

# X2-ER-Dxxxx

## X2-ER DWDM Transceiver for 40 km transmission

### DESCRIPTION

The X2-ER-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 fulfill ITU G.692 and G.694.1.

Designed for distances of up to 40km the transceiver module comprises a transmitter with an externally modulated laser (DFB EML), a receiver with a PIN 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.

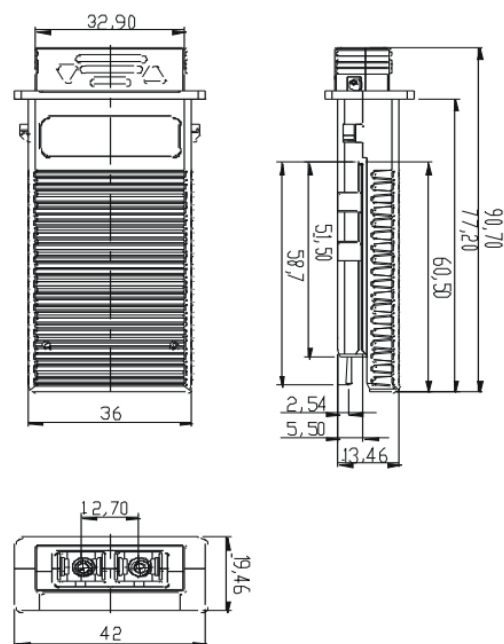
DWDM modules operate at Dense Wavelength Division Multiplexing (DWDM) wavelengths. there are 45 wavelengths available from 1528.77 nm – 1563.86 nm in a 100 GHz (~0.8 nm) channel spacing. The DWDM characteristics are fully compliant to the wavelength parameters specified in ITU-T standards G.692 and G.694.1

### APPLICATIONS

- IEEE 802.3ae 10GBase-ER 10.3125 Gb/s
- Regional Networking
- Metropolitan area Networking
- Inter and Intra Campus
- Data Centers

### FEATURES

- 45 DWDM lambdas ( $\lambda$ ): 1528.77 nm – 1563.86 nm
- Compliant to IEEE 802.3ae 10GBase-ER at 10.3125 Gbit/s
- Up to 40 km transmission on 9/125  $\mu$ m SMF G.652
- 15 dB link budget
- Laser Class 1 compliant
- Hot-Pluggable 70 pin connector with XAUI interface
- Alarms, controls and performance monitoring
- Cooled DFB EML laser
- Duplex SC-connector interface
- Compliant with the EU RoHS 6 environmental requirements
- Operating Case Temperature: 0°C to 70°C



### LASER SAFETY

This singlemode 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 a dust plug.

### ORDERING INFORMATION

Part no.	Description
X2-ER-Dxxxx	X2, 10GBase-ER, DDM, 40 km, DWDM, 15 dB, SM

### OPTICAL PARAMETERS

Part no.	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
X2-ER-Dxxxx	DWDM	-1 to +4	-16 to +0.5	15