

# edge Product Data Sheet

1051 FR80 1.1.

### Key Highlights:

- Type: XFP
- Compatibility: Multi-Vendor MSA Compatible
- Application: Transport Network
- Tx/Rx Wavelength: 45 Channel (17-61) ITU-T 100Ghz C-Band
- Fiber Type: Single-Mode Fiber (SMF)
- Connectors: Double LC
- Optical Budget: 23dB
- Max. Distance: 80km
- Data Rate: 1.24-11.3Gbps
- DDM/DOM: Supported
- Temperature: Standard 0°-70°C

### **Optical Transceiver : DWDM-10G-XFP-80-XX**

### **Product Description:**

DWDM-10G-XFP-80-XX is Multi-Vendor MSA Compatible 10G DWDM XFP multi-rate (1.24-11.32 Gbps) transceiver designed for operation over Double Single-Mode Fiber (SMF) optical cable in Transmission network environments for interconnection of metro long haul links. DWDM-10G-XFP-80-XX transceiver has a guaranteed optical budget of 23 dB, which in most cases is enough to reach up to 80 kilometer distance. Distance is just an indicative parameter for comfort of identification that is calculated by taking into account minimal optical budget and average attenuation of optical cabling in industry. On the transmission side 10G DWDM XFP module converts a 10-Gbps NRZ electrical signal into a 10-Gbps optical signal on a specific wavelength and reversely at the receiver side 10-Gbps optical signal is converted into 10-Gbps NRZ electrical signal. DWDM-10G-XFP-80-XX 10G DWDM XFP transceiver has a fixed laser with 45 channel support from the ITU-T 100GHz DWDM Channel Grid, more specifically Channel 17 to Channel 61 (191.7~196.1 THz) are supported, which need to be specified when ordering.

Fixed wavelength 10G DWDM XFP Module has DDM/DOM optical diagnostics functionality, which provides real time access to device operating parameters, control and status registers as specified in SFF-8472. DWDM-10G-XFP-80-XX operates



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in standard 0° to 70°C temperature range and has a Double LC interface. This XFP module supports 1.24-11.3Gbps data rate and such applications as 10G Ethernet (10.31Gbps), 1G Ethernet (1.25Gbps), STM-64 (9.95Gbps), STM-16 (2.488 Gbps), OTU1 (2.66Gbps), OTU2 (10.70Gbps), OTU1e (11.049Gbps), OTU2e (11.095Gbps), OTU1f (11.27Gbps), OTU2f (11.32Gbps), ODU0 (1.244Gbps), ODU1 (2.498Gbps), ODU2 (10.037Gbps), ODU2e (10.399Gbps), 10G FC (10.52 Gbps), 8.5G FC (8.5 Gbps), 4G FC (4.25 Gbps), 2G FC (2.125 Gbps), 1G FC (1.0625 Gbps).

This fixed wavelength 10G DWDM XFP Module is CE/RoHS certified and it is Compliant with product safety standards. 10 DWDM XFP Transceiver is fully compliant to XFP Multi Source Agreement. Consequently, it means that module is compatible with 80% of networking equipment, where is not implemented a special algorithm for protection against third party modules. However – we can provide an XFP transceiver with custom-encoded firmware in order to make it work in almost any base station manufacturers equipment. Therefore, we will be glad to know your requirements – Contact us.

General parameter	Value		
Media Type:	Single-Mode Fiber (SMF)		
Connectors:	Double LC		
TX Wavelength:	Fixed 45 Channel (CH: 17-61) ITU-T 100Ghz C-Band		
RX Wavelength:	1270-1610 nm		
Minimum Optical Budget:	23dB		
Maximum Distance:	80 km		
Supported Data Rate:	1.24-11.3Gbps		
Supported Applications:	10G Ethernet (10.31Gbps), 1G Ethernet (1.25Gbps), STM-64 (9.95Gbps), STM-16 (2.488 Gbps), OTU1 (2.66Gbps), OTU2 (10.70Gbps), OTU1e (11.049Gbps), OTU2e (11.095Gbps), OTU1 (11.27Gbps), OTU2f (11.32Gbps), ODU0 (1.244Gbps), ODU1 (2.498Gbps), ODU2 (10.037Gbps), ODU2e (10.399Gbps), 10G FC (10.52 Gbps), 8.5G FC (8.5 Gbps), 4G FC (4.25 Gbps), 2G FC (2.125 Gbps), 1G FC (1.0625 Gbps)		
Digital Diagnostic Monitoring (DDM):	Supported		
Optical Clock And Data Recovery (CDR):	Supported		
Operating Temperature Range:	0° to 70°C		
Power Supply Voltage Typical:	+ 3.3V		

### Product Specification:



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Transmitter Parameters:	Value	
Transmitter Type:	EML Laser	
Tx Wavelength Bandwidth:	ITU-T DWDM Grid 100 GHz C-Band	
Minimum Transmitting Power:	0 dBm	
Maximum Transmitting Power:	4 dBm	

Receiver Parameters:	Value
Receiver Type:	APD
Rx Wavelength Bandwidth:	1270-1610 nm
Receiver Sensitivity:	-23 dBm
Receiver Overload:	-10 dBm









### Compatibility:

EDGE Optical transceivers can be provided with custom-encoded firmware, in order to provide compatibility with more then 100 vendor brands in data and telecom communications industry:

MS - General MSA AD - ADVA AE - Advantech AL - Alcatel (Nokia) **AT** - Allied Telesis **AR** - Arista **AS** - Arris AV - Avaya BC - Barracuda BR - Broadcom QL - Cavium (Qlogic) **CR**- Ceragon **CP** - Checkpoint CH - Chelsio **CN** - Ciena CI - Cisco LI - Cisco (Linksys) CE - Comnet **CO** - Coriant DH - Dahua DC - DCN **DL** - Dell & Force10 DK - D-Link

DZ - DZS(Dasan-Zhone) EI - ECI **EC** - EdgeCore **EW** - EdgeWare **EL** - Fltex EM - EMC2 **EN** - Enterasys **ER** - Ericsson EF - FXFO **EX** - Extreme Networks F5 - F5 Networks **FI** - Finisar FO - Fortinet FU - Fujitsu H3 - H3C HI - Hirschmann HU - Huawei IB - IBM IF - Infinera IN - Intel IX - Ixia JU - Juniper Networks KM - KeyMile

KY - KyLand LN - Lenovo ML - Mellanox ME - Meraki (Cisco) MT - MikroTik MO - Moxa MR - MRV NC - NEC **NG** - Netgear NK - Nokia NT - Nortel NS - NSN **OR** - Oracle **PA** - Palo Alto Network PL - Planet QC - QCT(Quanta) QN - QNAP RD - RAD **RW** - RadWare RC - Raisecom **RK** - Ruckus **RU** - Ruijie Networks SG - Samsung

SV - Sandvine SC - Silicom SF - SolarFlare SW - Sonicwall **SM** - Supermicro SY - Synology TC - Telco Systems TP - TP-LINK **TN** - Trendnet **UN** - Ubiquiti Networks VX - VeFx WG - WatchGuard WS - Waystream WT - Westermo ZT - ZTE ZX - Zyxel HP - HP AG - Avago OC - Oclaro EU - Emulex TM - Transmode AU - HP Aruba XX - Other

#### Warranty:

EDGE Optic's provides a limited **warranty for sixty (60) months** from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship. Warranty does not cover damage caused by improper deployment, misuse and accidents.

### Ordering Information:

P	art Number	Data Rate	Applications	Temperature Range	Available DWDM Channels
DWDM	-10G-XFP-80-XX*	1.24-11.3Gbps	Up to 80 km	0°- 70°C	<b>17 to 61</b> ITU-T 100Ghz C-Band 1563.86nm to 1528.77nm

\*XX represents the chosen channel, thus Ch.17 would be DWDM-10G-XFP-80-17 (1563.86nm, 191.7Thz)



