

CXE800 OPTICAL RECEIVER



The CXE800 is a fibre deep optical node. It is designed for cases which don't need optical transmitter, but only a down stream signal is required.

Alignment of this product is made easy and no external plugs are needed. Fibre connector is situated at the housing wall, which makes the installation quick.

OLC as well as gain and slope adjustments use electrical controls that improve the reliability of this node. If there is a need for more outputs, internal splitter at output can be used.

Features

- OLC
- Adjustments without signal interruptions
- Low noise current density
- GaAs MESFET output amplifier
- 2nd output option
- No output plug-in needed in normal operation
- LED indication for optical level
- Optical level measurement
- Excellent surge and ESD protection

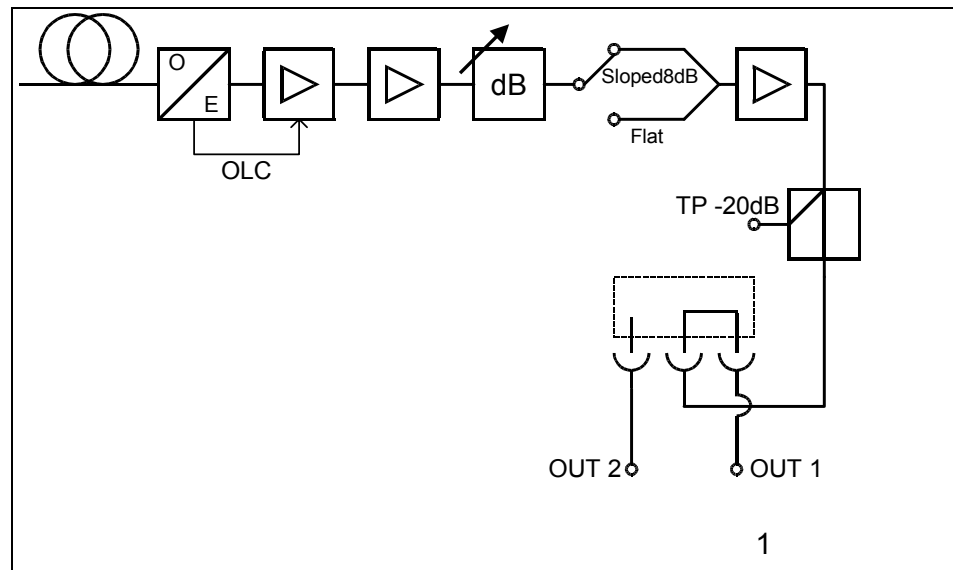
Technical specifications

Parameter	Specification	Note
Signal path		
Light wavelength	1290...1600 nm	
Optical input power range	-7...0 dBm	1)
Frequency range	47...862 MHz	
Return loss	18 dB	2)
OLC limited output level	110 dB μ V	3)
Gain limited output level (without OLC)	118 dB μ V	4)
Level adjustment	0...-15 dB	5)
Mid-stage slope	0 / 8 dB	6)
Flatness	\pm 0.5 dB	7)
Test point	-20 dB	7)
Noise current density	6 pA / \sqrt Hz	9)
CTB 42 channels	113 dB μ V	10)
CSO 42 channels	113 dB μ V	10)
XMOD 42 channels	110 dBuV	10)
General		
Power consumption	15 W	
Supply voltages	165...255 Vac	
Connectors, RF	F female	
Optics	SC/APC	
Dimensions	182 (210) x 140 (148) x 84 mm	
Weight	1.6 kg	
Enclosure classification	IP43	
Operating temperature range	-40...+55 °C	
EMC compatibility	EN 50083-2 (IEC 60728-2)	
Safety	EN 60728-11	
ESD	4 kV	11)
Surge	6 kV	12)

Notes

- 1) OLC is operational within this input power range.
- 2) The limiting curve is defined at 40 MHz -1.5 dB / octave.
- 3) This is the maximum output level with OLC when OMI is 4.0 %. The level is available with the optical input power of -7...0 dBm. The used wavelength is 1310 nm.
- 4) This level is available with optical input level of - 2 dBm (OLC off and OMI 4%).
- 5) Step size is 1 dB.
- 6) Between 47...862 MHz. Slope can be selected with jumper. There is no signal interruption during selection.
- 7) Typical value.
- 8) TP is from a directional coupler and has a ± 0.8 dB tolerance.
- 9) This is a typical value at 862 MHz when the optical input power is -7 dBm. The value can be used for C/N calculations.
- 10) EN50083-3. Optical input power is -4 dBm and OMI is 4.0 %. The output is 8 dB cable equivalent sloped.
All results are typical values in room temperature, which can be used in system calculations.
XMOD is measured at the lowest channel.
The recommended maximum output level is 115 dBuV with 21 channels and sloped output.
- 11) EN61000-4-2, contact discharge to enclosure and RF ports.
- 12) EN61000-4-5, 1.2 / 50 μ s pulse to RF ports.

Block diagram



Accessories

It is possible to have 2 outputs using the following separately orderable plugs (nominal values listed):

- AC6124 Splitter, 2 x 4 dB
- AC6112 Tap, 1 / 12 dB
- AC6116 Tap, 1 / 15 dB
- AC6119 Tap, 1 / 20 dB
- AC6128 Tap, 2 / 9 dB

The F connector (KDC313) for the second output port can be ordered as a separate item.