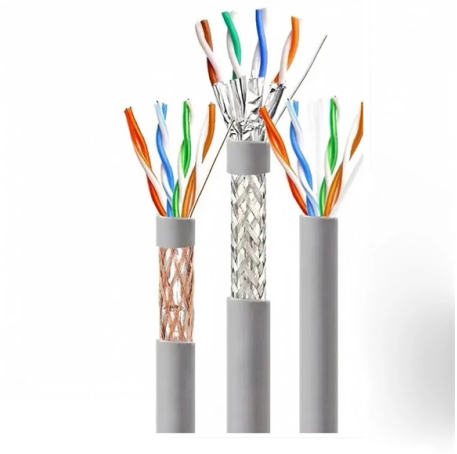
QSFP-DD Optical Core Router



Overview

Cisco 400G Digital Coherent Optics QSFP-DD Optical ModulesThese small, modular optical interface transceivers offer a convenient and cost-effective solutio.

Key Takeaways

QSFP-DD optical modules are high-performance 400G transceivers designed for core routers, with genuine products available from Cisco, Finisar, MikroTik, Acacia, and GenOptics. OverviewQSFP-DD (Quad Small Form-factor Pluggable Double Density) modules provide 400G Ethernet connectivity for high-density data center, enterprise, and service provider networks. They are backward compatible with lower-speed QSFP modules and support multiple line rates, making them ideal for core and distribution layer routers.

Genuine QSFP-DD modules ensure reliable performance, interoperability, and compliance with industry standards. Key Features of Genuine QSFP-DD ModulesHigh Bandwidth Density: Supports 400 Gbps aggregate bandwidth with eight independent full-duplex channels at 50 Gbps each. Digital Diagnostics: Built-in monitoring for optical power, voltage, temperature, and laser bias current to detect abnormal activity and plan maintenance.

Compatibility: Works with MTP/MPO-16 optical cables, supporting both short-reach (SR) and long-reach (LR/DR/ZR) applications. Standards Compliance: Adheres to QSFP-DD MSA, IEEE 802. 3bs, OpenZR+, and OpenROADM specifications for interoperability.

Optimized Design: Some modules, like Acacia QSFP-DD, use silicon photonic integrated circuits and DSP ASICs for low power consumption and high reliability.

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Examples of Genuine Products

Cisco 400G QSFP-DD Modules: Includes SR4. 2, DR4, FR, and LR variants for data center and high-performance computing networks.

Mikro

Tik DDQ+85MP01D: Reliable 400G optical module for CRS812 and CRS804 routers, supporting distances up to 100 meters with full diagnostics. Finisar FTCD8613E1PCM: 400GBASE-SR8 QSFP-DD transceiver, factory new with original packaging, supporting OM3/OM4 MMF up to 70–100 meters.

Gen

Optics 400G Series: Includes MQD, ATRE, and MTRQ transceivers for 400G Ethernet, optimized for data center and long-haul applications. Acacia QSFP-DD: Coherent pluggable modules for metro, regional, and long-haul networks, supporting OpenZR+ and OpenROADM interoperability.

Purchasing Tips for Genuine Modules

Buy from Authorized Vendors: Ensure the supplier is certified by the manufacturer to avoid counterfeit products. Check Product Codes and Packaging: Genuine modules come with factory-sealed packaging and verified part numbers. Verify Compatibility: Confirm the module supports your router model and required optical reach.

Digital Diagnostics: Prefer modules with built-in monitoring to maintain network reliability and plan upgrades.

Conclusion

For core router deployments, genuine QSFP-DD optical modules from trusted brands like Cisco, Finisar, MikroTik, Acacia, and GenOptics provide high-speed, reliable, and standards-compliant 400G connectivity. Selecting authentic products ensures interoperability, performance, and long-term network stability.

Article Content

Cisco 400G Digital Coherent Optics QSFP-DD Optical Modules

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

QSFP-DD Product Family » Acacia

Powered by Greylock and Delphi DSP ASICs, and silicon photonic integrated circuits (PICs) for an optimized co-packaged design with 3D Siliconization.

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QSFP-DD Linear Pluggable Optics (LPO)

Amphenol''s QSFP-DD Linear Pluggable Optical (LPO) Transceiver delivers low-latency, high-bandwidth PCIe ® Gen 5.0 over optical link, enabling

MikroTik · DDQ+85MP01D

QSFP-DD optical module for reliable 400G fiber connections, perfect for distances beyond DAC reach, up to 100 meters! The module includes built-in digital diagnostics for optical power, voltage,

MikroTik · SFP/QSFP

DDQ+DA0003 $109.00* A 400-Gigabit QSFP-DD direct attach cable, 3m long. Enables easy direct connectivity between ultra-fast devices like the CRS812 and CRS804!

400G QSFP-DD LR4-10-Genuine optics 400G series

The MQD-77F2C is a high performance, cost effective module for optical data communication applications to 400G and transmission distance up to 10km on

Genuine optics 400G series products.

The 400G QSFP-DD ZR+ Pro Transceiver is a high performance, high output power, cost effective module for optical data communication applications from 100G to

Genuine Finisar QSFP-DD Optical Transceivers | 400G | Compufox

Buy Genuine Finisar QSFP-DD Optical Transceiver Modules for Datacom applications using 400G Ethernet and high-density 50G and 100G Ethernet. Best prices and fast shipping.

Cisco QSFP-DD800 Transceiver Modules Data Sheet

For more information and references on QSFP-DD cable guides, please click on the following link: Cisco Transceiver Modules - Brochures - Cisco

Cisco Transceiver Modules

Cisco Transceiver Modules - Learn product details such as features and benefits, as well as hardware and software specifications.

MikroTik · SFP/QSFP

DDQ+85MP01D $159.00* QSFP-DD optical module for reliable 400G fiber connections within ultra-fast setups, like the CRS812 and CRS804!

QSFP-DD Product Family » Acacia

Quad Small Form-factor Pluggable Double Density (QSFP-DD) solution that fits into high-density switch and router client ports for optical interconnect links

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Cisco QSFP-DD Pluggable Open Line System (QSFP-DD OLS)

Product overview The Cisco® QSFP-DD Open Line System (QSFP-DD OLS) is a pluggable optical amplifier module that, together with the channel breakout options (described later), provides a simple

100GBASE QSFP-100G Modules Data Sheet

The Cisco® 100GBASE Quad Small Form-Factor Pluggable (QSFP) portfolio offers customers a wide variety of high-density and low-power 100

QSFP-DD Optical Transceivers – MapYourTech

Introduction QSFP-DD (Quad Small Form-Factor Pluggable Double Density) represents a transformative advancement in optical transceiver

Know Your 400G Transceiver | Juniper Networks

Form Factor—Juniper''s 400G optical transceivers incorporate the Quad Small Form-factor Pluggable Double Density (QSFP-DD) form factor to meet high power and thermal requirements for 400 Gbps

Cisco 400G Digital Coherent Optics QSFP-DD Optical Modules

Product overview Cisco now offers a range of all new 400G Digital Coherent QSFP-DD transceivers. Cisco already offers a range of Digital Coherent CFP2 transceivers capable of supporting up to a 200

Cisco QDD-400G-ZR-S Datasheet

Product overview Cisco now offers a range of all new 400G Digital Coherent QSFP-DD transceivers. Cisco already offers a range of Digital Coherent CFP2 transceivers capable of supporting up to a 200

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

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