

Ge Product Data Sheet

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: 26dB
- Max. Distance: 100km
- Dispersion Tolerance: 2000 ps/nm
- Data Rate: 9.95-11.32Gbps
- DDM/DOM: Supported
- Temperature: Standard 0°-70°C



Optical Transceiver : DWDM-10G-SFP-100

Product Description:

The DWDM-10G-SFP-100 is a Multi-Vendor MSA Compatible SFP+ (Small Form Factor Pluggable) Transceiver that operates over a Double Fiber DWDM Single-Mode Fiber (SMF) optical cable. It has a minimum guaranteed optical budget of 26 dB, which is usually enough to reach a distance of about 100 km. However, distance is only an indicative parameter calculated for identification comfort. Finally, we calculate distance while keeping in mind the minimum optical budget and the average attenuation of optical cabling in industry. This transceiver employs a high-quality EML Laser transmitter operating at nominal wavelengths according to ITU-T DWDM 100 Ghz Grid channels from 17 to 61 (1563.86 nm to 1528.77 nm), as well as 1270-1610 nm APD Photodiode receiver. This modules has a dispersion tolerance of 2000 ps/nm.

DDM/DOM optical diagnostics are supported by this module, which provides diagnostic information about the current operating conditions. The DWDM-10G-SFP-100 has a Double LC interface and operates in the standard 0°-70°C temperature range. SFP+ supports data rates ranging from 9.95 to 11.32Gbps and applications such as 10G Ethernet (10.31Gbps), STM-64 (9.95Gbps), ODU2 (10.037Gbps), ODU2e (10.399Gbps), OTU2 (10.70Gbps), OTU1f (11.27Gbps), OTU2f (11.32Gbps),



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OTU1e (11.049Gbps), OTU2e (11.095Gps). SFP+ Double Fiber DWDM-10G-SFP-100 DWDM optical transceiver is a multi-purpose module that is used in a variety of networking applications today. As a result, Internet Service Provider (ISP) Fiber To The Home aggregation and backbone, Mobile operator core and backhaul SDH/SONET applications, Data Center networking site interconnections, and other optical links are the most popular applications.

The transceiver is CE/RoHS certified and fulfills product safety standards. DWDM-10G-SFP-100 SFP+ Transceiver complies with the SFP+ Multi Source Agreement SFF-8431 and IEEE 802.3ae 10GBASE-ZR. As a result, the module is compatible with 80% of networking equipment where no special algorithm for protection against third-party modules is implemented. However, we can provide an SFP+ transceiver with custom-encoded firmware that will work in almost any equipment. Because we are committed to providing high-quality service, we conduct rigorous quality checks before delivering our products. As a result, we perform optical parameter measurements, connector cleanness tests, and EEPROM memory data validation tests on SFP+ transceivers. Please contact us if you require any additional information.

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:	26dB		
Maximum Distance:	100 km		
Dispersion Tolerance:	2000 ps/nm		
Supported Data Rate:	9.95-11.32Gbps		
Supported Applications:	10G Ethernet (10.31Gbps), STM-64 (9.95Gbps), ODU (10.037Gbps), ODU2e (10.399Gbps), OTU2 (10.70Gbps), OTU1 (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, SFF-8431, IEEE 802.3ae 10GBASE-ZR, RoHS, CE, Class 1 FDA and IEC60825-1 Laser Safety Compliant		

Product Specification:







Transmitter Parameters:	Value			
Transmitter Type:	EML Laser			
Tx Wavelength Bandwidth:	ITU-T DWDM Grid 100 GHz C-Band			
Minimum Transmitting Power:	tting Power: +1 dBm			
Maximum Transmitting Power:	ver: 5 dBm			
Extinction Ratio:	8.2 dB			
Transmitter Dispersion Penalty:	2.5 dB			
Relative Intensity Noise:	-128 dB/Hz			
Optical Return Loss Tolerance:	20 dB			

Receiver Parameters:	Value
Receiver Type:	APD
Rx Wavelength Bandwidth:	1270-1610 nm
Receiver Sensitivity:	-25 dBm
Receiver Overload:	-7 dBm
Los Assert:	-40 dBm
Los Dessert:	-24 dBm
Los Hysteresis:	0.5 dB
Receiver Reflectance:	-12 dB









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) EL - ECI **EC** - EdgeCore **EW** - EdgeWare **EL** - Fltex EM - FMC2 **EN** - Enterasys **ER** - Ericsson FF - EXEO **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:

Part Number	Data Rate	Applications	Temperature Range	Available DWDM Channels
DWDM-10G-SFP-100-XX*	9.95-11.32Gbps	Up to 100 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-100-17 (1563.86nm, 191.7Thz)



