

# WISI LX 11 S 2x00

1,2 GHz 1310 nm Transmitter

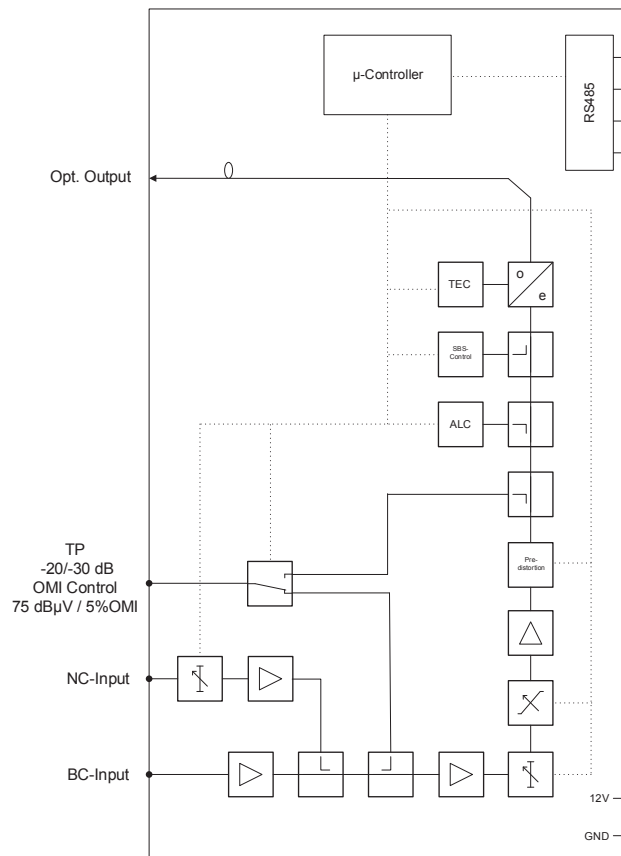


## At a glance:

- Optical HFC transmitter for use in WISI Chassis LX 50
- Adjustable OMI, Slope, NC-Input
- Automatic level control (ALC)
- Fullband transmitter 15...1218 MHz, Docsis 3.1 Ready
- High RF Input Isolation
- OMI Control Testport
- SBS suppression

## Description

The LX 11 is part of the Optopus product portfolio. LX 11 is a single direct modulated fullband transmitter with 1310 nm for use in HFC networks. 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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| Technical data                         |   |
|--|---|
| <b>Downstream</b>                      |   |
| Wavelength                             | 1310 nm ( $\pm$ 10 nm)  |
| Optical output power                   | 6 dBm (4 mW);<br>8 dBm (6,3 mW),<br>10 dBm (10 mW),<br>13 dBm (20 mW)   |
| Relative intensity noise (RIN)         | < -155 dB <sub>v</sub> /Hz  |
| Optical return loss                    | >40 dB  |
| Frequency range                        | 15...1218 MHz   |
| Input level broadcast                  | 78 dB $\mu$ V (PAL-Level)   |
| Input level Narrowcast                 | 82 dB $\mu$ V<br>(QAM-Level, 6 dB back off)                             |
| Gain control range                     | $\pm$ 5 dB  |
| Slope Control Range                    | $\pm$ 2 dB  |
| NC Offset                              | $\pm$ 2 dB  |
| Decoupling NC/BC input                 | $\geq$ 50 dB  |
| Test point                             | -20/-30 dB<br>(BC-/NC-Input & 75 dB $\mu$ V @ 5% OMI)                   |
| Electrical return loss                 | $\geq$ 20 dB  |
| Ripple                                 | $\leq \pm$ 0,5 dB   |
| <b>Signal performance</b>              |   |
| CSO                                    | $\geq$ 63 dBc (42 channels CENELEC)                                     |
| CTB                                    | $\geq$ 65 dBc (42 channels CENELEC)                                     |
| MER                                    | $\geq$ 44 dB (121 QAM 256 Ch.),<br>(10km fiber, -1 dBm @ opt. receiver) |
| BER                                    | $\leq$ 10E-9 (121 QAM 256 Ch.),<br>(10km fiber, -1 dBm @ opt. receiver) |
| <b>Connectors</b>                      |   |
| Optical connector                      | SC/APC  |
| F-socket                               | 1 pcs. (75 Ohm)   |
| <b>General data</b>                    |   |
| Power consumption                      | $\leq$ 9 W  |
| Environmental parameters               | -5...+45 °C<br>(EN300 019-1-3 Class 3.2)                                |
| Dimensions<br>(width x height x depth) | 30 x 133 x 320 mm   |
| <b>Management functionality</b>        |   |
| Laser                                  | On/Off  |
| ALC                                    | On/Off  |
| Attenuator                             | 0...10 dB   |
| Slope                                  | -2...+2 dB  |
| Narrowcast-Offset                      | -2...+2 dB  |
| SBS suppression                        | On/Off  |
| <b>Measurement</b>                     |   |
| Optical output power                   | dBm   |
| Laser Current                          | mA  |
| Laser Temperature                      | °C  |
| TEC Current                            | mA  |
| RF-Level                               | dB  |

## LX 11 X 2X00

|                        |  |
|------------------------|--|
| <b>Wavelength TX1:</b> | 0 – 1310 nm +/- 10 nm  |
| <b>Output power:</b>   | 26 – 6 dBm, 1.2 GHz (uncooled DFB)<br>28 – 8 dBm, 1.2 GHz (cooled DFB)<br>20 – 10 dBm, 1.2 GHz (cooled DFB)<br>23 – 13 dBm, 1.2 GHz (cooled DFB) |
| <b>Connector type:</b> | S – SC/APC   |