edge
OPTICAL SOLUTIONS

Product Data Sheet

| Key Highlights:

- Type: CFP4
- Compatibility: Multi-Vendor MSA Compatible
- Tx Wavelength: 1310 nm (LAN WDM)
- Rx Wavelength: 1310 nm (LAN WDM)
- Media Type: Single-Mode Fiber (SMF)
- Optical Budget: 6.3 dB
- Max. Distance: 10 km
- Data Rate: 103.1 - 112 Gbps
- Temperature: Standard 0-70°C

Optical Transceiver: 100G-CFP4-10

| Product Description:

100G-CFP4-10 is Multi-Vendor MSA Compatible CFP4 (C = 100 in Roman numerals; Centum F = Form Factor; P = Pluggable; 4th generation) optical transceiver, designed to support 100G Ethernet (100GBASE-LR4) and 112G OTN according ITU-T G.959.1 applications using four parallel LAN WDM separated data lanes on each direction . 100G-CFP4-10 operating over two-fiber Single-Mode Fiber (SMF) optical cable. It has minimum guaranteed optical budget of 6.3 dB, with in most cases is enough to reach about 10 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. For each direction this transceiver use 4xEML laser transmitters operating at 1310 band separated by wavelengths (1295.56, 1300.05, 1304.58, 1309.14nm) and 4 x PIN photodiode receivers for each data lane. It support DDM/DOM optical diagnostics, with provide diagnostic information about the present operating conditions. 100G-CFP4-10 operates in Standard 0°-70°C temperature range and has Double LC interface. CFP4 LR4 100G transceiver support 103.1 Gbps – 112 Gbps data rate and such applications as 100G Base LR4 for LAN and 112G OTU-4 for OTN WAN. Most popular applications for CFP4 LR4 100G is LAN Ethernet connections for Datacom and optical transport networking (OTN).

      CFP4 LR4 100G Transceiver is CE/RoHS certified and it is Compliant with relevant product safety standards. 100G-CFP4-10 is fully compliant to CFP MSA CFP4 Hardware Specification, Revision 0.2. 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 CFP4 transceiver with custom-encoded firmware in order to make it work almost in any equipment supporting CFP4 form-factor. 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 EEPROM memory data validation tests.

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Product Specification:

Parameter	Value
Media Type:	Single-Mode Fiber (SMF)
Tx Wavelength:	1310 nm LAN WDM (1295.56, 1300.05, 1304.58, 1309.14nm)
Rx Wavelength:	1310 nm LAN WDM (1295.56, 1300.05, 1304.58, 1309.14nm)
Minimum Optical Budget:	6.3 dB
Maximum Distance:	10 km
Supported Data Rate:	103.1 - 112 Gbps
Supported Applications:	100G Ethernet (103.1Gbps),OTU4 (112Gbps)
DDM/DOM:	Supported
Temperature Range:	Standard 0-70°C
Connectors:	Double LC
Tx Wavelength Bandwidth:	4 nm (1295.56, 1300.05, 1304.58, 1309.14nm)
Rx Wavelength Bandwidth:	4 nm (1295.56, 1300.05, 1304.58, 1309.14nm)
Minimum Transmitting Power:	-4.3 dB
Maximum Transmitting Power:	4.5 dB
Receiver Sensitivity:	-10.6 dBm
Receiver Overload:	4.5 dBm
Transmitter Type:	4 x EML Laser
Receiver Type:	4 x PIN Photodiode
Power:	+3.3V single power supply
MTBF	1 000 000 Hours
Chip-set:	SEMTECH/MAXIM/MINDSPEED/UX/AVAGO
Compliance:	CFP4 MSA, IEEE 802.3ba, OTN OTU4, RoHS

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Compatibility:

EDGE Optical transceivers can be provided with custom-encoded firmware, in order to provide compatibility with more then 50 vendor brands in data and telecom communications industry:

MS - General MSA
AD - ADVA
AL - Alcatel-Lucent
AR - Arista
AV - Avaya
BR - Brocade
CN - Ciena
CI - Cisco
DL - Dell & Force10
DK - D-Link
EM - EMC2
ET - Enterasys

ER - Ericsson
EX - Extreme Networks
F5 - F5 Networks
FO - Fortinet
FU - Fujitsu
H3 - H3C
HI - Hirschmann
HP* - HP Networking
HS* - HP Storage
HU - Huawei
IB - IBM
IF - Infinera

IN - Intel
JU - Juniper Networks
LI - Linksys
ML - Mellanox
ME - Meraki (Cisco)
MT - MikroTik
MO - Moxa
MR - MRV
NG - Netgear
NS - NSN
PA - Palo Alto Network
QL - Qlogic

RD - RAD
RU - Ruijie Networks
SM - Supermicro
SY - Synology
TC - Telco Systems
TP - TP-LINK
TN - Trendnet
WG - WatchGuard
ZT - ZTE
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.

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