Televes reserves the right to modify the product

FiberKom mini-optical node equipped with Return Path transmitter and OLC technology (2 fibers) 1200...1600 nm, Return: 1310 nm, Po 3 dBm

Mini-optical node to act as a bridge between coaxial technology and optical networks. Transforms the optical signal (1200 nm-1600 nm) on the main network into a coaxial signal (87 MHz-1220 MHz) that travels to the user's modem.
It also transforms the coaxial modem's signal (5 MHz-65 MHz) into an optical signal for the operator's headend, thanks to the the Return Path transmitter on the 1310 nm window with 3 dBm optical power.
Uses two fibers: one for the forward channel and the other for the Return Path.
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 and FTTB applications.

Ref.238001

Art.Nr	OMNRK21310
EAN13	8424450170793

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
- Wide reception optical range
- Very low power consumption

Main features

- DOCSIS compatible
- Two operation modes:

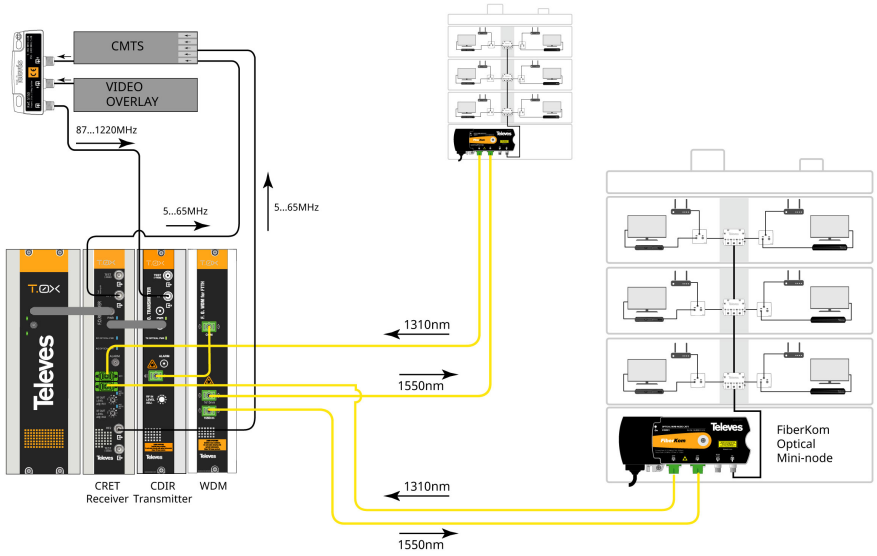
  1. CW (Continuous Wave) in which the laser transmits continuously; useful in applications where the Return Path is attenuated (FTTB).

  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
- Local powering

Application example

(Click to see the picture)



FTTB application with two fibres.

Technical specifications

Forward path		
Frequency range	MHz	87 ... 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	dBµV	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	1200 - 1600
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 ... 65
Input impedance	Ohm	75
Optical output level	dBm	3
Flatness	dB	± 1
RF input level	dBµV	70...100
Return path attenuator	dB	0/10/20 select.
Wavelength	nm	1310 ±20
Optical connector	type	SC/APC
Laser type	type	DFB (Class1M)
Transmitter turn-on/off time	µs	1
General		
Local mains voltage	V~/mA	99 / 75 ... 253 / 40
Max. mains power	W	4
Power voltage through RF connector	Vdc/mA	-
Test point	dB	-30 ±1
RF connectors	type	F
Housing material		Zamak/ABS
Operating temperature	ºC	-5 .... +45
Index operation	IP	30
EMC compatibility		EN 50083-2
Safety		EN 60825-1_2007