



WISI LX 15 S 50xx

1550 nm BC-transmitter

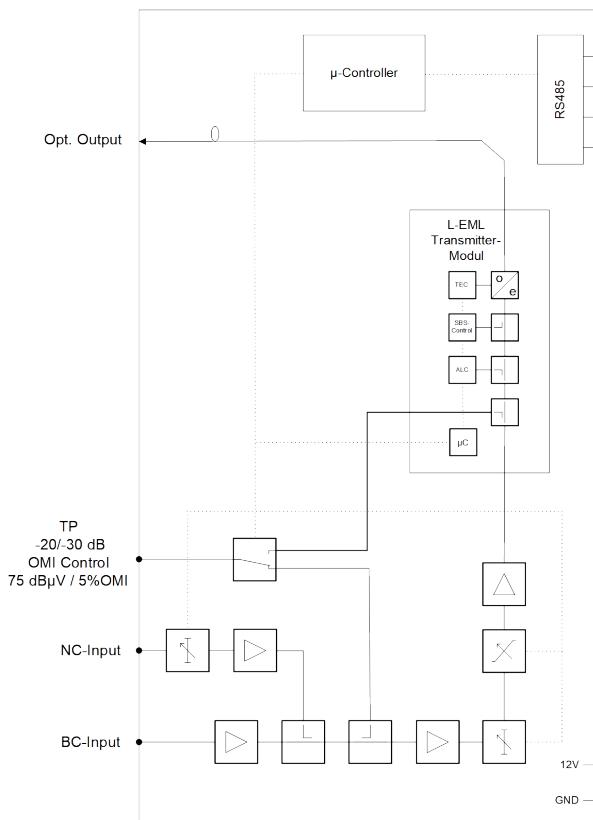


At a glance:

- Docsis 3.1 Ready
- Hot Plug In/Out
- Automatic level control (ALC)
- Adjustable OMIs, Slope, NC-Input
- High RF Input Isolation
- OMIs Control Testport
- SBS suppression
- Electronic predistortion

Description

The LX 15 is part of the Optopus product portfolio. LX 15 is a fullband transmitter with 1550 nm (DWDM) for use in HFC, RFoG networks and RF Overlay. The Optopus platform is a highly flexible and high density platform for all kinds of analog optical networks. The system is used in any network such as HFC, RF over Glass or RF Overlay in FTTX applications.



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WISI LX 15 S 50xx

Technical data	
Downstream	
Laser type	Linear Externally Modulated Laser
Wavelength	DWDM Channel (100 GHz-Grid)
Optical output power	≥11 dBm
Optical return loss	>40 dB
Frequency range	85...1218 MHz
Input level broadcast	76 dBµV
Input level Narrowcast	76...86 dBµV
Gain control range	0...10 dB
Slope Control Range	-2...+2 dB
Narrowcast Input Control Range	0...10 dB
Isolation between NC- & BC-Input	≥ 50 dB
Test point	-20 dB (BC-/NC-Input & 75 dBµV @ 5% OMI)
Electrical return loss	≥20 dB
Ripple	≤ ±0,75 dB
SBS suppression	LX15S50x1 14...16 dBm; LX15S50x2 21 dBm
Signal performance	
	(60km fiber, 3,3% OMI, -1 dBm @ opt. Receiver channel load 36 analog and 60 QAM256 channels)
CSO	≥ 60 dBc
CTB	≥ 60 dBc
CNR	≥ 51 dB
MER	≥ 42 dB
Signal performance	
	(60km fiber, 2,7% OMI, -1 dBm @ opt. Receiver channel load 121 QAM256 channels)
MER	≥ 44 dB
BER	<10-9
Connectors	
Optical connector	SC/APC connectors
F-female	1 pcs. (75 Ohm)
General data	
Supply voltage	12 V DC
Power consumption	max. ≤12 W
Environmental parameters	-5...+45 °C (EN300 019-1-3 Class 3.2)
Housing	WISI LX-Chassis
Management functionality	
Laser	On/Off
ALC	On/Off
Attenuator	0...10 dB
Slope	-2...+2 dB
Narrowcast Input Control Range	0...10 dB
Dispersion Compensation (fiber length)	0...60 km (LX15S50x1)
Measurement	
Optical output power	dBm
Laser Current	mA
Laser Temperature	°C
TEC Current	mA

Technical data	
RF-Level	dB
Alarms:	
Optical output power	to high / to low
RF-Level	to high / to low
Laser Current	to high
TEC Current	to high

LX 15 S 50XX

- SBS / Range:
1 – 16 dBm SBS, long range appr. 80 km
2 – 21 dBm SBS, short range appr. 40 km
- Channel:
See channel grid table for details
- Laser type:
5 – ExMOD, ext. modulated
- Connector type:
S – SC/APC

Channel table				
Ch1_digital	CH2_digital	CH1 ITU	CH2 ITU	Wavelength
1	1	18	18	1563.05 nm
2	2	19	19	1562.23 nm
3	3	20	20	1561.42 nm
4	4	21	21	1560.61 nm
5	5	22	22	1559.79 nm
6	6	23	23	1558.98 nm
7	7	24	24	1558.17 nm
8	8	25	25	1557.36 nm
9	9	26	26	1556.56 nm
A	A	27	27	1555.75 nm
B	B	28	28	1554.94 nm
C	C	29	29	1554.13 nm
D	D	30	30	1553.33 nm
E	E	31	31	1552.52 nm
F	F	32	32	1551.72 nm
G	G	33	33	1550.92 nm
H	H	34	34	1550.12 nm
I	I	35	35	1549.32 nm
J	J	36	36	1548.52 nm
K	K	37	37	1547.72 nm
L	L	38	38	1546.92 nm
M	M	39	39	1546.12 nm
N	N	40	40	1545.32 nm
O	O	41	41	1544.53 nm
P	P	42	42	1543.73 nm
Q	Q	43	43	1542.94 nm
R	R	44	44	1542.14 nm
S	S	45	45	1541.35 nm
U	U	46	46	1540.56 nm
V	V	47	47	1539.77 nm
W	W	48	48	1538.98 nm
Y	Y	49	49	1538.19 nm
Z	Z	50	50	1537.40 nm