Product information

WISI LX 18 S 1xxx

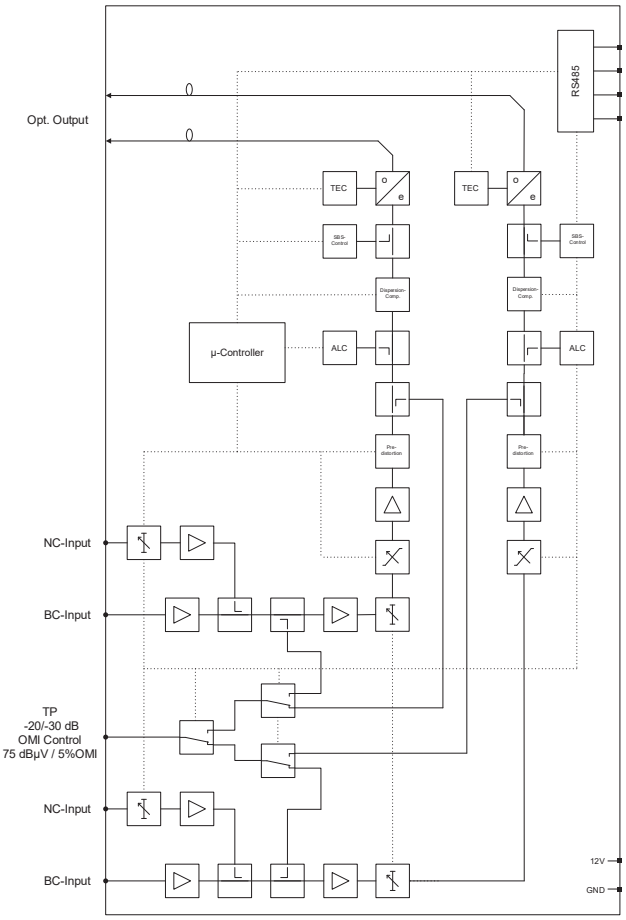
High Density Dual Transmitter

At a glance:

- High Density Dual Transmitter
- Adjustable OMI, Slope, NC-Input
- Automatic level control (ALC)
- Dual Fullband transmitter 15...1218 MHz, Docsis 3.1 Ready
- High RF Input Isolation
- OMI Control Testport
- SBS-Suppression
- Dispersion compensation

Description

The LX 18 is part of the Optopus product portfolio. LX 18 is a direct modulated fullband dual transmitter with 1550 nm (DWDM). 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 18 S 1xxx

Technical data	
Downstream	
Laser type	Temperature stabilized DFB laser
Wavelength	1555 nm (± 0,5 nm or DWDM Channel (100 GHz-Grid)
Optical output power	10 dBm (10 mW)
Relative intensity noise (RIN)	< -155 dB√Hz
Optical return loss	>40 dB
Frequency range	15...1218 MHz
Input level broadcast	76 dBµV (PAL-Level)
Input level Narrowcast	80 dBµV (QAM-Level, 6 dB back off)
Gain control range	±5 dB
Slope Control Range	±2 dB
Narrowcast-Offset	±2 dB
Decoupling NC/BC input	≥50 dB
Channel Isolation	≥60 dB
Test point	-20/-30 dB (BC-/NC-Input & 75 dBµV @ 5% OMI)
Electrical return loss	≥20 dB
Ripple	≤ ±0,5 dB
Max Fiber Length	
LX 18 S 1xx0	25 km
LX 18 S 1xx1	15 km
LX 18 S 1xx2	45 km
SBS suppression	
LX 18 S 1xx0	16 dBm
LX 18 S 1xx1	21 dBm
LX 18 S 1xx2	16 dBm
Signal Performance LX 18 S 1xx0/ LX 18 S 1xx1	
CSO	≥60 dBc (measured @ 20km (LX18S 1XX1 10km), 3,3% OMI, -1 dBm @ opt. Receiver channel load 36 analog and 60 QAM256 channels)
CTB	≥65 dBc (measured @ 20km (LX18S 1XX1 10km), 3,3% OMI, -1 dBm @ opt. Receiver channel load 36 analog and 60 QAM256 channels)
CNR	≥51 dB (measured @ 20km (LX18S 1XX1 10km), 3,3% OMI, -1 dBm @ opt. Receiver channel load 36 analog and 60 QAM256 channels)
MER	≥42 dB (measured @ 20km (LX18S 1XX1 10km), 3,3% OMI, -1 dBm @ opt. Receiver channel load 36 analog and 60 QAM256 channels)
Signal Performance LX 18 S 1xx2	
MER	≥40 dB (30 km fiber, 2,6% OMI, -1 dBm @ opt. Receiver channel load 121 QAM256 channels)
BER	≤10-9 (30 km fiber, 2,6% OMI, -1 dBm @ opt. Receiver channel load 121 QAM256 channels)

Technical data	
Connectors	
Optical connector	SC/APC connectors
F-socket	1 pcs. (75 Ohm)
General data	
Supply voltage	12 V DC
Power consumption	≤16 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-Offset	-2...+2 dB
Dispersion Compensation (fiber length)	0...50 km
SBS-Suppression	On/Off
Measurement	
Optical output power	dBm
Laser Current	mA
Laser Temperature	°C
TEC Current	mA
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 18 X XXXX

Calibration:
0 – 25 km, 16 dBm SBS suppression
1 – 15 km, 21 dBm SBS suppression
2 – 45 km, 16 dBm SBS suppression

Channel #1 & #2:
1 – 18 (1563.05 nm)
2 – 19 (1562.23 nm)
3 – 20 (1561.42 nm)
4 – 21 (1560.61 nm)
5 – 22 (1559.79 nm)
6 – 23 (1558.98 nm)
7 – 24 (1558.17 nm)
8 – 25 (1557.36 nm)
9 – 26 (1556.56 nm)
A – 27 (1555.75 nm)
B – 28 (1554.94 nm)
...
S – 45 (1541.35 nm)
U – 46 (1540.56 nm)
V – 47 (1539.77 nm)
W – 48 (1538.98 nm)
Y – 49 (1538.19 nm)
Z – 50 (1537.40 nm)
T – Tunable (all wavelengths)
X – unused
0 – 1555 nm +/- 1 nm

Connector type:
1 – default
E – equal input level

Connector type:
S – SC/APC