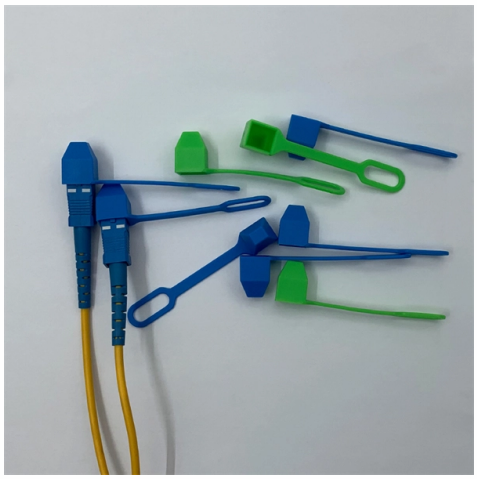
Inquiry about QSFP-DD optical modules SFP



Overview

OEM-compatible optical transceivers from 1G to 800G—SFP, SFP28, QSFP28, QSFP-DD & OSFP. MSA-compliant, TAA-certified, lifetime warranty. Find your module today.

Key Takeaways

QSFP-DD (Quad Small Form Factor Pluggable Double Density) modules are high-speed optical transceivers designed for 200G and 400G networks, offering backward compatibility and high bandwidth density for modern data centers. OverviewQSFP-DD is the next-generation optical module standard, defined by IEEE802.bs and the Multi-Source Agreement (MSA). The "Double Density" designation refers to doubling the number of high-speed electrical interfaces compared to QSFP28, enabling higher data throughput in the same compact form factor.

These modules are widely used in high-performance computing, cloud networks, and enterprise data centers. Data Rates and ModulationNRZ modulation: Each channel can reach up to 25Gb/s, achieving a total of 200Gbps for the module. PAM4 modulation: Each channel can reach 50Gb/s, enabling a maximum transmission rate of 400Gbps.

This flexibility allows QSFP-DD modules to support both 200G and 400G Ethernet applications, making them suitable for evolving network demands. Compatibility and Form FactorQSFP-DD modules are backward compatible with previous QSFP generations, including QSFP+, QSFP28, and QSFP56, which provides flexibility for network upgrades without replacing existing infrastructure. The modules are compact, plug-and-play, and designed for high-density deployments, maximizing port density in switches and routers.

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Applications

Data Center Interconnects (DCI): QSFP-DD modules support high-speed links between data centers. Enterprise Networks: Ideal for upgrading to 200G/400G Ethernet while maintaining compatibility with existing QSFP infrastructure. Cloud and Hyperscale Networks: Provide high bandwidth density for large-scale computing environments.

Advantages

High bandwidth density: Supports 200G–400G in a small form factor. Backward compatibility: Works with older QSFP modules, reducing upgrade costs. Flexible deployment: Suitable for both short-reach and long-reach applications depending on the specific module type.

Scalability: Supports future network growth with higher data rates and advanced modulation technologies. QSFP-DD modules are a critical component for modern high-speed networks, offering a balance of performance, density, and compatibility, making them a preferred choice for data centers and enterprise network upgrades.

Article Content

Cisco 400G QSFP-DD High-Power (Bright) Optical Module

These small, modular optical interface transceivers offer a convenient and cost-effective solution for an array of applications in the data center, campus, metropolitan-area access and ring network, storage

The Ultimate Reference Table for SFP & QSFP Optical Transceiver ...

The definitive guide to SFP, QSFP, and QSFP-DD standards for 2025. Compare 400G/800G optics, understand PAM4 complexity, and master QSFP-DD vs OSFP deployment

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

OEM-compatible optical transceivers from 1G to 800G—SFP, SFP28, QSFP28, QSFP-DD & OSFP. MSA-compliant, TAA-certified, lifetime warranty. Find your module today.

QSFP-DD Optical Transceivers – MapYourTech

What is QSFP-DD? QSFP-DD is an advanced hot-pluggable optical transceiver form factor that doubles the bandwidth density of traditional QSFP28 modules by implementing a double

Comprehensive Guide to 400G/800G QSFP-DD Optical Modules

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400G and 800G QSFP-DD optical modules play a key role in high-bandwidth, low-latency networks, with their technical advantages and flexibility making them the preferred choice for data

QSFP DD Guide: High-Speed QSFP DD Optical Modules

In this comprehensive guide, we will explore how QSFP DD works, why it has become a preferred optical module standard, and how it is deployed in

400G QSFP-DD Cable and Transceiver Modules Data Sheet | FS

It provides a QSFP-DD-to-QSFP-DD copper direct-attach solution. They are suitable for very short links and offer a cost-effective way to establish a 400-Gigabit link between QSFP-400G ports of

400G OSFP/QSFP-DD/QSFP112 Module Introduction and Selection

This article explores the technical characteristics, product lineup, and use cases of 400G OSFP/QSFP-DD/QSFP112 modules to choose the most suitable 400G solution for your data centers.

The Ultimate Guide to Optical Transceivers: SFP, QSFP-DD, OSFP,

This comprehensive guide breaks down the categories of optical modules, including SFP, SFP+, SFP28, QSFP+, QSFP28, QSFP56/QFSP112, QSFP-DD, and OSFP. We will explore their

Specifications of the Fiber Gigabit Ethernet SFP, XFP, SFP+, QSFP+ ...

Topic The following specifications are for the available Fiber Gigabit Ethernet modules and the platforms that support those modules. Important: The end user must ensure suitability of

400G Optical Module Selection Guide: QSFP-DD vs.

Compare QSFP-DD, QSFP28, and OSFP form factors. Learn about compatibility, power constraints, migration TCO, and data center selection

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

Wholesale Optical Transceivers Module | 100G QSFP28, 40G QSFP+

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

OSFP vs QSFP-DD Comparison | 800G Optical Module Form Factors

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Detailed analysis of OSFP and QSFP-DD form factors for 800G optical modules. Compare specifications, thermal management, backward compatibility, and choose the right solution

SFP vs SFP+ vs SFP28 vs QSFP+ vs QSFP28 vs QSFP-DD vs

The diversity of optical transceivers is reflected in various connector types and form factors, including SFP, SFP+, SFP28, QSFP+, QSFP28, QSFP-DD, and OSFP. But what are the

Top Optical Transceiver Modules for Data Center Applications

Explore the best optical transceiver modules for modern data centers, including SFP+, QSFP28, QSFP-DD, and OSFP. Learn how to select the right module for speed, distance, and

QSFP-DD Optical Module Overview: What is the differ?

The QSFP-DD is the smallest 400G form factor optical module on the market today. It is also the optical module that offers the highest transmission

SFP, SFP+, And QSFP Form Factor Standards

QSFP modules draw from 3.5W (SR4) to 6.0W (LR4) for 100G applications, with newer DSP-based QSFP-DD modules requiring up to 12W for 400G. Reach and Optical Budget: Standardized over 11

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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