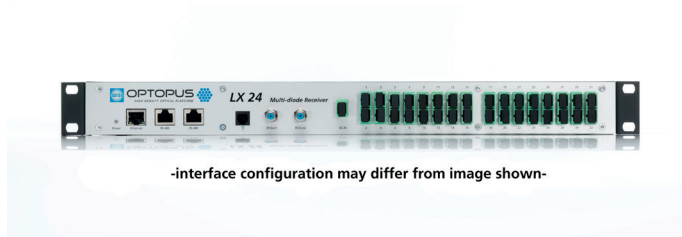


# WISI LX 25 x xFxx

Multidiode Receiver for RFoG Networks,  
single fiber version with EDFA

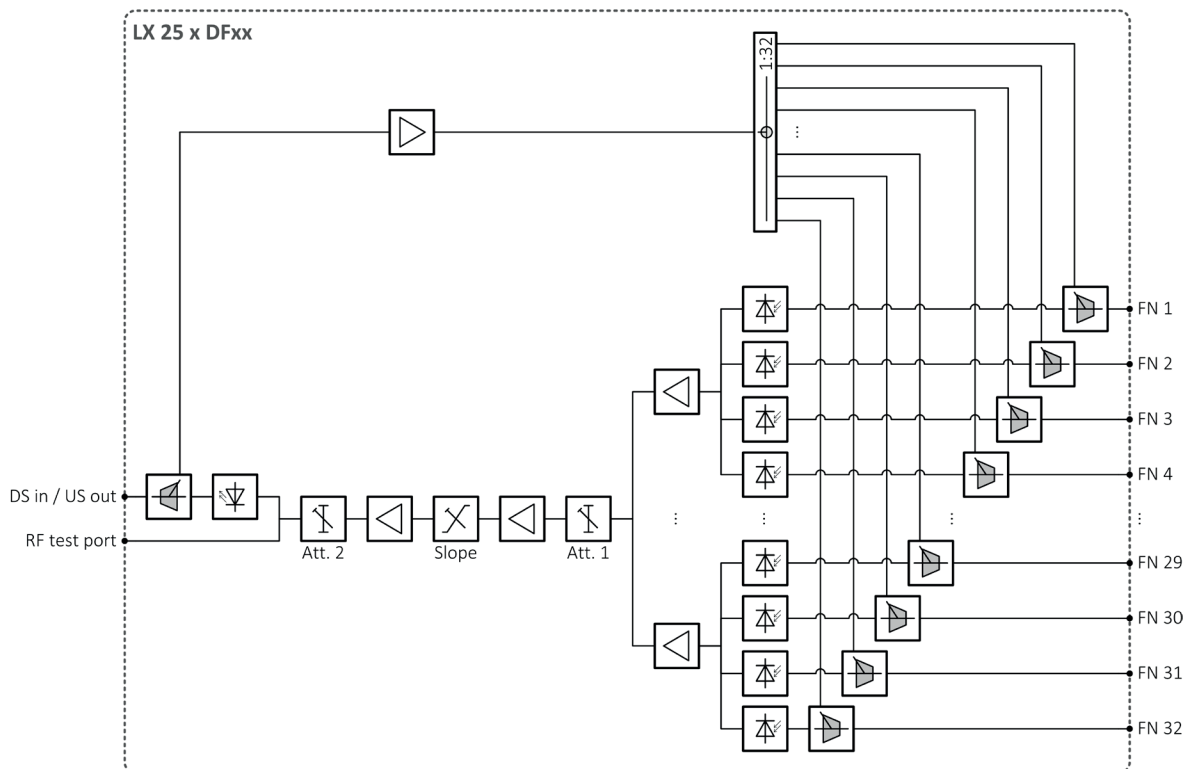


## At a glance:

- Single fiber version
- 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 and WEB
- Integrated CWDM Upstream transmitter
- Integrated EDFA to compensate splitter loss
- Electrical upstream test port
- Local or remote powered version available

## Description

Upgrading your network infrastructures to OBI-free (Optical Beat Interference) RFoG networks with this active upstream receiver. Use up to 32 output ports (or cascade them to reach higher port numbers) and eliminate issues instantly with the dedicated upstream receivers. Each of these ports provides an input power measurement in real time and can be shut off if necessary (testing purposes or subscriber service shutdown). That's why the LX 24/LX 25 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.



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## Technical data

<b>Upstream Receiver</b>	
Optical input power	+3...-10 dBm
Receiving wavelength	1270...1610 nm (except 1550 +/- 10nm)
Frequency range	5 (15)...204 MHz
Output level	70...85 dB $\mu$ V (OMI=15%/ch)
Frequency response	$\leq \pm 0,5$ dB
Output attenuator	0...40 dB (0,5 dB steps)
Slope	0...8 dB (0,5 dB steps)
Return loss	>20 dB (-1 dB/Oct.) min. 16 dB
Equivalent input noise	max. 7 pA $\sqrt$ /Hz
<b>General optical parameters</b>	
Optical return loss	>45 dB
Insertion loss DS (DS -> FN)	32 Ports 0...3 dB, 16 Ports -3...0 dB, 8 Ports -6...-3 dB
Insertion loss US (FN -> PD)	<1 dB
Decoupling (DS -> PD)	<60 dB
<b>Integrated upstream transmitter</b>	
Laser type	Uncooled isolated DFB laser
Wavelength	1270...1610 nm (CWDM)
Output power	3 dBm
RIN	< -145 dBHz-1
OMI setting range	3...8 % (75 dB $\mu$ V measured @ TP), (step 1 %)
<b>Integrated EDFA</b>	
Optical input level	-2...+10 dBm
Optical output level	<14...17 dBm
Noise figure	<6 dB
<b>Connectors</b>	
Downstream	1x LC/APC or 1x SC/APC
Upstream	1x LC/APC or 1x SC/APC
Test point	1x F (75 Ohm)
Node	8x, 16x or 32x ports LC/APC or SC/APC
<b>General data</b>	
Supply voltage	65 V AC/48 V DC or 230 V AC (see Order code)
Power consumption	<8 W
Operating temperature	-20...+55 °C
EMC	EN50083-2
Dimensions (width x height x depth)	425 x 43 x 250 mm
<b>Monitoring / Management</b>	
Attenuator	0...40 dB (0,5 dB steps)
Slope	0...8 dB (0,5 dB steps)
Port 1-32 Upstream	On/Off
Port 1-32 Upstream opt. receiving power	dBm

## LX 25 X XXXX

### Power supply:

- A – front connected 230 V AC
- D – front connected 48 V DC & 65 V AC
- L – LXPS xxxx slot (rear)

### Upstream type/wavelength:

- 0 – electrical upstream
- 1 – 1270 nm
- 2 – 1290 nm
- 3 – 1310 nm
- 4 – 1330 nm
- 5 – 1350 nm
- 6 – 1370 nm
- 7 – 1390 nm
- 8 – 1410 nm
- 9 – 1430 nm
- A – 1450 nm
- B – 1470 nm
- C – 1490 nm
- D – 1510 nm
- E – 1530 nm
- G – 1570 nm
- H – 1590 nm
- I – 1610 nm

### Options:

- C – 1550 nm OADM  
(single fiber)
- D – dual downstream inputs
- E – integrated EDFA
- F – integrated EDFA + 1550 nm OADM  
(single fiber)
- S – dedicated fiber for DS [US]  
(dual fiber if optical upstream)

### Number of ports:

- O – 8 ports
- H – 16 ports
- D – 32 ports

### Connector type:

- S – SC/APC
- L – LC/APC