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Product Data Sheet

Key Highlights:

- **Type**: 40GBASE QSFP
- **Compatibility:** Multi-Vendor MSA Compatible
- **Tx/Rx Wavelength:** 850, 880, 910, 940nm
- **Laser:** VSCEL
- **Fiber Type:** Multi-Mode Fiber (MMF)
- **Connectors:** Double LC
- **Optical Budget:** 4.5 dB
- **Max. Distance:** 350m
- **Data Rate:** 41.2 Gbps
- **Forward Error Correction:** Supported
- **DDM/DOM:** Supported
- **Power Consumption:** ≤4.5W
- **Temperature:** Standard 0°-70°C

Optical Transceiver : SWDM4-40G-QSFP-350

Product Description:

SWDM4-40G-QSFP-350 is Multi-Vendor MSA Compatible QSFP (Quad Small Form-factor Pluggable) Transceiver, operating over pair of Multi-Mode optical fiber providing four independent optical communication lanes separated from each other using SWDM4 technology. Module has minimum guaranteed optical budget of 4.5 dB, which in most cases is enough to reach 240 meters (OM3) and 350 meters (OM4) 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. SWDM4-40G-QSFP-350 uses 4 x VCSEL transmitting lasers and 4 x PIN receivers, operating each lane with speeds of 10.31 Gbps, giving an aggregated maximum bandwidth of 41.2 Gbps. Module supports DDM/DOM optical diagnostics, which provide diagnostic information about the present operating conditions. SWDM4-40G-QSFP-350 operates in Standard 0°-70°C temperature range and has double LC connector. SWDM4-40G-QSFP-350 support 41.2 Gbps data rate and such applications as 40G Ethernet (41.2 Gbps). SWDM4-40G-QSFP-350 optical transceiver is multi-purpose module used in number of different places of today's networking. Consequently, most popular applications are Internet Service Provider

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(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. SWDM4-40G-QSFP-350 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 – Contact us

Product Specification:

General parameter	Value
Media Type:	Multi-Mode Fiber (MMF)
Connectors:	Double LC
TX Wavelength:	850/ 880/ 910/ 940nm
RX Wavelength:	850/ 880/ 910/ 940nm
Minimum Optical Budget:	4.5 dB
Maximum Distance:	350m
Supported Data Rate:	41.2 Gbps
Supported Applications:	40G Ethernet (41.25Gbps)
Digital Diagnostic Monitoring (DDM):	Supported
Forward Error Correction (FEC):	Supported
Operating Temperature Range:	Standard 0°- 70°C
Storage Temperature Range:	- 40° to 85°C
Relative Humidity (Non-Condensation):	5 to 95%
Power Consumption:	≤4.5W
Power Supply Voltage Typical:	+ 3.3V
Power Supply Voltage Range:	-3.135 to 3.465V
Compliance:	IEEE802.3ba, SWDM MSA, CE, QSFP+ MSA, RoHS, SFF-8636

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Transmitter Parameters:	Value
Transmitter Type:	4xVSCEL Laser
Tx Wavelength Bandwidth:	850-940 nm
Average Launch Power, Each Lane (Max):	-7.5 dBm
Average Launch Power, Each Lane (Min):	3 dBm
Extinction Ratio (Min):	2 dB

Receiver Parameters:	Value
Receiver Type:	PIN Photodiode Array
Rx Wavelength Bandwidth:	850-940 nm
Average Receive Power Each Lane (Min):	-12.5 dBm
Average Receive Power Each Lane (Max):	2.4 dBm
Damage Threshold Each Lane:	3.8 dBm

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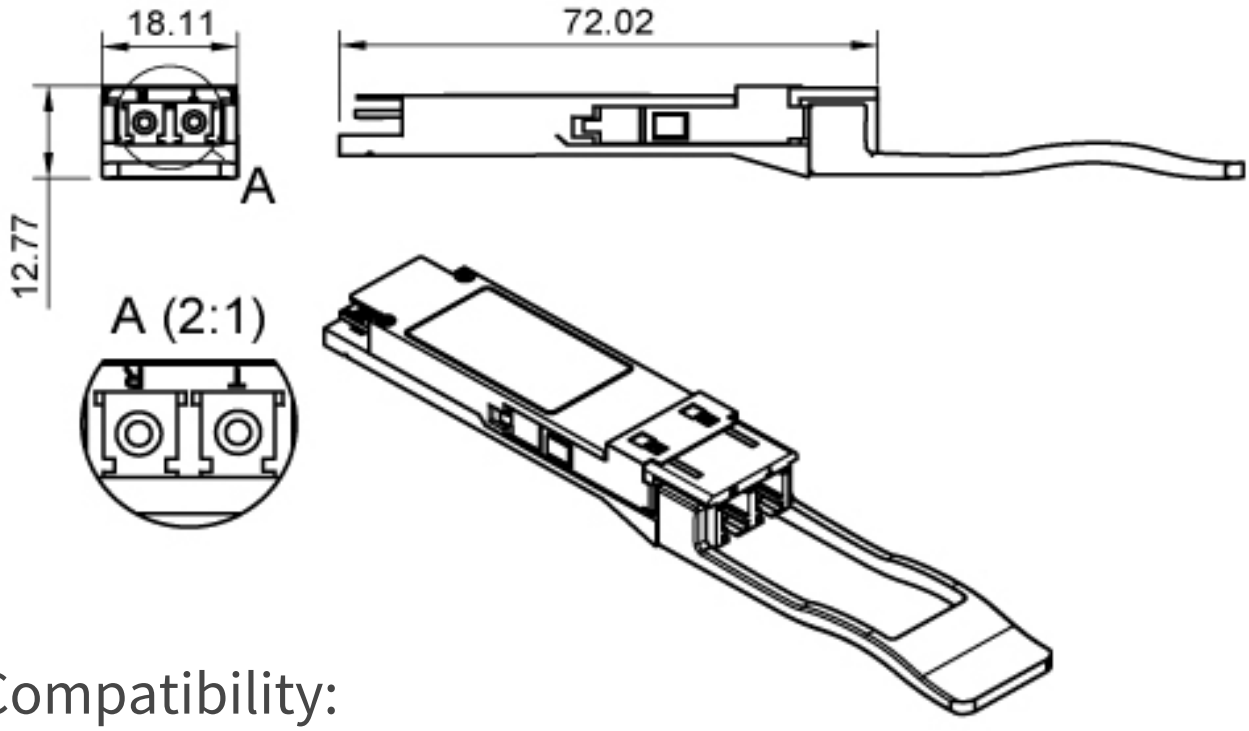
Product Data Sheet

Mechanical Drawing



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 - Zyxel
HP - HP
AG - Avago
OC - Oclaro
EU - Emulex
TM - Transmode
AU - HP Aruba
XX - Other

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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.

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