



### Key Highlights:

- Type: SFP+
- Tx Wavelength: Ch. 17 to Ch. 61 (1563.86 nm 1528.77 nm)
- Rx Wavelength: ITU-T DWDM Grid 100 GHz C-B and
- Media Type: Single- Mode Fiber
- Fiber Type: Single-Mode Fiber (SMF)
- Optical Budget: 11 dB
- Max. Distance: 20 km
- Data Rate: 4.25-14.025 Gbps
- Temperature: Standard 0°-70°C

# **Optical Transceiver : DWDM-16GFC-SFP-20-XX**

#### Product Description:

DWDM-16GFC-SFP-20-XX is Multi-Vendor MSA Compatible SFP+ (Small Form factor Pluggable) Transceiver, operating over Double Fiber DWDM Single-Mode Fiber (SMF) optical cable. It has minimum guaranteed optical budget of 11 dB, with in most cases is enough to reach about 20 km distance. However, distance is just indicative parameter calculated for comfort of identification. Eventually we calculate distance taking in account minimal optical budget and average attenuation of optical cabling in industry. This transceiver use top quality EML Laser transmitter with operating at nominal wavelength Ch. 17 to Ch. 61 (1563.86 nm – 1528.77 nm) and ITU-T DWDM Grid 100 GHz C-Band PIN Photodiode receiver. It support DDM/DOM optical diagnostics, with provide diagnostic information about the present operating conditions. DWDM-16GFC-SFP-20-XX operates in Standard 0°-70°C temperature range and has Double LC interface. SFP+ support 4.25-14.025 Gbps data rate and such applications as 16G FC (14.025Gbps)]8G FC (8.5 Gbps)]4G FC (4.25 Gbps).



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ODWDM-16GFC-SFP-20-XX SFP+ Double Fiber DWDM optical transceiver is multi-purpose module used in number of different places of today's networking. Consequently, most popular applications are T11 Fibre Channel infrastructure, SAN Networking backwards compatible with 8G and 4G Fibre Channel, and other optical links.

Transceiver is CE/RoHS certified and it is Compliant with product safety standards. DWDM-16GFC-SFP-20-XX SFP+ Transceiver is fully compliant to SFP+ Multi Source Agreement SFF-8431. 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 SFP+ transceiver with custom-encoded firmware in order to make it work almost in any equipment. Therefore, we will be glad to know what your requirement is. Because our focus is providing top quality service, we are performing serious quality checks before delivery of our products. As a result, we do optical parameter measurements, connector cleanness tests and SFP+ transceiver EEPROM memory data validation tests.

#### Product Specification:

General parameter	Value		
Media Type:	Single-Mode Fiber (SMF)		
Connectors:	Double LC		
TX Wavelength:	Ch. 17 to Ch. 61 (1563.86 nm - 1528.77 nm)		
RX Wavelength:	ITU-T DWDM Grid 100 GHz C-Band		
Minimum Optical Budget:	11 dB		
Maximum Distance:	20 km		
Supported Data Rate:	4.25-14.025 Gbps		
Supported Applications:	16G FC (14.025Gbps) 8G FC (8.5 Gbps) 4G FC (4.25 Gbps)		
DDM/DOM:	Supported		
Temperature Range:	Standard 0°-70°C		
Power Supply Voltage Typical:	+3.3V single power supply		
Compliance:	CE Class 1 FDA and IEC60825-1 Laser Safety Compli- ant RoHS SFF-8431 SFP MSA FC-PI-5 Rev 6.00		









# Product Specification:

Transmitter Parameters:	Value		
Transmitter Type:	EML Laser		
Tx Wavelength Bandwidth:	100GHz (0.8nm)		
Minimum Transmitting Power:	-2 dBm		
Maximum Transmitting Power:	2 dBm		

Receiver Parameters:	Value		
Receiver Type:			
	PIN Photodiode		
Rx Wavelength Bandwidth:	1260 - 1620 nm		
Receiver Sensitivity:	-13 dBm		
Receiver Overload:	2 dBm		







Te Product Data Sheet

#### 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 -** 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 - Zvxel 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.

# Ordering Information:

Part Number	Data Rate	Applications	Temperature Range	Available DWDM Chan- nels
DWDM-16GFC-SFP-20-XX*	4.25-14.025 Gbps	Up to 20 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-16GFC-SFP-20-17 (1563.86nm, 191.7Thz)



