



FiberKom mini-optical node equipped with Return Path transmitter and OLC technology (1 fiber) 1550 nm, Return: 1610 nm, Po 3 dBm

Mini-optical node to act as a bridge between coaxial technology and optical networks. Transforms the optical signal (1550 nm) on the main network into a coaxial signal (105 MHz-1220 MHz) that travels to the user's modem.

It also transforms the coaxial modem's signal (5 MHz-85 MHz) into an optical signal for the operator's headend, thanks to the the Return Path transmitter on the 1610 nm window with 3 dBm optical power.

Uses a single fiber for both the forward and the Return Paths.

Perfect for installations where the DOCSIS protocol is used for the bidirectional distribution of data, and the DVB-C standard is used for television signals.

Equipped with OLC technology.

Perfect for RF Overlay, FTTB, and FTTH applications.

Ref.	238005
Logical ref.	OMNRK1610N
EAN13	8424450177907

Packing

Box	1 pcs.
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Physical data

Net weight	499.00 g
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Gross weight	499.00 g
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Width	187.00 mm
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Height	89.00 mm
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Depth	34.00 mm
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Main product weight	499.00 g
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Highlights

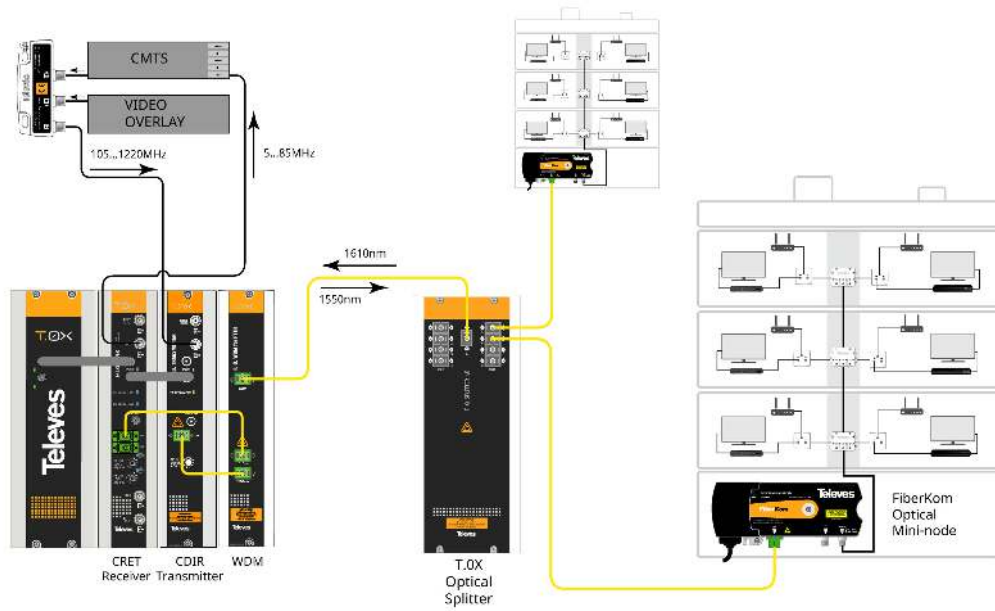
- The OLC (Optical Level Control) technology automatically adjusts the parameters to achieve a constant output level, irrespective of the channel load
- Equipped with attenuation controls
- High output voltage (RF amplification) and enhanced C/N
- Very low power consumption

Main features

- DOCSIS compatible
- Two operation modes:
 1. CW (Continuous Wave) in which the laser transmits continuously; useful in applications where the Return Path is attenuated (FTTB).
 2. RFoG (RF over Glass) where the laser only transmits when there are packets to be transmitted; it is therefore recommended for installations with minimal attenuation on the Return Path (FTTH).
- SC/APC optical connectors, and F-type connectors for RF
- Either local or remote powering via the output F connector

Application example

FTTB application with a single fibre.



Technical specifications

Forward path		
Frequency range	MHz	105 ... 1220
Output impedance	Ohm	75
Optical input level for OLC	dBm	-8 ... +1dBm
Flatness	dB	± 1
Number of outputs	no.	1
Typical output level in OLC range	dB μ V	93
CNR	dB	>52
CSO	dB	>60
CTB	dB	>60
Equivalent noise current density at input	pA/ Hz	< 6
Forward path attenuator	dB	6/12 select.
Pre-emphasis	dB	3
Wavelength	nm	1540 ... 1560
Optical return loss	dB	>40
Optical connector	type	SC/APC
Max. optical input power before damage	dBm	2
Optical device	type	InGaAs pin photodiode
Return path		
Frequency range (selectable)	MHz	5 ... 85
Input impedance	Ohm	75
Optical output level	dBm	3
Flatness	dB	± 1
RF input level	dB μ V	70...100
Return path attenuator	dB	0/10/20 select.
Wavelength	nm	1610 \pm 10
Optical connector	type	SC/APC
Laser type	type	DFB (Class1M)
Transmitter turn-on/off time	μ s	1
General		
Local mains voltage	V~/mA	99 / 75 ... 253 / 40
Max. mains power	W	4
Power voltage through RF connector	Vdc/mA	11 / 270 24/ 140
Test point	dB	-30 \pm 1
RF connectors	type	F
Housing material		Zamak/ABS
Operating temperature	°C	-5 +45
Index operation	IP	30

EMC compatibility		EN 50083-2
Safety		EN 60825-1_2007