

WISI LX 24 S 0861

Multidiode Receiver for RFoG Networks



interface configurations may be differ from image shown

Description

A cost-efficient solution for upgrading existing network infrastructures to the level of FTTB (Fiber To The Building), or even FTTH (Fiber To The Home) is RF over Glass (RFoG). It is a passive optical network that transmits HF signals via fiber to the subscriber, similar to a HFC network in the downstream direction. Due to Optical Beat Interference (OBI), many providers experienced difficulties during the ramp up of new RFoG networks and delayed their large scale rollout of new networks. WISI can help you to overcome these issues with the newly developed OBI FREE solution LX 24 as part of the optical OPTOPUS platform. Dedicated upstream receivers for each RFoG node allow the LX 24 to eliminate Optical Beat Interference (OBI) completely. That's why the LX 24 enables network providers to heal existing OBI-infected RFoG networks without any need to swap existing end user equipment. The solution will work with any upstream wavelength and laser mode. OPTOPUS and its OBI-free RFoG technology offer network providers a complete future-proof concept, while opening the doors for new FTTx deployments.

At a glance:

- Multidiode receiver for RFoG networks
- Converts existing RFoG networks to OBI free solutions without exchange of fiber nodes
- Remote optical input power reading and switch off functionality per port via SNMP und WEB
- Integrated CWDM Upstream transmitter
- Electrical upstream test port
- Local or remote powered version available

Technical data

Upstream Receiver	
Optical input power	+5...-3 dBm
Receiving wavelength	1260...1630 nm
Frequency range	5(15)...204 MHz
Output level	70...85 dB μ V (OMI=15%/ch)
Frequency response	$\leq \pm 0,5$ dB
Output attenuator	0...40 dB (0,5 dB steps)
Slope control	0...8 dB (0,5 dB steps)
Return loss	> 20 dB ((-1 dB/Okt) min. 16 dB)
Equivalent input noise	max. 7 pA \sqrt Hz
Integrated upstream transmitter	
Laser type	Uncooled isolated DFB laser
Wavelength	1610 nm
Output power	3 dBm
RIN	< -145 dBHz ⁻¹
OMI setting range	3...8 % (75 dB μ V measured @ TP), (step 1 %)
General optical parameters	
Optical return loss	> 45 dB
Insertion loss DS (COM-> Out FN)	typ. 18 dB
Insertion loss US (Out FN-> PD_US)	< 8 dB
Isolation COM -> PD_US	> 60 dB
opt. output level @output port	typ. -1 dBm
Connectors	
Downstream	1x SC/APC
Upstream	1x SC/APC
Test point	1x F
Node	8x SC/APC
General data	
Supply voltage	230 V AC / 27...65 V AC (pluggable PSU)
Power consumption max.	< 11 W
Ambient temperature	-20...+55 °C
EMC	EN50083-2
Dimensions (width x height x depth)	425 x 43 x 250 mm
Monitoring	
Attenuator range	0...40 (0,5 dB steps)
Slope control	0...8 dB (0,5 dB steps)
Port 1-32 Upstream	On/Off
Port 1-32 Upstream opt. receiving power	dBm

Packaging data

Sales unit	pcs.
Dimensions (WxHxD) sales unit	mm
Packaging volume sales unit	dm ³
Gross weight sales unit	kg
Shipping unit	pcs.
Dimensions (WxHxD) shipping unit	mm
Packaging volume shipping package	dm ³
Gross weight shipping unit	kg
EAN	
Article number	
Customs tariff number	