

# SFP-MRD-Cxx

## 155 Mb/s ~ 2.67 Gb/s CWDM Multirate SFP Family

#### DESCRIPTION

The SFP-MRD-Cxx transceiver family are small form factor pluggable modules for bi-directional serial optical data communications. The modules are hot pluggable and 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-stream with data-rates from 155 Mb/s up to 2.67 Gb/s. Typical protocols are STM-16FEC/OC-48FEC, STM-16/OC-48, 2G Fibre Channel, Gigabit Ethernet, Fibre Channel, STM-4/OC-12,DVB-ASI,ESCON and STM-1/OC-3.

The modules meet requirements of ITU G.957 (SDH/SONET), IEEE 802.3 Gigabit Ethernet standard and ANSI Fibre Channel specifications, and are very suitable for interconnections in WDM, SDH, Gigabit Ethernet and Fibre Channel environments. The family covers a wide range of applications and has modules operating at CWDM wavelengths for 50 km, 80 km and 120 km transmission on singlemode fiber.

CWDM modules operate at nominal Coarse Wavelength Division Multiplexing (CWDM) wavelengths. There are 18 center wavelengths available from 1471 nm to 1611 nm, with each step 20 nm. The CWDM characteristics are fully compliant to the wavelength parameters specified in ITU standards G.694.2 and G.695.

#### **APPLICATIONS**

- 155 Mb/s to 2.67 Gb/s
- CWDM Systems

#### **FEATURES**

- Up to 18 CWDM wavelengths (λ): 1271nm to 1611nm
- Up to 120 km transmission (31 dB)
- Hot-Pluggable SFP footprint
- · Duplex LC optical interface
- Small Form-Factor Pluggable (SFP) MSA compatible
- SFF-8472 Digital Diagnostic Function
- Fully compliant to ITU G.694.2 & G.695



#### 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.	Fiber type	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
SFP-MR50D-Cxx	SM	1271-1611	-2 to 3	-19 to -3	17
SFP-MR80D-Cxx	SM	1271-1611	0 to 5	-28 to -9	28
SFP-MR120D-Cxx	SM	1471-1611	0 to 5	-31 to -10	31

### **ORDERING INFORMATION**

Part no.	Description
SFP-MR50D-Cxx	SFP, 155Mbps-2.67Gbps, CWDM 1271nm-1611nm, SM, 17dB, 50km
SFP-MR80D-Cxx	SFP, 155Mbps-2.67Gbps, CWDM 1271nm-1611nm, SM, 28dB, 80km
SFP-MR120D-Cxx	SFP, 155Mbps-2.67Gbps, CWDM 1471nm-1611nm, SM, 31dB, 120km

C27 = CWDM 1271 nm	C39 = CWDM 1391 nm	C51 = CWDM 1511 nm
C29 = CWDM 1291 nm	C41 = CWDM 1411 nm	C53 = CWDM 1531 nm
C31 = CWDM 1311 nm	C43 = CWDM 1431 nm	C55 = CWDM 1551 nm
C33 = CWDM 1331 nm	C45 = CWDM 1451 nm	C57 = CWDM 1571 nm
C35 = CWDM 1351 nm	C47 = CWDM 1471 nm	C59 = CWDM 1591 nm
C37 = CWDM 1371 nm	C49 = CWDM 1491 nm	C61 = CWDM 1611 nm