

# Long-distance optical transceiver QSFP



## Overview

A QSFP 40G 80km transceiver is a long-reach 40Gbps optical module designed to transmit data up to 80km over single-mode fiber, typically based on extended-reach 40G ZR4 or enhanced ER4 optical architectures. It provides an ideal solution for large-scale data centers for high-demand. The QSFP-100G modules are our latest generation of 100G transceiver modules solution based on a QSFP form factor. ● Interoperable with other IEEE-compliant 100GBASE interfaces where. QSFP stands for Quad Small Form-factor Pluggable. By integrating four-lane signals into a single module, it supports four times the data throughput of the SFP while maintaining a slightly larger size. Simply put, 1x QSFP Speed = 4x SFP Total Speed The typical QSFP+ vs SFP+ appearance The initial. QSFP 40G 80km transceivers are designed for long-distance 40Gbps links where standard LR4 (10km) or ER4 (40km) optics cannot meet reach requirements. These transceivers are compliant with QSFP+ MSA and IEEE. At Pivotal Optics, we deliver transceiver solutions you can count on— precision-built, MSA-compliant, and performance-driven. Each transceiver undergoes rigorous testing and comes.

## Article Content

### 400G Optical Transceiver: Cisco 400G Optics, Pricing & Applications

Explore the 400G optical transceiver technology, pricing, Cisco optics, and application scenarios. Learn about QSFP-DD, DR4, and more for next-gen network solutions.

### 1000BASE-SX, 1000BASE-LX, 1000BASE-ZX& BX

Like 1000BASE-LX, it uses the same long wavelength of 1310nm but provides a higher power budget to achieve more considerable distances.

### Arista QSFP-100G-ERL4-Arista | 100G Transceiver, Single-Mode,

The Arista QSFP-100G-ERL4 is a 100GBASE-ER4 Lite QSFP28 transceiver designed for long-reach optical connectivity over single-mode fiber. Supporting distances up to 40km with FEC enabled or

### Optical Transceiver: Channel Configuration, Modulation

Therefore, coherent modulation has irreplaceable advantages in long-distance transmission. Due to the globally standardized form factors and interfaces of

### Optical Transceiver Market Size, Share, and Trends Analysis 2032

The global Optical Transceiver market size was estimated at USD 13.08 Billion in 2024 and is estimated to grow at a CAGR of 15.41% from 2025 to 2032.

### 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.

### QSFP28 optical transceivers | Smartoptics

To complement QSFP28 transceivers, Smartoptics offers a range of cable solutions: QSFP28 Direct Attach Copper (DAC) cables: Provide a cost-effective

### 100G QSFP-DD DCO : Optical Transceiver Module | NEC

NEC's 100G QSFP28 ZR DCO is a pluggable optical transceiver designed specifically for 100G, featuring a QSFP28 form factor that enables low power

### Juniper QSFP-100G-ZR4

The Juniper QSFP-100G-ZR4 100G Optical Transceiver is designed for high-speed long-distance optical networking applications. It delivers reliable 100 Gigabit Ethernet connectivity for data centers,

### What Is QSFP28? A Clear Explanation of 100G Transceivers

QSFP28 is a family of 100G transceivers that share the same QSFP form factor but use different optical architectures to support varying fiber types, distances, and deployment scenarios.

100GBASE QSFP-100G Modules Data Sheet

The Cisco QSFP 100-Gb SR1.2 Bi-Directional (BiDi) transceiver is a pluggable optical transceiver with a duplex LC connector interface for short

Optical Transceivers SFP SFP28 QSFP28 QSFP-DD 1G to 400G Range

Browse optical transceivers from Pivotal Optics including SFP, SFP28, QSFP28 & QSFP-DD modules. 1G to 400G solutions for data centers & networks. Shop now!

QSFP28 Transceiver: Complete 100G Connectivity Guide (2026)

QSFP28 transceiver guide covering module types, pricing, compatibility, and deployment. Learn how to choose, deploy, and troubleshoot 100G QSFP28 optics.

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

XVR-10163-20 Arista 100GBase-CWDM4 QSFP Optical Transceiver

The Arista XVR-10163-20 100GBase-CWDM4 QSFP28 optical transceiver is a premium-grade high-speed networking component designed for next-generation data center connectivity. Built for

SFP vs SFP+ vs SFP28 vs QSFP+ vs QSFP28: 2026

SFP vs SFP+ vs SFP28 vs QSFP+ vs QSFP28: 2026 Optical Transceiver Selection Guide  
A practical, engineer-friendly guide to choosing the

40G QSFP+ TRANSCEIVERS | Smartoptics

Long-range single-mode QSFP+ - Enables reliable 40G transmission up to 10 kilometers over single-mode fiber with LC connectors, suitable for metro and

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

What is QSFP & QSFP+ Transceiver: An Ultimate

QSFP Transceiver Types Although there are many types available, we typically categorize them using various attributes. By Media Type QSFP

Arista XVR-00013-02 40GBPS Single-Mode Fibre 1310nm New

The Arista XVR-00013-02 40GBPS Single-Mode Fibre QSFP+ Transceiver is engineered for high-speed optical networking environments that require dependable long-distance communication, low latency

Understanding Transceiver Types: SFP, QSFP, DAC, AOC, CWDM

Learn the differences between SFP, QSFP, DAC, AOC, CWDM, DWDM, 400G and 800G optical transceivers. A simple guide for networking and data center applications.

Optical Transceiver Guide 2026 EP4 SFP Module Selection Tips

☐☐ Optical Transceiver Guide 2026 — EP.4/7 is now available Choosing the right SFP module is not only about transmission distance anymore. In real deployment scenarios, System Integrators also ...

What is SFP Port? Everything You Need to Know

Networking Device, Optical Transceiver What is SFP Port? Everything You Need to Know Posted on 2024-11-29 by Cosmo17 29 Nov

SFP+, XFP, QSFP+, DAC Twinax Cable 10Gtek Transceivers Co., Ltd

DAC Twinax Cable Maker. CE, FCC, RoHS, ISO9001 Certified. Professional Manufacturer focusing on SFP+ Cables, QSFP+ Cables, MiniSAS Cables, QSFP Cables, XFP Cables, CX4 Infiniband Cables

All About QSFP Cables, Connectors, and More

The type of transceiver used depends on the cable type, application, required optical range of the network, and desired data transmission rate. QSFP

Optical Transceivers | Coherent

Telecom Optical Transceivers Use these transceivers for telecom applications such as enterprise access, metro aggregation, and broadband access, as well as

Optical Transceivers

Optical transceivers have revolutionized data transmission, providing high-speed, long-distance, and secure data transmission capabilities. Optical transceivers

High-Speed 40G QSFP+ Optical Transceivers for Long

With their high data rate, low power dissipation, and long reach capabilities, these optical transceivers provide reliable and efficient network

What is sfp optical transceiver?

What is an SFP Optical Transceiver? An SFP optical transceiver is a modular device that plugs into a network switch, router, or other networking equipment to provide connectivity to fiber optic or copper

FS QSFP28 LR4 Optical Transceiver: High-Speed,

Discover FS's QSFP28 100G LR4 optical transceiver, offering low power consumption, perfect compatibility, and reliable long-distance

## Contact Us

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

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