

# 40g optical module distance



## Overview

The Cisco 40GBASE-SR4 QSFP Modules support link lengths of 100 meters and 150 meters, respectively, on laser-optimized OM3, and OM4/OM5 multimode fibers. QSFP-40G-SR4-S is aligned to IEEE 40GBASE-SR4 optical specifications which support high-bandwidth 40G optical links over 12-fiber parallel. QSFP 40G 80km transceivers are designed for long-distance 40Gbps links where standard LR4 (10km) or ER4 (40km) optics cannot meet reach requirements. They are typically deployed in metro networks, inter-campus backbones, and data center interconnect (DCI) scenarios that require up to 80km. FS 40G QSFP+ optical transceiver module solutions offer a full range of QSFP+ modules from 150m to 80km reach, and used for high-density switching, routing and data center applications. Click to get your 40G QSFP+ transceiver modules from nearby warehouses. Trusted by 260K+. The 40G ZR4 optical module, with its ultra-long-distance transmission capability of 80km, has become a cost-effective choice for bridging 10G and 100G, with ETU-LINK products gaining market favor for their stable performance. This guide explores our QSFP+ form-factor solutions, designed to be the most reliable and cost-effective choice for data center interconnection (DCI).

## Article Content

How far can single-mode 40G go

Single-mode 40G fiber optic technology can transmit data up to 40 kilometers (24.8 miles) without the need for signal regeneration.

40G ZR4 Optical Module: The Preferred Solution for Long-Distance ...

The 40G ZR4, with its "80km transmission range, high cost-effectiveness, and high compatibility," has become a core choice in the mid-to-high-end long-haul market.

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

Fiberstore QSFP-LR4-40G, 40GbE QSFP+ Optical Transceiver Module

Genuine Fiberstore QSFP-LR4-40G QSFP+ Optical Transceiver Module in used condition. Designed for high-speed 40Gb Ethernet networking over long-distance single-mode fiber connections.

Connection Schemes for Optical Module and Fiber Patch Cord

40G QSFP SR4 optical module operates at a wavelength of 850nm, using MPO connectors, and pairs with OM3 multimode fiber patch cords for distances up to 100M and OM4

AOC, DAC, ACC, AEC Modules: The most Complete

Understand AOC, DAC, ACC & AEC modules in one guide. Compare features, benefits & best use cases to choose the right cable for your

Understanding SFP Modules in Networking Explained

Boost Your Bandwidth with 40G QSFP+ AOCs Superior Reach: Active Optical Cables (AOC) outperform DACs over longer distances with zero signal loss. Lightweight & Flexible: Thinner than ...

40G ZR4 Optical Module: The Preferred Solution for Long-Distance ...

The 40G ZR4 optical module, with its ultra-long-distance transmission capability of 80km, has become a cost-effective choice for bridging 10G and 100G, with ETU-LINK products gaining

Cisco 40GBASE QSFP Modules Data Sheet

The S-Class Cisco 40GBASE-SR4-S QSFP module supports link lengths of 100 and 150 meters, respectively, on laser-optimized OM3, and OM4/OM5 multimode fibers.

What is QSFP & QSFP+ Transceiver: An Ultimate

What is a QSFP & QSFP+ Transceiver? QSFP stands for Quad Small Form-factor Pluggable. By integrating four-lane signals into a single

SM 10G DWDM SFP+ 80km Optical Transceiver Module For Ethernet

10G DWDM SFP+ 80km Optical Transceiver Optical Module For 10G Ethernet Network  
This transceivers include an APD diode and temperature stabilized DFB-EML transmitter. Digital

QSFP Optical Module Planning for the Future: Key Trends 2026-2034

Explore the dynamic QSFP optical module market, forecast to reach \$14.7 billion by 2025 with a 4.5% CAGR. Discover key drivers, trends, and applications in high-speed networking and data

40G QSFP+ Transceiver Modules | Optical Transceivers

FS 40G QSFP+ optical transceiver module solutions offer a full range of QSFP+ modules from 150m to 80km reach, and used for high-density switching, routing and data center applications.

25G SFP28 Transceiver

Generic SFP-25G-ER Compatible 25GBASE-ER 1310nm 40KM DDM LC SMF Optical Transceiver Module Brocade Cisco Generic +1 25G / Generic / 40km / LC / SMF / SFP28 242 in real-time stock,

Optical Module Encapsulation Types

The eSFP and SFP optical modules have the same functions and services. They can substitute for each other as long as they have the same optical power, sensitivity, and transmission distance. The eSFP

Single Mode Optical Modules Market 2026

Telecommunication operators are extensively deploying Single Mode Optical Modules in fronthaul and backhaul applications to support 5G network rollouts. The modules enable high-speed, low-latency

Optical Transceiver Pricing: Cost Ranges by Speed

40G QSFP + modules for MMF SR4 links are among the most cost-efficient high-speed options; compatible 40G SR4 MPO modules can be found at modest

Optical Transceivers / SFP Modules – High-Performance Compatible

Comprehensive Optical Transceivers & SFP Module for High-Speed Networks LINK-PP offers a full range of optical transceivers and SFP module for modern data centers, telecom networks, and

X-linkit 40G Optical Modules: The Complete Guide for High-Speed ...

X-linkit's 40G portfolio solves a critical market pain point: the gap between short-reach limitations and the high cost of long-haul 100G solutions. Our full-distance matrix allows network

Optical module

An optical module is a typically hot-pluggable optical transceiver used in high-bandwidth data communications applications. Optical modules typically have an electrical interface on the side that

SFP Module Guide: SFP vs SFP+ vs SFP28 vs QSFP and How to

Learn what an SFP module is, how SFP, SFP+, SFP28, and QSFP differ, and how to choose the right module for speed, distance, fiber type, and compatibility.

1.25G 1310nm 40Km CWDM SFP Optical Transceiver Module Single

1.25G 1310nm 40Km CWDM SFP Optical Transceiver 1.25G Single Mode Product Description GEZHI compatible 1.25Gpbs CWDM SFP transceiver supports up to 40km, 80km, 120km or 160km link

The Ultimate Guide to SFP Modules (2026): Types,

Confused by SFP vs SFP+? Read the definitive 2026 guide on SFP modules. We explain Single Mode vs Multimode, DDM diagnostics, and how to choose the

Wholesale Optical Transceivers Module | 100G

Shop high-speed optical transceivers from Unitekfiber. We offer 100% compatible 40G, 100G, and 400G QSFP-DD modules for data centers. Expert technical

Lot of 6 FS QSFP-SR4-40G 40G QSFP+ Optical Transceiver Modules

Lot of 6 x Brand New FS QSFP-SR4-40G QSFP+ Optical Transceiver Modules. Designed for high-speed 40Gb Ethernet connectivity in enterprise networks, switches, servers, and data center

Arista Optics Modules and Cables

Each module is optimized for different media and reach (ranging from 0.5 meters to 80 kilometers). All interface speeds, from 1G to 400GE have connectivity options that include Direct Attach copper

LR4 40G QSFP+ Transceiver 1310nm 10km SMF Fiber Transceiver Module

40G QSFP+ LR4 1310nm 10km SMF Fiber Transceiver Module Description This product is a transceiver module designed for 2m-10km optical communication applications. The design is compliant to

Pluggable Optical Module Market Research Report 2034

Pluggable optical modules, encompassing SFP, SFP+, QSFP, QSFP+, CFP, CFP2, and CFP4 form factors, serve as the foundational building blocks of modern optical networking, enabling high

QSFP+ Explained: 40G Types, Distances & Selection

QSFP+ (Quad Small Form-Factor Pluggable Plus) is the workhorse optical form factor for 40 GbE compact, hot-pluggable, and built around 4x10

QSFP 40G 80km: Complete Guide to 40G Long-Distance Optics

This guide explains what QSFP 40G 80km modules are, how they work, their key specifications, and when they are the right choice for long-distance optical networking.

## Contact Us

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