

# fiber options

# OH-TR-8-XXXX Fiber SFP Data Sheet

## 3Gbit SDI Optical Transceiver - CWDM (high power)

- SDI multi-rate optical transceiver for 3G-SDI, HD-SDI and SD-SDI signals
- Receiver and transmitter in single package
- Support for SMPTE 424M, SMPTE 292M, SMPTE 259M, DVB-ASI
- 18 CWDM wavelength selections according to ITU-T G694.2
- Receive wavelengths 1260 to 1620nm according to ITU-T G694.2
- TX Distances up to 80km\*\*
- For use with yellobrik, greenMachine and Series 5000 product lines
- Pluggable and hot swappable
- Lead free and RoHS compliant

The OH-TR-8-XXXX SDI optical transceiver is a plug in option for select LYNX Technik yellobrik and Series 5000 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. 18 CWDM wavelength selections are provided and it is suitable for distances up to 80km\*\*. The module accommodates 270Mbit / 1.485Gbit and 2.97Gbit SDI signals conforming to SMPTE 424M, 292M, 259M and DVB-ASI. This is a higher power device intended for long haul applications.

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	Typ	Max
Intrinsic Jitter (ps)	2.97 Gb/s	-	45	80
	1.485 Gbit/s	-	45	80
	270 Mbit/s	-	45	80
Wavelength		$\lambda -10\text{nm}$	$\lambda$	$\lambda +10\text{nm}$
Optical Power		+1dBm	+3dBm	+5dBm
Linear Extinction Ratio		5.0	8.0	-

$\lambda = 1270/1290/1310/1330/1350/1390/1410/1430/1450/1470/1490/1510/1530/1550/1570/1590/1610\text{nm}$

### RX Specifications

Parameter		Min	Typ	Max
Receiver Sensitivity	2.97 Gb/s	-26 dBm	-28dBm	-
	1.485 Gbit/s	-26 dBm	-28dBm	-
	270 Mbit/s	-26 dBm	-28dBm	-
Wavelength		1260nm	-	1620nm
Overload		-	-	-3 dBm
Loss of Signal Asserted		-45 dBm	-	-
Loss of Signal De-Asserted		-	-	-26 dBm
Optical Hysteresis		0.5 dB	2dB	-

Country of manufacture: Taiwan

Specifications subject to change



Shown with dust cap fitted

### Mechanical

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	200mA typical 300mA max
Humidity (non condensing)	90%

### Ordering Information

EAN / UPC	Model	Description
4250479320772	OH-TR-8-1270	3G SDI Fiber Transceiver - 1270nm
4250479320789	OH-TR-8-1290	3G SDI Fiber Transceiver - 1290nm
4250479320796	OH-TR-8-1310	3G SDI Fiber Transceiver - 1310nm
4250479320802	OH-TR-8-1330	3G SDI Fiber Transceiver - 1330nm
4250479320819	OH-TR-8-1350	3G SDI Fiber Transceiver - 1350nm
4250479320826	OH-TR-4-1370	3G SDI Fiber Transceiver - 1370nm
4250479320833	OH-TR-8-1390	3G SDI Fiber Transceiver - 1390nm
4250479320840	OH-TR-8-1410	3G SDI Fiber Transceiver - 1410nm
4250479320857	OH-TR-8-1430	3G SDI Fiber Transceiver - 1430nm
4250479320864	OH-TR-8-1450	3G SDI Fiber Transceiver - 1450nm
4250479320871	OH-TR-8-1470	3G SDI Fiber Transceiver - 1470nm
4250479320888	OH-TR-8-1490	3G SDI Fiber Transceiver - 1490nm
4250479320895	OH-TR-8-1510	3G SDI Fiber Transceiver - 1510nm
4250479320901	OH-TR-8-1530	3G SDI Fiber Transceiver - 1530nm
4250479320918	OH-TR-8-1550	3G SDI Fiber Transceiver - 1550nm
4250479320925	OH-TR-8-1570	3G SDI Fiber Transceiver - 1570nm
4250479320932	OH-TR-8-1590	3G SDI Fiber Transceiver - 1590nm
4250479320949	OH-TR-8-1610	3G SDI Fiber Transceiver - 1610nm

\*\* 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

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