FIBERWORKS DATASHEET

X2-ZR-Dxxxx

10 Gb/s X2-ZR DWDM Transceiver for 80 km transmission

INTRODUCTION

The X2-ZR-Dxxxx is a highly integrated, serial optical transceiver module for high-speed, 10Gbit/s data transmission applications.

The module is fully compliant to IEEE 802.3ae standard for Ethernet making it ideally suited for 10 GbE applications. The modules operate at DWDM wavelengths and fulfills ITUG.692 and G.694.1.

Designed for distances of up to 80km the transceiver module comprises a transmitter with an externally modulated laser (DFB-EA), a receiver with a APD photo diode, a XAUI-Attachment Interface, an integrated Coder / Decoder and multiplexer / demultiplexer (SERDES: Serializer / Deserializer). The transceiver operates within a wide temperature range of 0°C to +70°C and offers optimum heat dissipation and excellent electromagnetic shielding. A 70 pin electrical connector and a duplex SC connector optical interface assure the X2 MSA compliant connectivity.

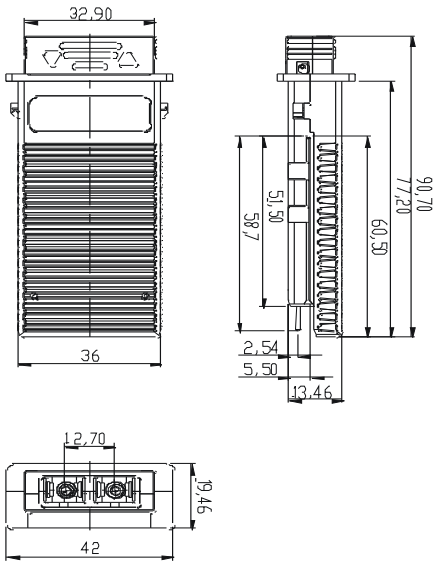
DWDM modules operate at Dense Wavelength Division Multiplexing (DWDM) wavelengths. There are 40 wavelengths available from 1530.33 nm–1560.61 nm in a 100 GHz (~0.8 nm) channel spacing. The DWDM characteristics are fully compliant to the wavelength parameters specified in ITU standards G.692 and G.694.1

APPLICATIONS

- IEEE 802.3ae 10GBASE-ZR 10.3125 Gb/s
- Regional Networking
- Metropolitan Area Networking
- Inter and Intra Campus
- Data Centers

FEATURES

- 40 DWDM lambdas (l): 1530.33 nm – 1560.61 nm
- Compliant to IEEE 802.3ae 10GBASE-ZR at 10.3125 Gbit/s
- Up to 80 km transmission on 9/125 µm SMF G.652
- 23 dB link budget
- Laser Class 1 compliant
- Hot-Pluggable 70 pin connector with XAUI interface
- Alarms, controls and performance monitoring
- DFB-EA laser
- Duplex SC-connector interface
- Compliant with the EU RoHS 6 Environmental Requirements



LASER SAFETY

This optical transceiver is a Class 1 laser product. It complies with IEC-60825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical ports of the module need to be terminated with an optical connector or with a dust plug.

Specification subject to change without notice.

Ordering Information

Part no:	Description/Application
X2-ZR-Dxxxx *	X2, 10GBase-ZR, 10.3125 Gbps, DWDM, DDM, 23dB, 80km

* xxxx = 9180 ~ 9610:
1563.05 nm = 191.80 THz = 9180

Optical Parameters

Part no.\Parameter	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget[dB]
X2-ZR-Dxxxx	DWDM	-1 to +3	-24 to -7 **	23 dB

** When shorter distances of optical fiber are used an attenuator must be used to avoid overloading and damaging of the optical APD receiver.

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