

40km Optical Module Specifications



Article Overview

40km optical modules are designed for long-distance transmission over single-mode fiber, typically operating at 1550 nm for 10G and 1310–1550 nm for 40G/100G, with LC duplex or QSFP interfaces and optical link budgets around 15 dB for 10G and higher for 100G.

10GBASE-ER SFP+ Modules

Key Specifications:

- Data Rate: 10 Gbps (supports multi-rate 1.25–11.32 Gbps for Ethernet, Fibre Channel, and SONET/SDH)
- Wavelength: 1550 nm DFB laser
- Maximum Reach: 40 km over single-mode fiber (G.652/OS2)
- Connector Type: Duplex LC/UPC
- Optical Link Budget: ~15 dB, supporting long-haul metro and enterprise links
- Monitoring: Digital Optical Monitoring (DOM/DDM) for real-time transmit/receive power, temperature, voltage, and laser bias current
- Form Factor: Hot-pluggable SFP+ (SFF-8431 compliant)
- Power Supply: +3.3 V single supply
- Applications: Metro Ethernet, campus backbone, data center interconnects, and telecom access networks

40GBASE-ER4 QSFP+ Modules

Key Specifications:...

Article Content

What are the detailed parameters of the optical module

Optical modules generally have the following specifications: multi-mode 550m, single-mode 15km, 40km, 80km and 120km and so on. Loss and dispersion: the two mainly affect the

Multi-mode optical fiber

Multi-mode optical fiber is a type of optical fiber mostly used for communication over short distances, such as within a building or on a campus. Multi-mode links can be used for data rates up to 800 Gbit/s.

HUAWEI 10G 1550nm 40km SM SFP module

HUAWEI 10G 1550nm 40km SM SFP module This transceiver is manufactured with high-quality components and tested strictly to meet or exceed original manufacturer specifications and optimized

40G Optical Transceivers and Cables Portfolio | FS

1. 40GBASE Transceiver Module Series 40G QSFP+ Transceiver Module Series include SR4, BIDI, CSR4, PIR4, LX4, IR4, LR4, PLR4 and ER4. The series of product adopts LC or MTP/MPO

400G QSFP-DD ER4 40km Optic Module

As one of the most professional 400g qsfp-dd er4 40km optic module manufacturers and suppliers in China, we're featured by customized products for compatible brands. Please rest assured to buy bulk

40km Fiber Optic Sfp: Structure, Specifications, and Common Industry ...

Types of 40 km Fiber Optic SFPs A 40 km fiber optic SFP (Small Form-factor Pluggable) is a compact, hot-pluggable transceiver used in telecommunications and data communications for high-speed data

10G-SFP+ SF-40KM

Overview 10G-SFP+ SF-40KM The 10G SFP+ transceivers is cost effective Bi-Directional transceiver a high performance, module supporting data rate of 10Gbps and 40km transmission distance with SMF

10GBASE-BR BIDI SFP+ 1270/1330nm - High-Speed Long Reach

High-speed 10GBASE-BR BIDI SFP+ transceiver with 1270/1330nm wavelengths and 40km reach over SMF. Designed for telecom, metro, and enterprise optical networks.

100Gb/s QSFP28 40KM Optical Transceiver Module

Low Power Mode (LPMode) pin is used to set the maximum power consumption for the product in order to protect hosts that are not capable of cooling higher power modules, should such modules be

SFP-10G-ER Explained: Powering 40km 10Gbps Optical Links

SFP-10G-ER is a 10G SFP+ transceiver for up to 40km over single-mode fiber, featuring 1550nm wavelength, LC connector, and real-time monitoring.

40G QSFP+ Optical Transceivers Complete Guide | Fibrecross

How 40G QSFP+ optical transceivers boost performance in data centers and telecom networks. Learn about types, use cases, and cost-saving benefits.

40Gbps QSFP+ Optical Modules

40Gbps QSFP+ Optical Modules QSFP-40G-LR4 QSFP-40G-SDLC-PAM QSFP-40G-SR-BD (02311FPA) QSFP-40G-eSR4 QSFP-40G-iSR4 QSFP-40G-LX4 QSFP-40G-ER4 QSFP-40G-LR4

10G XFP ER 1550nm 40km Optical Transceiver

Diagnostic Performance Monitoring of module temperature, Supply Voltages, laser bias current, transmit optical power, and receive optical power RoHS6 compliant (lead free)

QSFP-40G-ER4 Demystified: Your Guide to 40Gbps Over 40km

LINK-PP 's optical modules, including their QSFP-40G-ER4 transceiver, are rigorously tested to ensure 100% compatibility with major OEM switches (Cisco, Juniper, Arista, etc.) and full

Fiber Optic Transceiver, XFP, 1550nm, ER SMF 40km, 10G/OC-192

Fiber Optic Transceiver, XFP, 1550nm, ER SMF 40km, 10G/OC-192 DDM, Adtran from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies,

10X10 MSA releases 10-km, 40-km specs for 100-Gbps optical

The 10X10 MSA has added to its potential portfolio of 100-Gbps optical modules with the announcement of specifications for 10-km and 40-km reach.

40GBASE-ER4 QSFP+ 1310nm 40km Transceiver Datasheet | FS

QSFP+ transceiver modules are designed for use in 40 Gigabit Ethernet links and 4x10G OTN client interfaces over single mode fiber. They are compliant with the QSFP+ MSA, IEEE 802.3bm

SFP+ 40km (10GBASE-ER): Extended-Reach Optical Module Guide

Understand SFP+ 40km (10GBASE-ER) modules, including specs, SMF compatibility, and how to choose the right extended-reach optical transceiver for your network.

100G-4WDM-QSFP40KM Extreme | €508 | EDGE Optical Solutions

Extreme Networks-coded 100G-4WDM-QSFP40KM compatible. 100GBASE-4WDM-40 QSFP28, 40km SMF over LAN-WDM, DOM. EU stock + lifetime warranty. €508.

Product Specification XFP 10G ER 40km LC Optical Transceiver

XFP 10G ER 40km LC Optical Transceiver Features Supports 10GBE Application at the Data-Rate of 9.953Gbps to 10.3125Gbps

Up to 40Gbps Data over 40km with 40GBASE-ER4 QSFP+ Module

The 40GBASE-ER4 QSFP+ 1310nm Optical Transceiver Module is designed to transmit 40GBASE Ethernet throughput up to 40km over duplex LC connectors using single-mode fiber (SMF) at

Comprehensive Guide to SFP BiDi 10G 40km Modules: Selection ...

Discover Link-PP's reliable and compatible SFP BiDi 10G 40km modules for high-speed, cost-effective single-fiber 10G networks. Learn about selection tips, wavelength pairing, installation

40km dcf-based passive dispersion compensation module

Description DCM (Dispersion Compensation Modules) provides fixed chromatic dispersion compensation for high-speed metro core, regional, and extended long haul DWDM networks, and it

100G QSFP ER4L 40km

100G QSFP ER4L 40km • Support line rates from 103.125 Gbps to 111.81Gbps • Compliant with QSFP28 Standard: SFF-8665 Revision 1.9, SFF-8636 Revision 2.6

SFP-10G-ER Explained: Powering 40km 10Gbps Optical Links

This comprehensive guide dives deep into the SFP-10G-ER optical transceiver module. Learn its technical specifications, key applications, compatibility nuances, advantages over other 10G

10GE SFP+ Optical Modules

If the SFP-10G-ER-1310 is connected to a 10Gbase-ER standard optical module (1550nm, 10GE, 40km), the maximum transmission distance is only 20km due to different specifications such as wavelength

QSFP+ 40G ZR4 Optical Transceiver Module 80km

Asterfusion 40G QSFP+ ZR4 optical transceiver modules support 40GBASE-ZR4 Ethernet. QSFP+ 40G 80km optical modules are designed for Ethernet, Telecom, and Infiniband.

Extend Your 100G Reach to 40km Transmission with FS Optics

In this article, we will provide a detailed overview of these different types of 40km 100G modules, analyzing their unique features and application scenarios to help you choose the most

40km line optical module

In modern optical transport networks, 100G optical modules with a transmission distance of 40km have emerged as a core technology to meet the needs of carriers' backbone networks, large enterprises,

10GBASE-ER SFP+ 40km 1550nm | EDGE Optical

The 10G-SFP-40 is a 10GBASE-ER SFP+ module that extends 10 Gigabit Ethernet up to 40 km over single-mode fiber at 1550 nm.

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.thebucketlistbook.co.za>

Email: sales@thebucketlistbook.co.za

Phone: +33 1 42 78 39 16

Address: 10 Rue de la Paix, 75002 Paris, France

This document is for informational purposes only. Specifications subject to change without notice.

