

### 12G-SDI Bidirectional Optical Transceiver



#### Features

- SDI Multi-rate optical bidirectional transceiver for 12G-SDI, 6G-SDI, 3G-SDI, HD-SDI, and SD-SDI
- 1 port bidirectional operation over single fiber (singlemode)
- Support for SMPTE 2082, SMPTE 2081, SMPTE 424M, SMPTE 292M, and SMPTE 259
- 1330nm TX Wavelength / 1270nm RX Wavelength
- For distances up to 10km\*\*
- For use with yellobrik, greenMachine, and Series 5000 product lines
- Pluggable and hot swappable
- Lead free and RoHS compliant

#### Technical Specifications

TX Specifications	Min	Typ	Max
Wavelength	1320nm	1330nm	1340nm
Optical Power	-3dBm	-	+3dBm
Linear Extinction Ratio	3.5	-	-

RX Specifications	Min	Typ	Max
Receiver Sensitivity	11.88 Gb/s		-10 dBm
	6 Gb/s	-	-10 dBm
	2.97 Gb/s	-	-14 dBm
	1.485 Gbit/s	-	-14 dBm
Wavelength	1260nm	1270nm	1280nm
Overload	-2dBm	-	-
Loss of Signal Asserted	-30 dBm	-	-
Loss of Signal De-Asserted	-	-	-12 dBm
Optical Hysteresis	0.5 dB	2dB	-

Mechanical	
Size (not including connector - typ)	57mm x 13.4mm x 12.4mm
Weight	50g
SFP Connector pinning	MSA
Fiber connections	LC (Simplex) - Singlemode
Operating Temperature Range	5°C - 40°C
Power Supply Voltage	3.3VDC
Power Consumption	300mA typical 400mA max
Humidity (non condensing)	90%

#### Description

The **OH-BD-12G-1330-LC** 12G SDI bidirectional optical transceiver is an integrated part or plug in option for select LYNXTechnik yellobrik, greenMachine, and Series 5000 products. This SFP module transmits an optical SDI signal and also receives an optical SDI signal over a single fiber link. TX Wavelength is a fixed 1330nm and suitable for distances up to 10km\*\*. The RX wavelength is between 1260nm and 1280nm. The module accommodates 11.88Gbit, 5.94Gbit, 2.97Gbit, and 1.485Gbit SDI signals conforming to SMPTE 2082, SMPTE 2081, SMPTE 424M, SMPTE 292M, and SMPTE 259.

A socket, or "cage" is provided for the SFP in the supporting LYNX-Technik product for easy installation or upgrade. The SFP is hot swappable.

This SFP is typically used in simple WDM closed loop point to point applications and is intended to be paired with the OH-BD-12G-1270-LC SFP at the other end of the fiber link.

#### Ordering Information

EAN / UPC	Model	Description
4250479327504	OH-BD-12G-1330-LC	12G SDI Optical Bidirectional Transceiver (TR) SFP module-1330nm - Fiber LC connector

\*\* Distance is an approximation. Actual distances achieved can be longer or shorter depending on the type of fiber cable and accumulated optical losses in the fiber link. Determine link losses and perform optical budget calculations to ensure correct operation.

#### WARNING

This SFP module is a Class 1 laser device which complies to IEC825 and FDA 21 CFR 1040.10 and 1040.11. The device must be operated within specified temperature and voltage limits. The optical ports of the module must always be terminated with an optical connector or a dust plug (dust plug supplied)

#### Safety Standards

