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
- 8 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 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. 9 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 | Тур | Max |
|-------------------------|--------------|---------|-------|---------|
| Intrinsic Jitter (ps) | 2.97 Gb/s | - | 45 | 80 |
| | 1.485 Gbit/s | - | 45 | 80 |
| | 270 Mbit/s | - | 45 | 80 |
| Wavelength | | λ -10nm | λ | λ +10nm |
| Optical Power | | +1dBm | +3dBm | +5dBm |
| Linear Extinction Ratio | | 5.0 | 8.0 | - |

λ= 1450/1470/1490/1510/1530/1550/1570/1590/1610nm

Ordering Information

| EAN / UPC | Model | Description |
|---------------|--------------|-----------------------------------|
| 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 |



Shown with dust cap fitted

** 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

RX Specifications

| Parameter | | Min | Тур | 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 | | - | - | -7.5 dBm |
| Loss of Signal Asserted | | -45 dBm | - | - |
| Loss of Signal De-Asserted | | - | - | -26 dBm |
| Optical Hysteresis | | 0.5 dB | 2dB | - |

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% |

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)



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Rev 1.1 Specifications subject to change