

# SFP-MR120D-Dxxxx

## 155 Mb/s ~ 2.67 Gb/s DWDM Multirate SFP

### DESCRIPTION

The SFP-MR120D-Dxxxx transceiver family are small form factor pluggable modules for bi-directional serial optical data communications. The modules fulfill ITU G.692 and operate at ITU DWDM wavelengths. The SFP-MR120D-Dxxxx meet requirements of ITU G.957 (SDH/SONET), IEEE 802.3 Gigabit Ethernet standard and ANSI Fibre Channel specifications, and are suitable for interconnections in WDM, SDH, Gigabit Ethernet and Fibre Channel environments.

The modules are hot pluggable and enhanced digital diagnostic functions are available via an I2C serial bus specified in the SFP MSA SFF-8472. Its multirate characteristics allow the module to transmit data-streams with data-rates up to 2.67 Gb/s. Typical protocols are STM-16FEC/OC-48FEC, STM-16/OC-48, 2G Fibre Channel, Gigabit Ethernet and 1G Fibre Channel.

DWDM modules operate at Dense Wavelength Division Multiplexing (DWDM) wavelengths. There are 45 wavelengths available from 1529.55 nm– 1564.68 nm in 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

- 155 Mb/s to 2.67 Gb/s
- Ethernet IEEE 802.3ae
- 2x/1x Fibre Channel
- DWDM systems
- OC-48/STM-16/OTN-1 DWDM Systems

#### FEATURES

- 45 DWDM lambdas (λ): 1529.55 nm 1564.68 nm
- 28 dB link budget Up to 120 km transmission on SMF
- Hot-Pluggable SFP+ footprint LC Optical Transceiver
- Duplex LC receptacle
- Small Form-Factor Pluggable (SFP) MSA compatible
- SFF-8472 Digital Diagnostic Function
- Fully compliant to ITU G.692 & G.694.1
- RoHS compliance
- Operating Case Temperature: 0°C to 70°C

#### LASER SAFETY

This 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.

#### **OPTICAL PARAMETERS**

Part no.	SM/MM Fiber	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
SFP-MR120D-Dxxxx	SM	DWDM	0 to 4	-28 to -7	28

#### **ORDERING INFORMATION**

Part no.	Description	
SFP-MR120D-Dxxxx*	SFP, 2.67 Gbps Multirate DWDM, SM, DDM, 28dB, 120km	

\* xxxx = 9160 ~ 9600:

1564.68 nm= 191.60 THz = 9160 1529.55 nm = 196.00 THz = 9600



FIBERWORKS