

# XFP-MR-L120D-Dxxxx

## 10GBase XFP Transceiver, DWDM Single-mode 120 km Reach

### DESCRIPTION

This Fiberworks 10 Gigabit Small Form Factor Pluggable (XFP) transceiver is compliant with the current XFP Multi-Source Agreement (MSA) Specification, and simultaneously comply with 10 Gigabit Ethernet 10GBASE-ZR/ZW and STM-64, both with and without FEC.

The transceiver consists of two sections: the transmitter section incorporates a temperature-stabilized DWDM EML laser, and the receiver section consists of an APD photodiode integrated with a TIA and low power dual CDR with Electronic Dispersion Compensation (EDC). This advanced optical technology enables transmission over 120km on standard singlemode fiber.

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

- 10GBASE-ZR/ZW 10G Ethernet (with or w/o FEC)
- SDH STM-64

### FEATURES

- 45 DWDM lambdas ( $\lambda$ ): 1528.77 nm – 1563.86 nm
- Hot pluggable XFP MSA form factor
- Temperature-stabilized DWDM EML laser transmitter and APD photo-detector
- Transmission distance of 120km with SMF
- Supports 9.95Gb/s to 11.3Gb/s bit rates
- Power supply: +5.0 V, +3.3 V
- Low power consumption
- LC connector full duplex transmission mode
- SFF-8472 Digital Diagnostic Function
- RoHS-6 compliant



### 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
XFP-MR-L120D-Dxxxx	XFP, 10GBase-ZR, 9.95-11.1 Gbps, DDM, 120km, DWDM, 25-31dB, SM, DDM

### OPTICAL PARAMETERS

Part no.	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
XFP-MR-L120D-Dxxxx	DWDM	+1 to +5	-24 (BER < 10 <sup>-12</sup> )	25
			-30 (BER < 10 <sup>-4</sup> ) <sup>1)</sup>	31

<sup>1)</sup> A Bit Error Rate (BER) of 10<sup>-4</sup> can be corrected to 10<sup>-12</sup> with standard Forward Error-Correction (FEC).