

## Key Highlights:

- **Type:** SFP+
- **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:** 9.95-11.32Gbps
- **DDM/DOM:** Supported
- **Temperature:** Standard 0°-70°C



## Optical Transceiver : DWDM-10G-SFP-80-XX

### Product Description:

DWDM-10G-SFP-80-XX is Multi-Vendor MSA Compatible 10G DWDM SFP+ multi-rate (9.95-11.32Gbps) 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-SFP-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 SFP+ 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-SFP-80-XX 10G DWDM SFP+ 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 SFP+ 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-SFP-80-XX operates in standard 0° to 70°C temperature range and has a Double LC interface. This SFP+ module supports 9.95-11.32Gbps data rate and such applications as 10G Ethernet (10.31Gbps), STM-64 (9.95Gbps), ODU2 (10.037Gbps), ODU2e (10.399Gbps), OTU2 (10.70Gbps), OTU1f (11.27Gbps), OTU2f (11.32Gbps), OTU1e (11.049Gbps), OTU2e (11.095Gps).

This fixed wavelength 10G DWDM SFP+ Module is CE/RoHS certified and it is Compliant with product safety standards. 10 DWDM SFP+ Transceiver is fully compliant to SFP+ 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 SFP+ 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.

## Product Specification:

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:	9.95-11.32Gbps
Supported Applications:	10G Ethernet (10.31Gbps), STM-64 (9.95Gbps), ODU2 (10.037Gbps), ODU2e (10.399Gbps), OTU2 (10.70Gbps), OTU1f (11.27Gbps), OTU2f (11.32Gbps), OTU1e (11.049Gbps), OTU2e (11.095Gps)
Digital Diagnostic Monitoring (DDM):	Supported
Operating Temperature Range:	0° to 70°C
Power Supply Voltage Typical:	+ 3.3V
Compliance:	SFP MSA, SFF-8472, RoHS, CE, Class 1 FDA and IEC60825-1 LaserSafety Compliant



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:	-6 dBm



## Compatibility:

EDGE Optical transceivers can be provided with custom-encoded firmware, in order to provide compatibility with more than 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** - Eltex**EM** - EMC2**EN** - Enterasys**ER** - Ericsson**EF** - EXFO**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** - VeEx**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:

Part Number	Data Rate	Applications	Temperature Range	Available DWDM Channels
DWDM-10G-SFP-80-XX*	9.95-11.32Gbps	Up to 80 km	0°- 70°C	17 to 61 ITU-T 100Ghz C-Band 1563.86nm to 1528.77nm

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

