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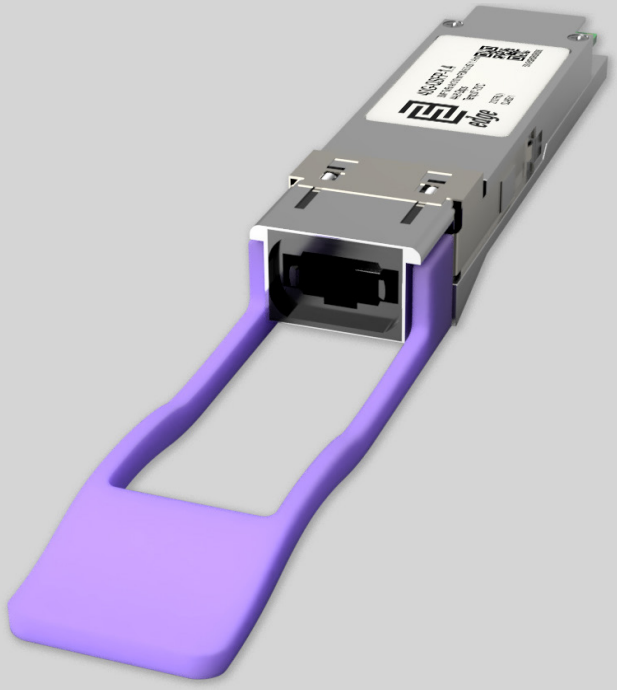
Product Data Sheet

Key Highlights:

- Type: QSFP+
- Compatibility: Multi-Vendor MSA Compatible
- Tx/Rx Wavelength: 1310 nm / 1310 nm
- Media Type: Single Mode Fiber
- Optical Budget: 6.3 dB
- Max. Distance: 1.4km
- Data Rate: 39.81-44.8 Gbps
- Temperature: Standard 0°-70°C



Optical Transceiver: 40G-QSFP-1.4

Product Description:

40G-QSFP-1.4 is Multi-Vendor MSA Compatible QSFP (Quad Small Form-factor Pluggable) Transceiver, operating over four parallel pairs of singlemode optical fiber providing four independent optical communication lanes. It has minimum guaranteed optical budget of 6.3 dB, which in most cases is enough to reach 1.4km distance using single-mode cable. 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 lane 40G-QSFP-1.4 uses 4 x FP transmitting lasers and 4 x PIN receivers, operating each lane with speeds of 11.2 Gbps, giving an aggregated maximum bandwidth of 44.8 Gbps. Module supports DDM/DOM optical diagnostics, which provide diagnostic information about the present operating conditions. 40G-QSFP-1.4 operates in Standard 0°-70°C temperature range and has MPO 12 connector. 40G-QSFP-1.4 support 39.81 - 44.8 Gbps data rate and such applications as 40G Ethernet (41.25 Gbps), STM256 (39.81 Gbps), OTU3 (43.108 Gbps) and OTU3e2 (44.58 Gbps). 40G-QSFP-1.4 optical transceiver is multi-purpose module used in number of different places of today's networking. Consequently, most popular applications are Internet Service Provider (ISP) Fiber To The Home aggregation and backbone, Mobile operator core and back-haul 40G applications, Data Center networking site interconnections and other optical links.

Transceiver is CE/RoHS certified and it is Compliant with product safety standards. 40G-QSFP-1.4 Transceiver is fully compliant to QSFP+ 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 QSFP+ 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 QSFP+ transceiver EEPROM memory data validation tests.

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Product Data Sheet

Product Specification:

Parameter	Value
Media Type:	Single Mode Fiber
TX Wavelength:	4x1310 nm PSM
RX Wavelength:	4x1310 nm PSM
Minimum Optical Budget:	6.3 dB
Maximum Distance:	1.4 km
Supported Data Rate:	39.81 - 44.8 Gbps
Supported Applications:	40G Ethernet (41.25 Gbps), STM256 (39.81 Gbps), OTU3 (43.108 Gbps) and OTU3e2 (44.58 Gbps)
DDM/DOM:	Supported
Temperature Range:	Standard 0°-70°C
Connectors:	MTP/MPO
Tx Wavelength Bandwidth:	80nm (1270-1350 nm)
Rx Wavelength Bandwidth:	80nm (1270-1350 nm)
Minimum Transmitting Power:	Each Lane -5.2 dBm
Maximum Transmitting Power:	Each Lane 0.5 dBm
Receiver Sensitivity:	Each Lane -11.5 dBm
Receiver Overload:	Each Lane 3 dBm
Transmitter Type:	4 x FP Laser
Receiver Type:	4 x PIN photodiode
Power:	+3.3V single power supply
Compliance:	QSFP+ MSA, SFF-8436, 40GBASE-IR4-PSM, CE, Class 1 FDA and IEC60825-1 Laser Safety Compliant, 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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