# fiber options

# OH-TR-12G-LC Fiber SFP Data Sheet

# **12Gbit SDI Optical Transceiver**

- SDI multi-rate optical transceiver for 12G-SDI, 6G-SDI, 3G-SDI and HD-SDI signals
- Support for SMPTE 2082, SMPTE 424M, SMPTE 292M,
- 1310nm TX Wavelength singlemode
- LC Duplex fiber connections
- Receive wavelengths 1260 to 1620nm according to ITU-T G694.2
- TX Distances up to 10km\*\*
- For use with yellobrik and greenMachine product lines
- Pluggable and hot swappable
- Lead free and RoHS compliant

The OH-TR-12G-LC SDI optical transceiver is a plug in option for select LYNX Technik yellobrik green/Machine products. This SFP module includes a receiver and a transmitter which facilitates the conversion of an electrical SDI signal into an optical signal for transmission over fiber, and also receives an optical SDI signal and converts to an electrical signal for further processing. Transmission wavelength is a fixed 1310nm and suitable for distances up to 10km\*\* using singlemode fiber. The receiver will capture any wavelength between 1260-1620nm. The module supports 12Gbit, 6Gbit, 3Gbit and 1.5Gbit SDI signals conforming to SMPTE 2082M, SMPTE 424M and SMPTE 292M.

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

### **TX Specifications**

Parameter	Min	Тур	Max
Transmitting Optical Power	-5dBm	-	0.5dBm
Wavelength	1260nm	1310nm	1360nm
Linear Extinction Ratio	5.0	8.0	-

## **RX Specifications**

Parameter		Min	Тур	Max
Receiver Sensitivity	11.88 Gb/s	-	-	-10dBm
	5.94 Gbit/s	-	-	-10dBm
	2.97 Gbit/s	-	-	-14dBm
	1.485 Gbit/s	-	-	-14dBm
Wavelength		1260nm	-	1620nm
Overload		-2dBm	-	-
Loss of Signal Asserted		-30 dBm	-	-
Loss of Signal De-Asserted		-	-	-10 dBm
Optical Hysteresis		0.5 dB	2dB	-

Country of manufacture: Taiwan



Shown with dust cap fitted

#### **Mechanical**

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Parameter			
Size (not including connector - typ)	57mm x 13.4mm x 12.4mm		
Weight	50g		
SFP Connector pinning	MSA		
Fiber connections	LC / Duplex - Singlemode		
Operating Temperature Range	5°C - 40°C		
Power Supply Voltage	3.3VDC		
Power Consumption	130mA typical 180mA max		
Humidity (non condensing)	90%		

#### **Ordering Information**

EAN / UPC	Model	Description
4250479325029	OH-TR-12G-LC	12G SDI Fiber Transceiver

<sup>\*\*</sup> 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)



Rev 1.1 Specifications subject to change

