

QSFP-40G-ER4

40G Ethernet QSFP+ for singlemode fiber

DESCRIPTION

The QSFP-40G-ER4 transceiver is a Quad Small Formfactor Pluggable module for bi-directional serial optical data communications such as 40GBASE Ethernet and 10GBASE Ethernet. The transceiver uses four parallel data streams of 10.3 Gbps to provide an aggregate signal rate of 41.2 Gbps. The four lanes are launched with center wavelengths of 1271, 1291, 1311 and 1331 nm and then multiplexed on to singlemode fiber. In the receiver the lanes are demultiplexed and retimed.

The modules are fully compliant to the QSFP+ MSA SFF-8436 and are hot pluggable. Digital diagnostic functions are available via an I2C serial bus also specified in SFF-8436. The modules meet the requirements of the IEEE 802.3 40GBASE-ER and are suitable for interconnections in 40G Ethernet environments.

The QSFP-40G-ER4 uses standard CWDM wavelengths 1271-1331. This makes it possible to use a standard CWDM demultiplexer to split the channels in order to create a 40G to 4x10G breakout. The QSFP-40G-ER4 also supports 10GBASE-ER and supports 1-4 10G channels operating simultaneously.

APPLICATIONS

- 40GBASE-ER4
- 10GBASE-ER
- Data center

FEATURES

- Up to 40 km transmission on singlemode fiber
- Hot-Pluggable QSFP footprint
- Duplex LC interface for fiber pair operation
- QSFP+ MSA compatible
- CWDM wavelengths 1271, 1291, 1311 and 1331 nm
- Digital Diagnostic monitoring interface
- Operating Case Temperature: Standard: 0°C to 70°C
- Power dissipation < 3.5 W



LASER SAFETY

This transceiver is a Class 1 laser product. It complies with IEC-60825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical ports of the module need to be terminated with an optical connector or a dust plug.

OPTICAL PARAMETERS

Part no.	Fiber type	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
QSFP-40G-ER4	SM	1271-1331	-3 to 5	-19 to 3	16

ORDERING INFORMATION

Part no.	Description
QSFP-40G-ER4	QSFP+, 40G Ethernet, 1310nm, SM, DDM, 16dB, 40km