

# WISI LX 10 S BN03

Optical Transmitter with high performance



## Description

The S-type series transmitters are designed to be the most versatile model within the WISI LX10 series family. They can easily be configured to meet most HFC network solutions requiring link lengths in the range of 50 to 70 kilometers with one EDFA as well as links utilizing multiple EDFAs. The WISI LX10 series product line is a family of state-of-the-art high performance 1550 nm externally modulated CATV fiber optic transmitters optimized for varying network applications. Packaged in a convenient 1RU housing, this line of optical transmitters couples high optical output powers, up to 11.0 dBm, with low optical linewidth resulting in unmatched performance. The optical modulator, combined with proprietary predistortion circuitry, provides superior CTB and CSO performance with SBS suppression levels of greater than 20 dBm. Advanced features such as built in field adjustable SBS control and electronic dispersion compensation allows these transmitters to be quickly optimized in the field for any link or application without the need to procure specifically tuned transmitters. This affords the system designer a level of flexibility previously unknown in the CATV market place.

## At a glance:

- Dual optical outputs
- Field adjustable SBS suppression
- External modulated transmitter
- Redundant & hot swappable power supplies
- Management via web interface and SNMP
- Field adjustable SBS suppression

## Technical data

Wave length	ITU ch. 31
Specified link length	65 km (in combination with additional EDFA)
Optical output power	2x +10 dBm
SBS suppression	≥ 16,0 dBm
Carrier to noise ratio	≥ 53,0 dB
Signal performance (37 analog, 50 digital) CSO/CTB	≥ 70,0 dBc
Input level	78 / 87 dBμV (PAL-Level/SAT-IF)
Front panel RF gain/OMI adjustment range	+2/-4 dB (from nominal setting)
CATV frequency range	47...1006 MHz
CATV flatness	± 0.50 dB (47 MHz ... 550 MHz), ± 0.75 dB (47 MHz ... 1006 MHz)
CATV electrical return loss	≥ 16 dB (47...1006 MHz)
CATV RF test point	-20 dB (± 1 dB)
<b>General data</b>	
Optical connectors	Rear: SC/APC
EMC	EN50083-2
Safety standards	IEC 60950-1; IEC 60728-11; Laser IEC 60825-2
Operating temperature range	0...50 °C (ETSI EN 300 019-1-3 Class 3.2)
Supply voltage	48 V DC, DC primary, DC secondary
Power consumption	≤ 65 W
Dimensions (width x height x depth)	483 x 45 x 381 mm
CNR test configuration	EDFA: 16 dBm, Link: 65 km, Received Power: 0 dBm

## Packaging data

Sales unit	pcs.
Dimensions (WxHxD) sales unit	mm
Packaging volume sales unit	dm <sup>3</sup>
Gross weight sales unit	kg
Shipping unit	pcs.
Dimensions (WxHxD) shipping unit	mm
Packaging volume shipping package	dm <sup>3</sup>
Gross weight shipping unit	kg
EAN	4010056730468
Article number	73046
Customs tariff number	85176200

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**Power supply:**  
 1 – AC primary, AC secondary  
 2 – AC primary, DC secondary  
 3 – DC primary, DC secondary  
 5 – AC primary, no secondary  
 6 – DC primary, no secondary

**Output:**  
 0 – Rear SC/APC  
 2 – Rear E2000/APC  
 3 – Rear LC/APC  
 6 – Front SC/APC  
 7 – Front E2000/APC  
 8 – Front LC/APC

**Wavelength:**  
 0 – 1555 +/- 5 nm  
 1 – 1550 +/- 5 nm (standard)  
 A – ITU ch. 18  
 B – ITU ch. 19  
 ...  
 W – ITU ch. 40

**Output power:**  
 7 - 2x 7 dBm  
 8 - 2x 8 dBm  
 B - 2x 10 dBm

**Transmitter type:**  
 K  
 S  
 L  
 P - Power supply