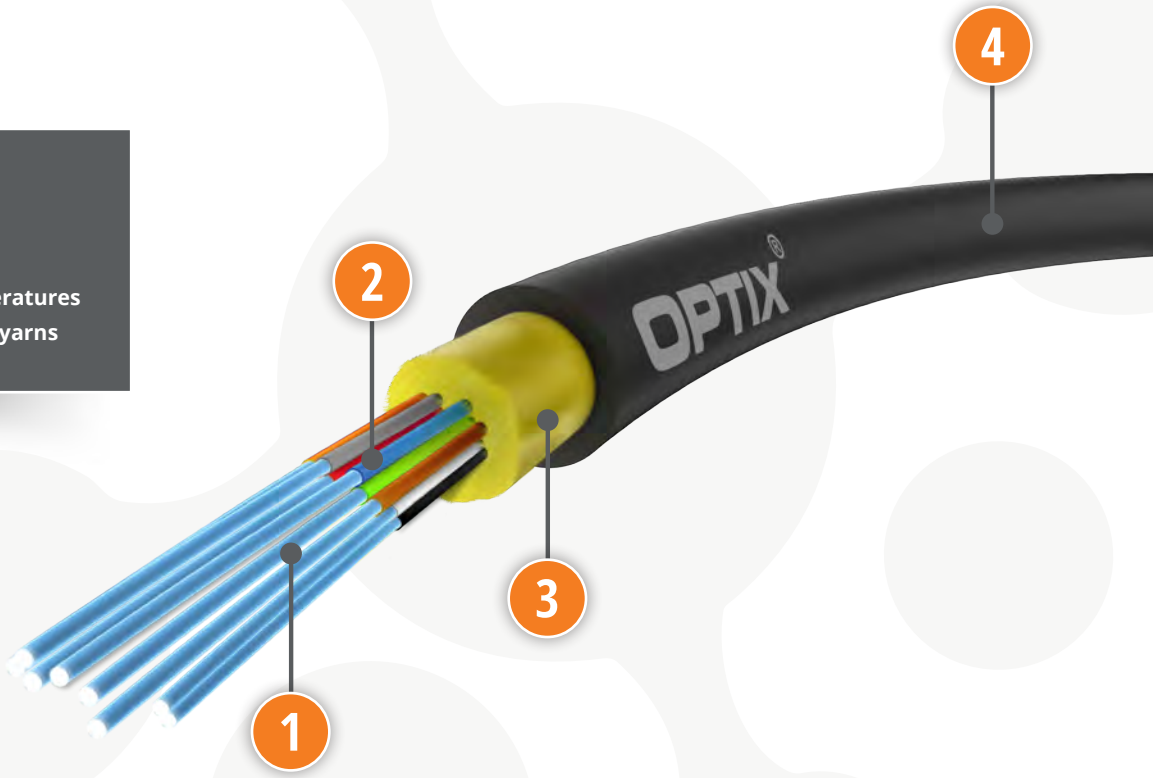
OPTIX Cable Multi LSZH W-NOTKSdD 0.8kN

9/125 ITU-T G.657A1/G.657A2

Cod. Z3FNV833-Cable version*

FEATURES:

- Cable for indoor installation
- Fully dielectric construction
- Resistance to high and low temperatures
- Enhanced by high quality aramid yarns
- Solid LSZH jacket



CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coating
2. Coloured buffer 0.9mm (tight buffer for black outer jacket, easy strip for white outer jacket)
3. Aramid yarns
4. LSZH outer jacket, (allowed: white or black)

Indoor installation | LSZH | Fireproof | High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.4)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material & thickness [mm] (±5%)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
0T2F	2	23	5.3	None	Aramid yarns		LSZH (1.0)	-10° to +70° C	-20° to +70° C	20D/10D
0T4F	4	24	5.4	None	Aramid yarns		LSZH (1.0)	-10° to +70° C	-20° to +70° C	20D/10D
0T6F	6	24	5.5	None	Aramid yarns		LSZH (1.0)	-10° to +70° C	-20° to +70° C	20D/10D
0T8F	8	26	5.7	None	Aramid yarns		LSZH (1.0)	-10° to +70° C	-20° to +70° C	20D/10D
0T12F	12	36	6.5	None	Aramid yarns		LSZH (1.0)	-10° to +70° C	-20° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	2-6F	8-12F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	800N	800N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	300N	300N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N (100x100mm) for 60 sec.	
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]	

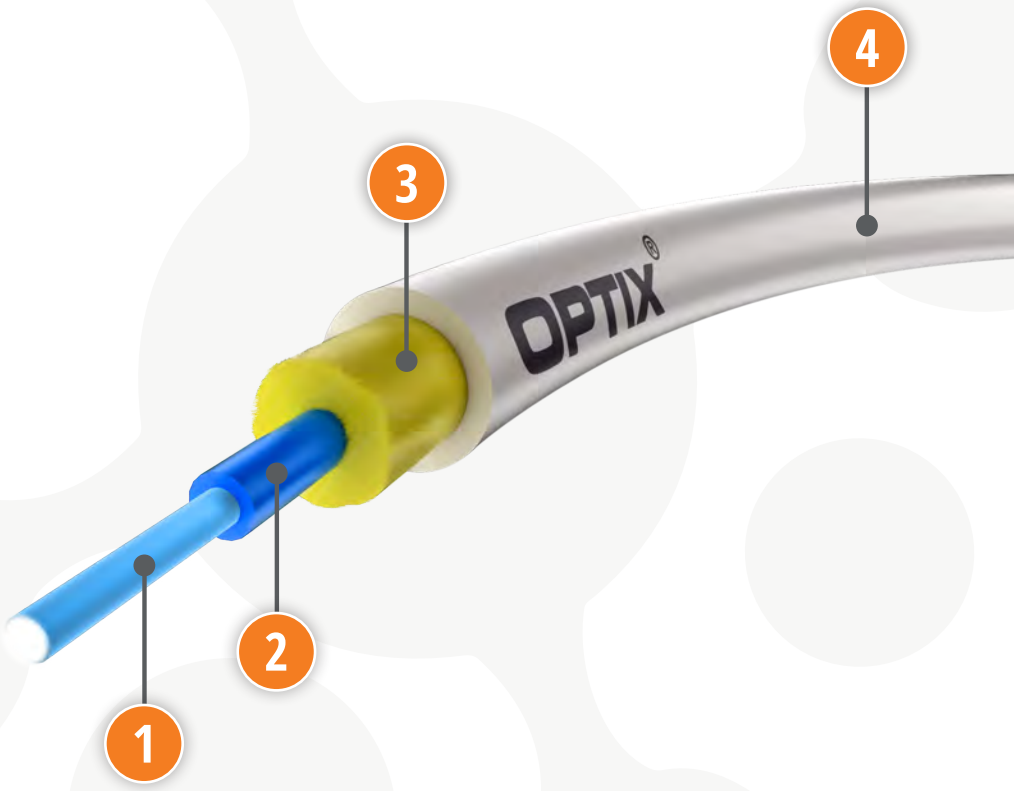
OPTIX Cable MINI LSZH W-NOTKSdD 0.12kN

9/125 ITU-T G.657A2 / ITU-T G.657B3

Cod. Z3FNV171-Cable version*

FEATURES:

- Cable for indoor installation
- Great flexibility and durability for dragging
- Fully dielectric construction
- Resistance to high and low temperatures
- Enhanced by high quality aramid yarns
- Solid FR LSZH jacket
- Small diameter ~3mm



CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coating
2. Coloured buffer 0.9mm (tight buffer or semi-tight buffer)
3. Aramid yarns
4. FR LSZH outer jacket (white), UV stabilized

Indoor installation | LSZH | Flexible | Fireproof | Reduced diameter | UV protection | High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±5%)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material & thickness [mm] (±5%)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
0T1F	1	7.0	2.8	None	Aramid yarns		LSZH (0.40)	-10° to +50° C	-40° to +70° C	20D/15D
0T2F	2	8.5	3.0	None	Aramid yarns		LSZH (0.40)	-10° to +50° C	-40° to +70° C	20D/15D

Mechanical parameters	EN standard	IEC standard	1F	2F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	120N	120N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	-	-
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.	
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]	

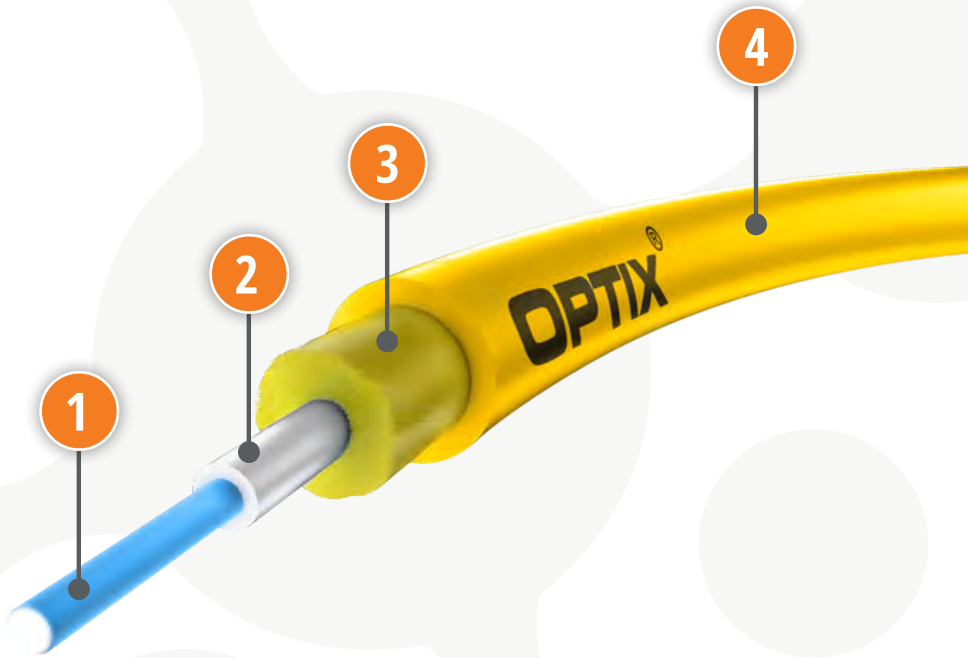
OPTIX Cable FireBlock B2$_{CA}$ W-NOTKSdD 0.5kN

9/125 ITU-T G.652D / ITU-T G.657A1

Cod. Z3FNV173-Cable version*

FEATURES:

- Cable for indoor installation in areas requiring special fire protection (escape routes)
- CPR - Euroclass of reaction to fire (acc. to EN 50575): B2$_{CA}$-s1a, d2, a1
- Fully dielectric construction
- Resistance to high and low temperatures
- Enhanced by high quality aramid yarns
- Small diameter
- Durable, halogen-free jacket, enhanced with flame-retardant additives



CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coating
2. Coloured buffer 0.9mm (semi-tight buffer)
3. Aramid yarns
4. LSZH-FR (CPR B2$_{CA}$) outer jacket (yellow)

Class of Reaction-to-Fire B2$_{CA}$ | Indoor installation | LSZH (CPR B2$_{CA}$) | Flexible | Fireproof | Reduced diameter | High and low temperature resistant

Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±0.3)	Ø Tube	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material & thickness [mm] (±5%)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/permanent
0T1F	1	8.0	2.8 (±0.2)	None	Aramid yarns		LSZH-FR (0.45) [CPR B2$_{CA}$]	-10° to +60° C	-20° to +70° C	20D/10D
0T2F	2	8.5	3.0 (±0.2)	None	Aramid yarns		LSZH-FR (0.45) [CPR B2$_{CA}$]	-10° to +60° C	-20° to +70° C	20D/10D
0T4F	4	19.0	5.0	None	Aramid yarns		LSZH-FR (0.65) [CPR B2$_{CA}$]	-10° to +60° C	20° to +70° C	20D/10D
0T6F	6	23.0	5.2	None	Aramid yarns		LSZH-FR (0.65) [CPR B2$_{CA}$]	-10° to +60° C	-20° to +70° C	20D/10D
0T8F	8	26.0	5.5	None	Aramid yarns		LSZH-FR (0.65) [CPR B2$_{CA}$]	-10° to +60° C	20° to +70° C	20D/10D
0T12F	12	36.5	6.5	None	Aramid yarns		LSZH-FR (0.80) [CPR B2$_{CA}$]	-10° to +60° C	-20° to +70° C	20D/10D
0T16F	16	44.5	7.5	None	Aramid yarns		LSZH-FR (1.00) [CPR B2$_{CA}$]	-10° to +60° C	20° to +70° C	20D/10D
0T24F	24	54.5	8.5	None	Aramid yarns		LSZH-FR (1.20) [CPR B2$_{CA}$]	-10° to +60° C	-20° to +70° C	20D/10D

Mechanical parameters	EN standard	IEC standard	1-8F	12-24F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	500N	500N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	200N	200N
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	1000N/10cm	
Heat generation	EN 50399	IEC 60332-3	B2	
Fire spreading	EN 60332-1-2	IEC 60332-1		
Smoke emission	EN 50399	IEC 60332-3	s1a	
Flaming droplets	EN 50399	IEC 60332-3	d2	
Corrosive gases emission	EN 60754-1,-2	IEC 60754-1,-2	a1	

OPTIX Cable GHOST W-VOTKSd 0.06kN

ITU-T G.657B3

Cod. Z3FNV195-Cable version*

FEATURES:

- Cable for indoor installation
- Small diameter 0.9mm
- Reduced bend radius - G.657B3 fibers
- Invisible nylon coat (PA-12)
- Possibility to mount by warm glue
- Packed on one kilometre drums

CABLE CONSTRUCTION

1. Optical fibers in 0.25mm coating
2. Buffer 0.9mm Nylon PA-12 (invisible)

Indoor installation | Flexible | Fireproof | Reduced diameter | Bendsafe

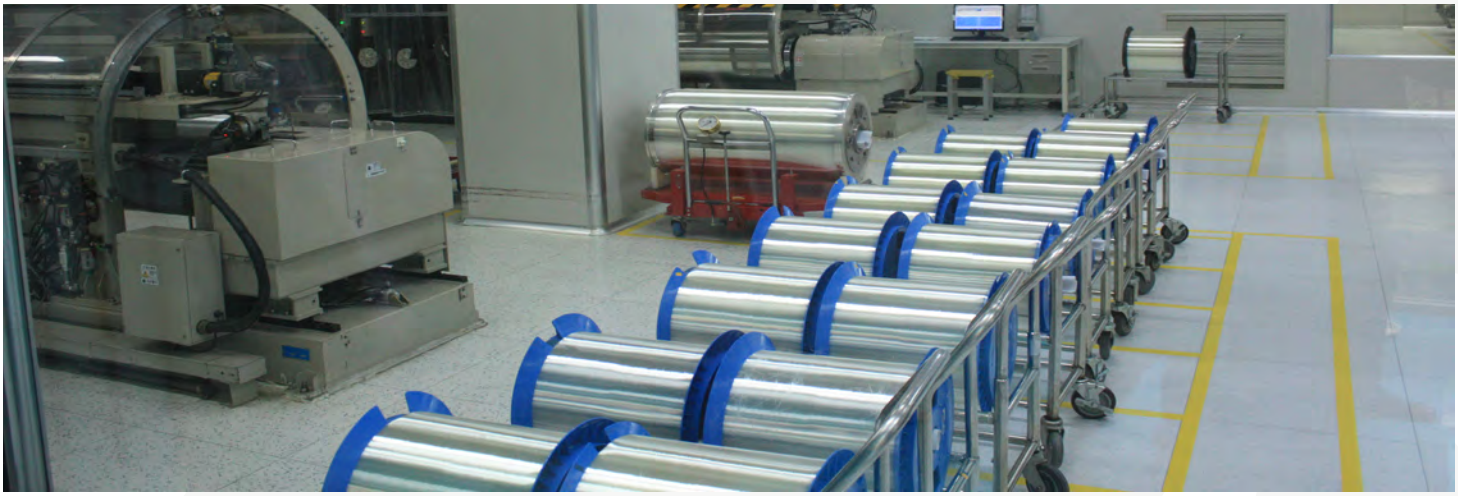
Product information

*Cable version	The total amount of fibers [pcs]	Weight [kg/km] (±10%)	Ø Cable [mm] (±5%)	Ø Tube [mm] (±0.15)	Supporting element / Peripheral reinforcement	Reinforcing element	Coating material & thickness [mm] (±5%)	Temp. range installation	Temp. range operating, transport	Minimum bending radius temporary/ permanent
0T1F	1	0.65	0.9	None	None	None	Nylon (0.25)	-10° to +50° C	-10° to +50° C	20D/15D

Mechanical parameters	EN standard	IEC standard	1F
Tensile Strength Installation	EN 187000	IEC 60794-1-2-E1	60N
Tensile Strength Operation	EN 187000	IEC 60794-1-2-E1	-
Crushing resistance	EN 187000, m. 504	IEC 60794-1-2-E3	500N (100x100mm) for 60 sec.
Repeated bending	EN 187000, m. 507	IEC 60794-1-2-E6	30 cycles [(20xD), 1Kg]

BASIC PARAMETERS OF OPTICAL FIBERS

SINGLE AND MULTI MODE

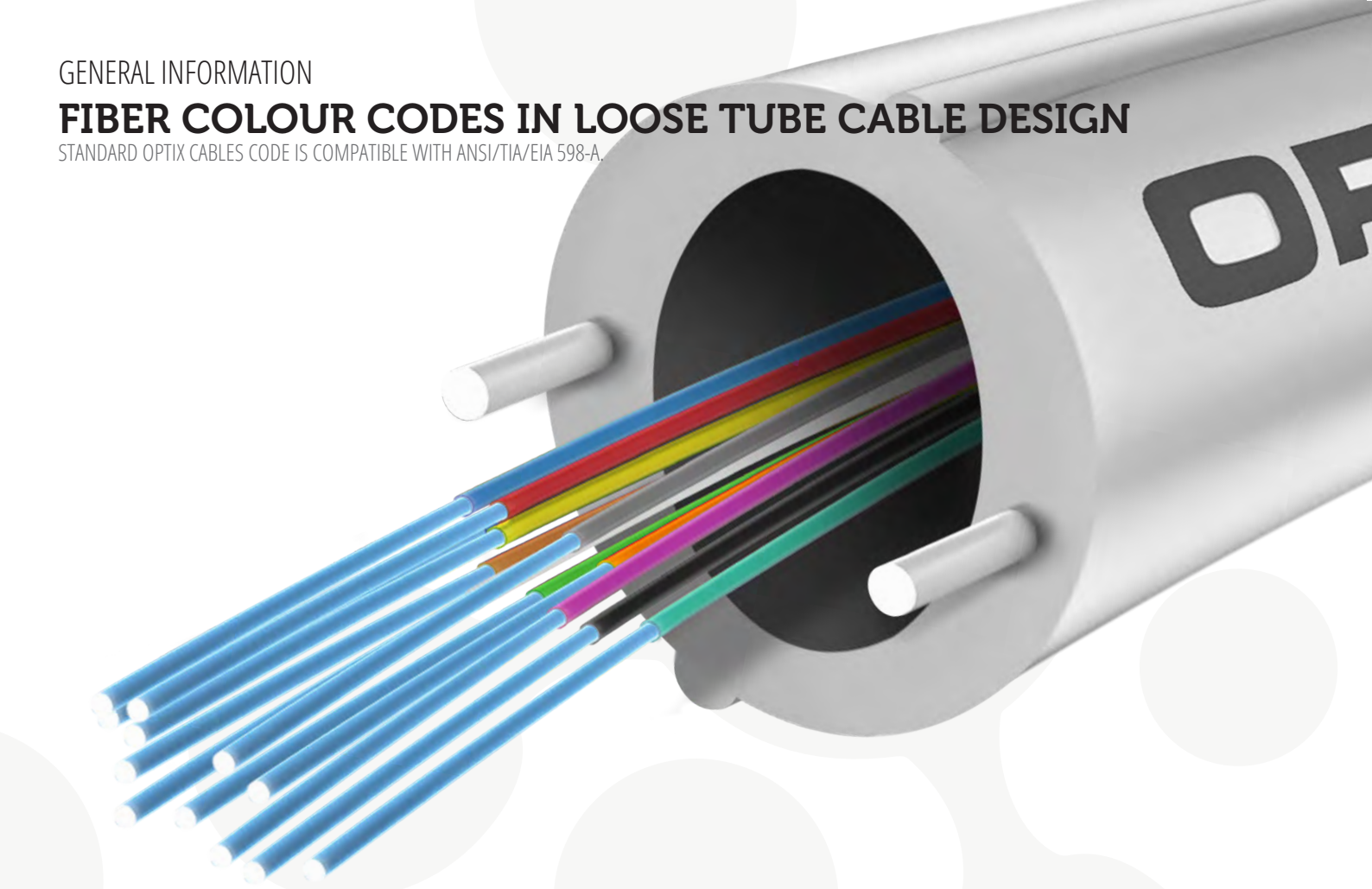


SINGLE MODE OPTICAL FIBERS						
Geometrical parameters	**Unit**	**ITU-T G652D**	**ITU-T G655**	**ITU-T G657A1**	**ITU-T G657A2**	**ITU-T G657B3 (A3)**
Mode field diameter at wavelength 1310 nm	µm	9.2±0.3	---	8.5 – 9.3 ± 0.3	8.4 – 9.2 ± 0.3	8.3 – 9.1 ± 0.3
Mode field diameter at wavelength 1550 nm	µm	10.4±0.5	9.6±0.5	9.4 – 10.4 ± 0,5	9.4 – 10.4 ± 0.5	9,2 – 10.4 ± 0.5
Cladding diameter	µm	125±0.7	125±0.7	125±0.7	125±0.7	125±0.7
Primary coating diameter	µm	235-245	235-245	235-245	235-245	235-245
Mode field eccentricity	µm	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5
Coating/cladding eccentricity	µm	≤12	≤12	≤12	≤12	≤12
Cladding ellipticity	%	≤0.7	≤1.0	≤0.7	≤0,7	≤0.7
Transmission parameters						
Attenuation - at wavelength 1310 nm - at wavelength 1550 nm - at wavelength 1625 nm - at wavelength 1285-1380 nm - at wavelength 1525-1625 nm	dB/km	 ≤0.34 ≤0.21 --- ≤0.37 ≤0.23	 ≤0.40 ≤0.22 ≤0.24 --- ---	 ≤0.35 ≤0.21 ≤0.24 ≤0.37 ≤0.23"	 ≤0.35 ≤0.21 ≤0.24 ≤0.37 ≤0.23"	 ≤0.35 ≤0.21 ≤0.23 ≤0.38 ≤0.23"
Chromatic dispersion - at wavelength 1550 nm - at wavelength 1625 nm	ps/(nm*km)	 ≤18.0 ≤22.0	 ≤4.5 ---	 ≤18.0 ≤22.0	 ≤17.5 ≤22.0	 ≤18.0 ≤22.0
Polarisation mode dispersion (PMD)	ps/√km	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1
Zero dispersion wavelength	nm	1302<λ0<1322	≤1460	1302<λ0<1322	1302<λ0<1322	1302<λ0<1322
Cut-off wavelength λcc	nm	≤1260	≤1450	≤1260	≤1260	≤1260

MULTI MODE OPTICAL FIBERS			
Geometrical parameters	**Unit**	**Type G 50 (OM2)**	**Type G 62,5**
Core diameter	µm	50±2.5	62.5±2.5
Cladding diameter	µm	125±0.8	125±1.0
Primary coating diameter	µm	242±5	245±10
Core ellipticity	%	≤5	≤5
Cladding ellipticity	%	≤0.7	≤1
Core/cladding eccentricity	µm	≤1	≤1
Numerical aperture	–	0.200±0.010	0.275±0.015
Transmission parameters			
Attenuation - at wavelength 850 nm - at wavelength 1300 nm	dB/km	 ≤2.20 ≤0.60	 ≤2.90 ≤0.60
Bandwidth - at wavelength 850 nm - at wavelength1300 nm	MHz*km	 ≥700 ≥500	 ≥220 ≥500

FIBER COLOUR CODES IN LOOSE TUBE CABLE DESIGN

STANDARD OPTIX CABLES CODE IS COMPATIBLE WITH ANSI/TIA/EIA 598-A.



LOOSE TUBE CABLES

The most popular fiber optic tube to distribute optical fibers. Standard in fiber optic cable OPTIX is 24 fibers with 0.25mm (250µm) coating. Usually in the tubes are 12 optical fibers. Advantages of these tubes are: compact and sturdy design, resistance to weather conditions, resistance to mechanical damage. Fibers and tubes are based (painted) on Optical Fiber Cable Colour Coding. Fiber optic cables OPTIX are coded according to ANSI/TIA/EIA 598-A.

Fibers colour for tight tube by ANSI/TIA/EIA 598-A												
number	1	2	3	4	5	6	7	8	9	10	11	12
colour												
name	blue	orange	green	brown	grey	white	red	black	yellow	purple	pink	turquoise
number	13	14	15	16	17	18	19	20	21	22	23	24
colours												
name	blue/black	orange/ black	green/ black	brown/ black	grey/black	white/black	red/black	black/ yellow	yellow/ black	purple/ black	pink/black	turquoise/ black

Tube colour by ANSI/TIA/EIA 598-A												
number	1	2	3	4	5	6	7	8	9	10	11	12
colour												
name	blue	orange	green	brown	grey	white	red	black	yellow	purple	pink	turquoise

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Distributore Ufficiale

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WAVLINK

Router Wi-Fi 6

Router 4G LTE
Outdoor

Wi-Fi 6
Mesh

Router
Outdoor

Access Point

AP/Extender
Wi-Fi Mesh

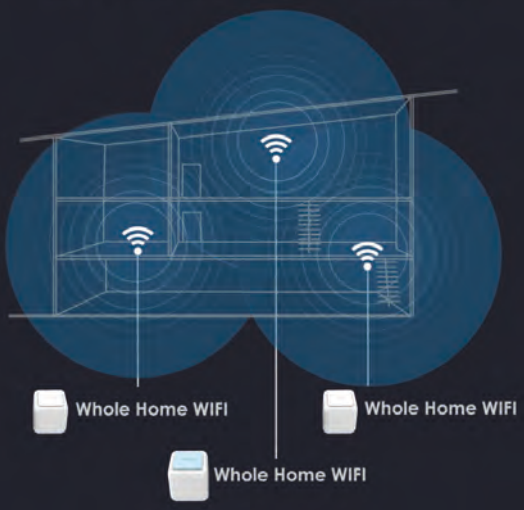
CATALOGO
WIRELESS HI-PRO
2023 Q3

Wireless Hi-Pro / Streaming & Game
2023 Q3

INDICE

Mesh Wi-Fi System

Wi-Fi points work together to create one reliably strong and fast Wi-Fi system, covering your whole home.



Traditional Router with Repeater

Huge Degradation

Low Efficiency | Heavy Transmission Loss | High Instability | Lots of Wi-Fi Dead Zones

100% Wi Fi Mesh Network Signal

Full Strength

High Stability | High Efficiency | Full-strength Wi-Fi Signal | Blazing-fast Transmission Rates

TOUCH AND CONNECT

NO MORE HARD TIMES FIGURING THE PASSWORDS

With intuitive WAVLINK APP

you can easily manage your network from any Android or iOS device.

Available on the APP STORE

Download on the Android Market

WL AERIALHD6 - Wi-Fi 6 AX1800 Outdoor Long Range Router Mesh

WL AERIALHD6

SPECIFICHE	WL AERIALHD6
Ports	1x 10/100/1000 Mbps WAN/LAN (POE)
Button	1x Reset/Pair
LED	1x Sys
Working modes	AP, Repeater, Mesh Router, Mesh Extender Modes
Frequency band	2.4 GHz, 5 GHz
Standard	IEEE 802.11b/g/n/a/ac/ax
Sensitivity	802.11n: -73 dBm / 802.11ac: -65 dBm / 802.11ax: -65 dBm
Speed	802.11ax: up to 1201 Mbps, 802.11ac: up to 574 Mbps, 802.11n: up to 300 Mbps 802.11a: up to 54 Mbps, 802.11g: 54 Mbps 802.11b: 11 Mbps
Wireless Security	WPA2-PSK, WPA2/WPA3-MIX encryption
Antennas	4x 8 dBi detachable Omni Directional
Distance	Outdoors 300 m, Indoor 150 m (According to the actual environment change)
WAN Type	PPPoE, Dynamic IP, Static IP
DHCP Settings	Server, Client
Cloud service	Auto firmware upgrade, OTA firmware upgrade
Other settings	Time Setting / DDNS / Static Router / DHCP Server / Wireless Setting
Rated Voltage/ requency	Input: 100-240 Vac - 50/60 Hz
Power Supply	54 Vdc / 1.0 A Power over Ethernet (Passive PoE)
Weight	1109 g (without antennas)
Unit Dimensions	240.6 x 239.9 x 62.4 mm (L x W x H) - Not including antenna
Operating Temperature	-40° ~ +70° C
Relative Humidity	10% ~ 90%, noncondensing
IP grade	IP67 waterproof

Wi-Fi 6 AX1800 Dual-Band Long Range Outdoor Router/AP/Extender Mesh Wi-Fi

- Designed for long-range wireless networking, it is the ideal solution for small business office and outdoor networkinG needs
- The rugged weatherproof enclosure ensures that it can be deployed in a wide variety of environments, withstanding a wide range of humidity and temperature (-40° ~ +70° C)
- Four convenient modes make it more flexible In addition to Mesh extender, it can also be used as outdoor AP, repeater and router.

Main features:

- Supports 160 MHz bandwidth and 1024-QAM for much faster wireless connections
- Supports MU-MIMO & OFDMA technique to simultaneously communicate with multiple devices in a very effective way
- Multiple PoE Options for Easy Installation: supports both 802.3af/at active PoE and passive PoE power supply, making installation effortless and flexible
- Four 8 dBi omni-directional detachable antennas greatly strengthen signals. The glass tube antenna is meant for high precision, corrosion resistance, long life, strong wind resistance
- With 802.11AC Wi-Fi 6 technology, it can run both 2.4 GHhz and 5 GHz with up to 1800 Mbps. It allows you to connect more devices simultaneously using dual bands to easily support 4K movie playback, online video, music, shopping, 3D games
- The durable, weatherproof IP67 enclosure protects the access point against harsh outdoor conditions and provides stable wireless coverage up to 200/300 m
- Sets up in minutes with the WavRouter App or Web UI, easily manage WiFi settings
- Can be easily installed on a wall or a pole with the provided mounting kits
- Better Partner with Mesh System: compatible with Wavlink Everything Mesh WiFi system for seamless roaming and whole-home coverage.

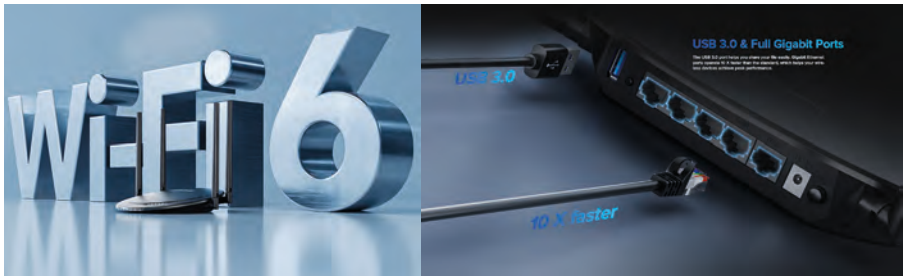
WL LUXMX3 - Wi-Fi 6 AX3000 Smart TouchLink Router Mesh Wi-Fi

WL LUXMX3

SPECIFICHE	WL LUXMX3
Ports	1x WAN 1000 Mbps, 4x LAN 1000 Mbps, 1x USB 3.0
Button	1x power on/off, 1x reset, 1x turbo, 1x pair
LED	1x Power, 1x WAN, 4x LAN, 1x Wi-FI , 1x Logo
Power Supply	12 Vdc / 1.0 A
Rated Voltage/ requency	Input: 100-240 Vac - 50/60 Hz
Unit Dimensions	220 x 220 x 32mm (L x W x H)
Standard	IEEE 802.11b/g/n/a/ac/ax
Frequency band	2.4 GHz, 5 GHz
Speed	802.11ax 5G: up to 2400 Mbps, 802.11ax 2.4G: up to 600 Mbps 802.11ac: up to 867 Mbps, 802.11n: up to 300 Mbps 802.11a: up to 54 Mbps, 802.11g: 54 Mbps, 802.11b: 11 Mbps
Wireless Security	OPEN, WPA-PSK, WPA2-PSK/WPA3P-SK MIX encryption
Antennas	4x 5 dBi High-performance
WAN Type	PPPoE, Dynamic IP, Static IP
DHCP Settings	Server, Client
Other settings	Time Setting / DDNS / Static Router / DHCP Server / Wireless Setting

Wi-Fi 6 AX3000 Smart Touchlink Router Mesh Wi-Fi

- Compared to the previous Wi-Fi 4 & Wi-Fi 5 the speed of Wi-Fi 6 has been multiplied with maximum 2.4 Gbps, which provides greater capacity to handle more devices on your networks
- AX3000 Dual Band Mesh router system is suitable for various household types and signals can pass through walls and travel further, optimizing the wireless network coverage to its best ability
- Switch between two bands to avoid signal congestion and to improve Wi-Fi speeds
- The USB 3.0 port helps you share your file easily. and Gigabit Ethernet ports operates 10x faster than the standard, which helps your wireless devices achieve peak performance
- **TouchLink** function can easily set up a separate and secure Wi-Fi network for visitors and guests to use without the need to enter a password.



Main features:

- Complies with IEEE 802.11ax/ac/a/n/g/b standards
- MU-MIMO TX/RX; MU-OFDMA TX/RX; STBC, LDPC, TX and RX BeamFormee
- Simultaneous 5G@2402 Mbps and 2.4G@574 Mbps connections for 2976 Mbps of total available bandwidth
- 160 MHz bandwidth and 2x2 MU-MIMO technology communicates with several devices at once to reduce waiting time and speed up connections
- Supports PPPoE, Dynamic IP, static IP access to the Internet
- Built-in DHCP server & client with automatic dynamic IP address distribution
- Provides 10/100/1000 Mbps Auto-Negotiation Ethernet WAN port and LAN ports
- Patented omni-directional internal antennas: 2x 5 dBi 2G antennas and 2x 5 dBi 5G antennas providing even better wireless performance, signal coverage and direction
- **Cloud mobile application** supports device management functions such as LAN setting, LED setting and signal control for easy control.

WL LUXDX4 - Wi-Fi 6 AX1800 Smart TouchLink Router Mesh Wi-Fi

WL LUXDX4

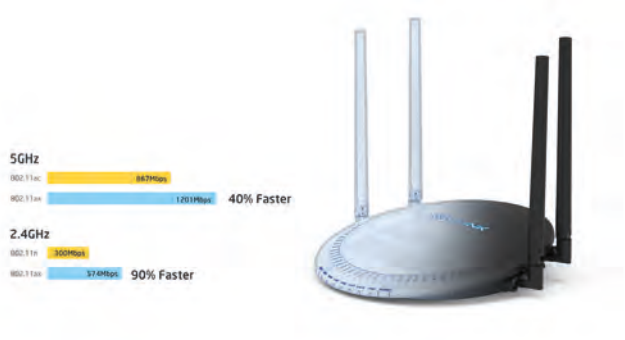
SPECIFICHE	WL LUXDX4
Ports	1x WAN 1000Mbps, 4x LAN 1000Mbps, 1x USB 3.0
Button	1x power on/off, 1x reset, 1x turbo, 1x pair
LED	1x Power, 1x WAN, 4x LAN, 1x WiFI , 1x logo
Power Supply	12 Vdc / 1.0 A
Rated Voltage/ requency	Input: 100-240 Vac - 50/60Hz
Unit Dimensions	200 x 200 x 30mm (L x W x H)
Standard	IEEE 802.11b/g/n/a/ac/ax
Frequency band	2.4 GHz, 5 GHz
Speed	802.11ax 5G: up to 1201 Mbps, 802.11ax 2.4G: up to 573 Mbps 802.11ac: up to 867 Mbps, 802.11n: up to 300 Mbps 802.11a: up to 54 Mbps, 802.11g: 54 Mbps, 802.11b: 11 Mbps
Wireless Security	OPEN, WPA-PSK, WPA2-PSK/WPA3P-SK MIX encryption
Antennas	4x 5 dBi High-performance
WAN Type	PPPoE, Dynamic IP, Static IP
DHCP Settings	Server, Client
Other settings	Time Setting / DDNS / Static Router / DHCP Server / Wireless Setting

Wi-Fi 6 AX1800 Smart Touchlink Router Mesh Wi-Fi

- Compared to the previous WiFi 4 & WiFi 5, the speed of WiFi 6 has been multiplied with maximum 2.4 Gbps, which provides greater capacity to handle more devices on your networks.
- AX1800 Dual band Mesh router system is suitable for various household types and signals can pass through walls and travel further, optimizing the wireless network coverage to its best ability.
- Switch between two bands to avoid signal congestion and to improve Wi-Fi speeds.
- MU-MiMO technology allows an access point to transmit data to multiple client devices simultaneously.
- Four 5 dBi Omni Directional Antennas widen the wireless signal coverage and direction.
- The USB 3.0 port helps you share your file easily. Gigabit Ethernet ports operates 10x faster than the standard, which helps your wireless devices achieve peak performance.

Main features:

- Complies with IEEE 802.11ax/ac/a/n/g/b standards
- MU-MIMO TX/RX; MU-OFDMA TX/RX; STBC, LDPC, TX Beamformmer and RX BeamFormer
- Simultaneous dual AX bands of 573Mbps@2.4GHz and 1201Mbps@5GHz; backward compatible with AC band of 867Mbps@5GHz, N band of 300Mbps@2.4GHz
- Supports PPPoE, Dynamic IP, static IP access to the Internet
- Built-in DHCP server & client with automatic dynamic IP address distribution
- Provides 10/100/1000 Mbps Auto-Negotiation Ethernet WAN port and LAN ports.
- External antennas provide omni-directional stable signal and superior wireless coverage
- **Cloud APP** supports device management functions for easy control
- **TouchLink** function can easily set up a separate and secure WiFi network for visitors and guests to use without the need to enter a password
- Simply but elegantly designed, this router can be a good match for your home decoration.



WL AERIALD4X - Wi-Fi 6 AX1800 Range Extender / Mesh Client / AP

WL AERIALD4X

SPECIFICHE	WL AERIALD4X
Ports	1x WAN 1000 Mbps, 1x LAN 1000 Mbps
Button	1x power on/off, 1x reset, 1x WPS
LED	1x Smart night light
Power Supply	5 Vdc / 2.5 A
Rated Voltage/ requency	Input: 100-240 Vac - 50/60 Hz
Unit Dimensions	159 x 73.6 x 43mm (L x W x H)
Standard	IEEE 802.11b/g/n/a/ac/ax
Frequency band	2.4 GHz, 5 GHz
Speed	802.11ax up to 334 Mbps 802.11ac: up to 867 Mbps, 802.11n: up to 300 Mbps 802.11a: up to 54 Mbps, 802.11g: 54 Mbps, 802.11b: 11 Mbps
Wireless Security	WPA-PSK, WPA2-PSK/WPA3-PSK MIX encryption
Antennas	4x 5dBi Omni directional
WAN Type	PPPoE, Dynamic IP, Static IP
DHCP Settings	Server, Client
Other settings	Time Setting / Switch AP - Range extender - Mesh client / Wireless Setting

Wi-Fi 6 AX1800 Smart Touchlink Mesh Wi-Fi (with router WLLUXDX4)

- Our W-iFi 6 range extender delivers fast speeds and greater range to a greater number of devices, increase your internet's efficiency, and reduce network congestion
- Keeps your network running at top-speed by automatically choosing the fastest connection path to the router. Use both Wi-Fi bands to enjoy super-fast connections, so it's ideal for HD streaming and gaming
- The Repeater can take an existing 2.4 GHz or 5 GHz wireless signal, repeat and extend it to a longer range where it is too far away for the router or access point to reach. Providing free Wi-Fi service in big area such as factory , community , street or etc.
- Equipped high-gain copper antennas widen the wireless signal coverage area and direction, making it possible to cover the whole home without dead zones effectively and dynamically
- Mode switch to Extender / Mesh Client / AP

Wi-Fi 6

1800 Mesh Dual Band

Main features:

- Next-Gen Wi-Fi Standard, supporting the latest Wi-Fi standard 802.11ax (WiFi 6) and 80 MHz bandwidth for better capacity and efficiency
- Simultaneous Dual-Band Streaming 2.4G@573 Mbps + 5G@1201 Mbps with the aggregated speeds up to 1800 Mbps
- Extend Seamless Mesh Wi*Fi System, pair with a compatible Wi-Fi Mesh router (Es. **WLLUXDX4**) to create a seamless mesh network
- 2x Gigabit Ethernet Ports provide your devices high-speed network experience
- Built-in Smart Signal Indicator for signal detection
- Latest Wi-Fi Security - Easy wireless security encryption at a push of the WPS button for WPA-PSK/ WPA2-PSK/ WPA3-PSK encryption
- The BSS colouring technology enables a better spatial reuse
- Advanced TWT (Target Wake Time) Resource Management technology reduces power consumption.

WL WING12ML - High-Power Outdoor 4G LTE Router Mesh Wi-Fi

WL WING12ML

High-Power Wi-Fi AC1200 Outdoor 4G LTE Router Mesh Wi-Fi

- Eliminate Wi-Fi Dead Zones
- Maximum Speed up to 5GHz@867 Mbps and 2.4GHz@300 Mbps
- Robust weatherproof case withstands harsh outdoor conditions
- Passive PoE
- Professional Outdoor Design
- Support for Flexible Deployment

SPECIFICHE	WL WING12ML
Ports	1x WAN 1000Mbps, 1x LAN 100Mbps, 1x 4G nano sim card slot
Button	1x Reset
LED	1x Power, 1x WAN, 1x LAN, 1x WiFI , 3x Signal, 1x 4G status
Chipset	MT7621DA + MT7613B + MT7603E
Flash	128 Mb
DDR2	1024 Mb
Power Supply	24 Vdc / 1.0 A Power over Ethernet (Passive PoE)
Rated Voltage/ requency	Input: 100-240 - Vac 50/60Hz
Unit Dimensions	180 x 50 x 50mm (L x W x H)
Operating Temperature	-10° C to +50° C
Relative Humidity	10% ~ 90%, noncondensing
Standard	IEEE 802.11b/g/n/a/ac
Frequency band	2.4 GHz, 5 GHz
Transmit Power	2.4G: 28dBm max 5G: 28dBm max
Sensitivity	802.11b: -93 dBm / 802.11g: -73 dBm / 802.11n: -68 dBm
Speed	802.11ac: up to 867 Mbps, 802.11n: up to 300 Mbps 802.11a: up to 54 Mbps, 802.11g: 54 Mbps 802.11b: 11 Mbps
Wireless Security	WPA-PSK, WPA2-PSK encryption
Antennas	2x 2.4GHz + 2x 5GHz 7 dBi detachable Omni Directional 2x 4G LTE internal Omni Directional
Distance	Outdoors 500 m, Indoor 150 m (According to the actual environment change)
WAN Type	PPPoE, Dynamic IP, Static IP, 4G LTE
DHCP Settings	Server, Client
Other settings	Time Setting / DDNS / Static Router / DHCP Server / Wireless Setting

Main features:

- Support TDD/FDD-LTE/TD-SCDMA HSUPA/HSDPA/UMTS/DC-HSPA+ Networks
- Fast LTE CAT4, Speed: 150 Mbps Download / 50 Mbps Upload
- The next generation of Wi-Fi, leading 802.11ac standard
- Complies with IEEE 802.11 ac/a/b/g/n, standards
- Dual-Band Speed up to 2.4GHz@300 Mbps, 5GHz@867 Mbps
- Weather-Proof RJ45 Connector, Integrated Passive Power over Ethernet (PoE)
- Provides high performance at a Long-Range Links, depending on its antenna.
- Robust weatherproof case withstands harsh outdoor conditions.
- Maximum Security with WPA/WPA2-PSK
- Support 3 LEDs Wireless Signal Strength
- Build in lightning arrester (15kV ESD)
- Supports by 4G LTE, PPPoE, Dynamic IP, Static IP to the Internet
- Supports 4G LTE / WAN Internet Connection Auto detect
- Supports Everything Mesh Router function, with **HALO BASE PRO** and **WLWING12M**
- Whole Home Mesh Wi-Fi System built to connect with each other in a single network configuration. If one Node loses connection, the remaining units will reestablish Internet connection, automatically and seamlessly

WL WING12M - AC1200 High-Power Outdoor Extender Mesh Wi-Fi

WL WING12M

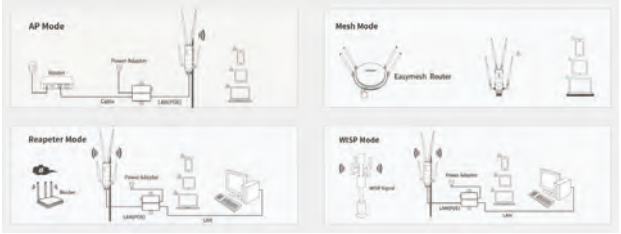
SPECIFICHE	WL WING12M
Ports	1x WAN 10/100/1000Mbps, 1x LAN 10/100/1000Mbps
Button	1x Reset
LED	1x Power, 1x WAN, 1x LAN, 1x WiFI , 3x Signal
Chipset	MT7620A + MT7612E
Flash	64 Mb
DDR2	512 Mb
Power Supply	24 Vdc / 0.6 A Power over Ethernet (Passive PoE)
Rated Voltage/ requency	Input: 100-240 Vac - 50/60Hz
Unit Dimensions	180 x 50 x 50mm (L x W x H)
Operating Temperature	-30° to +70° C
Relative Humidity	10% ~ 90%, noncondensing
Standard	IEEE 802.11b/g/n/a/ac
Frequency band	2.4 GHz, 5 GHz
Transmit Power	2.4G: 27dBm max 5G: 25dBm max
Sensitivity	802.11b: -93 dBm /802.11g: -73 dBm / 802.11n: -68 dBm
Speed	802.11ac: up to 867Mbps, 802.11n: up to 300Mbps 802.11a: up to 54Mbps, 802.11g: 54Mbps 802.11b: 11Mbps
Wireless Security	WPA-PSK, WPA2/WPA3-PSK encryption
Antennas	4x 7dBi Detachable Omni Directional
Distance	Outdoors 500 m, Indoor 150 m (According to the actual environment change)
WAN Type	PPPoE, Dynamic IP, Static IP, WISP, Repeater
DHCP Settings	Server, Client
Other settings	Time Setting / DDNS / DHCP Server / Wireless Setting

AC1200 High-Power Outdoor Router/AP/Extender Mesh Wi-Fi

- Designed for WISP CPE and long distance wireless network
- Complies with IEEE 802 11a/b/g/n/ac standards
- Maximum Speed up to: 5GHz@867 Mbps and 2.4GHz@300 Mbps
- Features up to 1000 mW of power and an enhanced receiver design
- Robust weatherproof case withstands harsh outdoor conditions
- Passive PoE
- High performance at a Long-Range Links, depending on its antenna
- Support for Flexible Deployment

Main features:

- Weatherproof and build in lightning arrestar withstand harsh outdoor conditions
- Four 7dBi omnidirectional antennas eliminate Wi-Fi dead zones
- High power amplifier lor stronger signal transmission
- Gigabit port provides faster connection
- Support AP /Router / Repeater / EasyMesh agent mode
- Supports Everything Mesh function, with **HALO BASE PRO** and **WLWING12ML** as router
- Outdoor mesh network up to six nodes
- MU-MIMO function lets the router talk to several devices simultaneously over the same Wi-Fi band
- Maximum Security with WPA, WPA2 and WPA2/WPA3 Mix
- Support 3 LEDs Wireless Signal Strength
- Build in lightning arrester (15kV ESD)



WL Halo Polar - AC3000 Tri-Band Home Mesh Wi-Fi System

WL Halo Polarx3:
3-Units Tri-Band Mesh Wi-Fi Router Kit

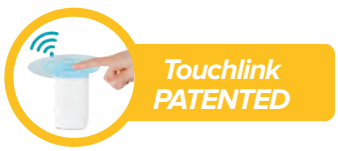
WL Halo Polarx2:
2-Units Tri-Band Mesh Wi-Fi Router Kit

WL Halo Polar:
Unit Tri-Band Mesh Wi-Fi Router

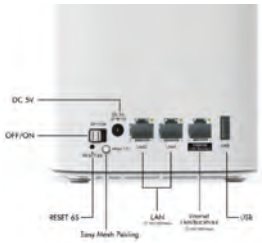
SPECIFICHE	WL HALO POLAR
Ports	1x 10/100/1000 Mbps WAN port 2x 10/100/1000 Mbps LAN port 1x USB 2.0
Button	1x Power On/Off, 1x Reset, 1x Pair Button, 1x TouchLink
LED	3x 1000 Mbps LAN/WAN, 1x Status (Blue+Red)
Chipset	MT7621DA + MT7615D + MT7615N
Flash	128 Mb
SDRAM	1 Gb
Power Supply	12 Vdc - 2.0 A
Rated Voltage/ requency	Input: 100-240 Vac - 50/60 Hz
Unit Dimensions	119 x 120 x 197.6 mm (L x W x H)
Operating Temperature	0° ~ 40° C
Relative Humidity	10% ~ 90%, noncondensing
Standard	IEEE 802.11b/g/n/a/ac
Frequency band	2.4 GHz, 5 GHz
Transmit Power	2.4G: 20 dBm 5G: 23 dBm max
Sensitivity	802.11b: -93 dBm /802.11g: -73 dBm / 802.11n: -68 dBm
Speed	802.11ac: up to 1733 Mbps + 867 Mbps, 802.11n: up to 400 Mbps 802.11a: up to 54 Mbps, 802.11g: 54 Mbps 802.11b: 11 Mbps
Wireless Security	WPA-PSK / WPA2-PSK encryption
Antennas	2x 5 dBi 2G Omni Directional 6x 7 dBi 5G Omni Directional
Distance	Indoor 150 mq / Each (According to the actual environment change)
WAN Type	PPPoE, Dynamic IP, Static IP, WISP
DHCP Settings	Server, Client
USB Sharing	Support Samba (Storage)

AC3000 Tri-Band Whole Home Mesh WiFi System
- 2.4GHz@400 Mbps
  5GHz@ 867Mbps + 1733 Mbps
- Standards 802.11ac/a/n/g/b
- TouchLink easy connection

Coverage Area
- Up to 10 satellites as you need.
Each unit covers 150 mq, while 2-unit kit covers 300 mq, and the 3-unit kit covers 500mq, depending on how you place them at your home.
MU-MIMO technology communicates with several devices at once to speed up connections and reduce waiting time.



Main features:
- Free installation, automatic networking, easily fill the whole house with WiFi coverage.
- Powerful tri-band Mesh Wi-Fi System distributes 100% Internet speed to the edge of your Wi-Fi network at home, without signal degradation when the end device is moving around.
- Mesh Wi-Fi solution is built to connect with each other in a single network configuration. If one node loses connection, the remaining units will reestablish Internet connection, automatically and seamlessly.
- Mesh Wi-Fi System chooses the fastest path for device connections and keeps your network running as fast as possible.
- Built-in high-power amplifiers to provide extreme Wi-Fi coverage and penetration.
- Patented omni-directional internal antennas: 6x 7dBi 5G antennas + 2x 5dBi 2.4G antennas providing even better wireless performance.
- 3x 10/100/1000 Mbps Auto-Negotiation Gigabit Ethernet ports.
- USB 2.0 Port - share files & media with networked devices
- Tri-Band technology creates three separate Wi-Fi bands to connect more devices to your network without sacrificing performance.
- **TouchLink** function can easily set up a separate and secure Wi-Fi network for visitors and guests to use.
- Easy setup assistant with multi-language support provides a quick & hassle-free installation process.



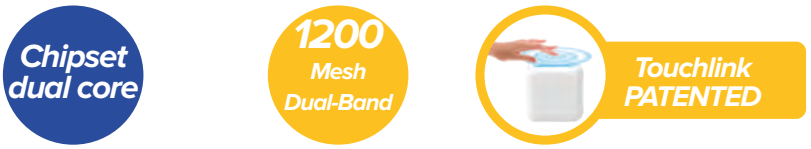
WL Halo Base PRO - AC1200 Dual Band Home Mesh Wi-Fi System

WL Halo Base Pro x3:
3-Units Dual-Band Mesh Wi-Fi Router Kit

WL Halo Base Pro x2:
2-Units Dual-Band Mesh Wi-Fi Router Kit

WL Halo Base Pro:
Unit Dual-Band Mesh Wi-Fi Router

SPECIFICHE	WL HALOBASEPROX3
Ports	1x 10/100/1000 Mbps WAN/LAN Backhaul port 1x 10/100/1000 Mbps LAN port
Button	1x Reset&Pair, 1x Touch cover, 1x Power On/Off switch
LED	3x LAN/WAN, 2x Status
Solution	MT7621A + MT7612E + RTL8211F
Flash	64 Mb
DDR2 RAM	512 Mb
Power Supply	5 Vdc / 2.0 A
Rated Voltage/ requency	Input: 100-240 Vac - 50/60 Hz
Unit Dimensions	90 x 90 x 95mm (L x W x H)
Operating Temperature	0° ~ +40° C
Relative Humidity	10% ~ 90%, noncondensing
Standard	IEEE 802.11b/g/n/a/ac
Frequency band	2.4 GHz, 5 GHz
Transmit Power	2.4G: 23 dBm max 5G: 27 dBm max
Sensitivity	802.11b: -93 dBm /802.11g: -73 dBm /802.11a: -76 dBm / 802.11n: -68 dBm
Speed	Band 1: 300 Mbps@2.4 GHz Band 2: 867 Mbps@5 GHz
Wireless Security	WPA/WPA2, WPA-PSK/WPA2-PSK encryption
Antennas	4x 3 dBi Omni Directional Antennas inside
Coverage Area	WN535K3: 330 mq - WN535K2: 220 mq (According to the actual environment change)
WAN Type	PPoE, Dynamic IP, Static IP
DHCP Settings	Server, Client
Other Settings	Time Setting / DDNS / DHCP Server / Wireless Setting



AC1200 Dual Band Whole Home Mesh Wi-Fi System
- Maximum spedd up to
  2.4GHz@300 Mbps
  5GHz@867 Mbps
- Standards 802.11ac/a/n/g/b
- TouchLink easy connection

Coverage Area
- Up to 10 satellites as you need
One unit covers 120 mq, while 2-unit kit covers 220 mq and the 3-unit kit covers 330 mq, depending on how you place them at your home.

Main features:
- Free installation, automatic networking, easily implement whole house Wi-Fi coverage
- According to the demand can be added to the 10 Mesh Satellite
- Complies with IEEE 802.11ac/a/n/g/b standards
- Simultaneous 5G@867 Mbps and 2.4G@300 Mbps connections for 1167 Mbps of total available bandwidth
- 4x Internal antennas provide omnidirectional stable signal and superior wireless coverage
- Provides 10/100/1000 Mbps Auto-Negotiation Ethernet WAN/LAN ports
- Supports by PPPoE, Dynamic IP, static IP and WISP access to the Internet
- Built-in DHCP server with automatic dynamic IP address distribution
- Supports Everything Mesh function, with **WLWING12ML** as router
- Supports Everything Mesh Router function, with **WLWING12M** as extender
- Support **TouchLink** function, easy to share Wi-Fi with your friends

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