Product information

# WISI LX 10 K 7001

## Optical Transmitter

## Description

The K-type series transmitters are intended for use in FTTx and RFoG architecture designs requiring high quality transmission over varying transmission lengths and EDFA output powers. These transmitters successfully support very high optical launch powers while controlling the detrimental effects of Stimulated Brillouin Scattering (SBS), group velocity dispersion (GVD), and self phase modulation (SPM). 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

**WISI Communications GmbH & Co. KG**
Wilhelm-Sihn-Str. 5-7
75223 Niefern-Oeschelbronn, Germany
Phone: +49 7233 66-280, Fax: -350
E-Mail: export@wisi.de

# WISI LX 10 K 7001

| Technical data | |
|---|---|
| Wave length | 1555 nm (± 1 nm) |
| Specified link length | 40 km<br>(in combination with additional EDFA) |
| Optical output power | 2x +7 dBm |
| SBS suppression | ≥ 21,0 dBm |
| Carrier to noise ratio | ≥ 48,6 dB |
| Signal performance<br>(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<br>(from nominal setting) |
| CATV frequency range | 47...1006 MHz |
| CATV flatness | ± 0.50 dB (47 MHz ... 550 MHz),<br>± 0.75 dB (47 MHz ... 1006 MHz) |
| CATV electrical return loss | ≥ 16 dB (47...1006 MHz) |
| CATV RF test point | -20 dB (± 1 dB) |
| **General data** | |
| Optical connectors | Rear: SC/APC |
| EMC | EN50083-2 |
| Safety standards | IEC 60950-1;<br>IEC 60728-11;<br>Laser IEC 60825-2 |
| Operating temperature range | 0...50 °C<br>(ETSI EN 300 019-1-3 Class 3.2) |
| Supply voltage | 230 V AC,<br>AC primary, AC secondary |
| Power consumption | ≤ 65 W |
| Dimensions<br>(width x height x depth) | 483 x 45 x 381 mm |
| CNR test configuration | EDFA: 21 dBm,<br>Link: 40 km,<br>Received Power: -5,6 dBm |

| Packaging data | |
|---|---|
| Sales unit | pcs. |
| Dimensions (WxHxD) sales unit | mm |
| Packaging volume sales unit | dm³ |
| Gross weight sales unit | kg |
| Shipping unit | pcs. |
| Dimensions (WxHxD) shipping unit | mm |
| Packaging volume shipping package | dm³ |
| Gross weight shipping unit | kg |
| EAN | 4010056723729 |
| Article number | 72372 |
| Customs tariff number | 851762000 |

LX 10 X x x x x

**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