Energy-efficient QSFP-DD optical module original and genuine product



Overview

QSFP-DD Optical Transceivers for High-Speed Connections Cisco offers a comprehensive portfolio of QSFP-DD modules across copper, multimode fiber, and singl.

Key Takeaways

QSFP-DD optical modules offer high-speed, energy-efficient performance for 400G and 800G networks, with genuine products from Cisco, Amphenol, and Acacia ensuring reliability and thermal optimization. Overview of QSFP-DD ModulesQSFP-DD (Quad Small Form-Factor Pluggable Double Density) modules are designed to double the data lanes of traditional QSFP modules while maintaining the same port density, supporting speeds from 400G to 800G. They are backward compatible with QSFP+, QSFP28, and QSFP56, allowing network operators to upgrade networks gradually without replacing existing infrastructure.

These modules are widely used in data centers, high-performance computing, AI/ML applications, and service provider networks.

Energy Efficiency and Thermal Management

Energy efficiency is a key feature of QSFP-DD modules. They are optimized for low power consumption, with some models consuming less than 5W per module, such as Amphenol's QSFP-DD Linear Pluggable Optics (LPO) for PCIe Gen 5. 0 interconnects.

© 2026 EXF OPTICAL NETWORKS - All rights reserved

Cisco QSFP-DD modules incorporate riding heatsinks and flexible thermal designs, enabling high-speed operation while maintaining optimal airflow and cooling efficiency. Acacia's QSFP-DD modules leverage silicon photonic integrated circuits and low-power DSP ASICs, reducing operational power requirements while maintaining high optical performance.

Genuine Product Manufacturers

Cisco: Offers a comprehensive portfolio of QSFP-DD modules across copper, multimode fiber, and single-mode fiber, including 400GBASE and 800G coherent optics modules. Cisco modules are optimized for thermal dissipation and energy efficiency, supporting high-density deployments. Amphenol: Provides QSFP-DD LPO transceivers with low-latency, high-bandwidth performance,

Article Content

QSFP-DD Optical Transceivers for High-Speed Connections

Cisco offers a comprehensive portfolio of QSFP-DD modules across copper, multimode fiber, and single-mode fiber, optimized for a broad range of applications and distances, leveraging NRZ, PAM4, and

QSFP-DD Optical Transceivers Unlocking Faster

The QSFP-DD (Quad Small Form-Factor Pluggable Double Density) optical transceiver is a revolutionary advancement in high-speed data

QSFP-DD Power Consumption: 400G Power Budget & Thermal Guide

Shenzhen Ascent Optics manufactures a comprehensive range of QSFP-DD transceivers optimized for power efficiency and thermal performance. Contact our engineering team for assistance

Cisco QSFP-DD and OSFP 800G ZR/ZR+ Coherent

They expand Cisco routed optical networking applications to include 800G links and are compatible with Cisco and third-party 800G-capable routers,

800G QSFP-DD Digital Coherent Optics Transceiver

The 800G Digital Coherent Optics (DCO) family of transceivers are available in two small form-factors, QSFP-DD and OSFP, which enable them to plug directly into

QSFP-DD Hardware

Chapter 9 describes an improved QSFP+ form factor called QSFP112 39 with improved signal integrity for 100 Gb/s per lane operation and with an aggregate bandwidth of 400 Gb/s.

© 2026 EXF OPTICAL NETWORKS - All rights reserved

800G QSFP-DD-Product Solutions-INNOLIGHT

The products of this series comply with IEE802.3ck and QSFP-DD 800 MSA standards, and support CMIS4.0. Products are mainly used in 800G Ethernet, data centers and cloud networks.

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

Genuine optics coherent series products.

800G QSFP-DD ZR Pro Transceiver is a high performance, high output power, cost effective pluggable DCO module compatible with various switches and routers for optical data communication applications.

800Gb/s QSFP-DD Transceivers

Amphenol''s 800G QSFP-DD optical modules include 2xFR4(plus), 2xLR4, AOC, and AOC break-out series, which adopt LC or MPO optical ports and are compatible with IEEE802.3, OIF-CMIS, and

Cisco QSFP-DD800 Transceiver Modules Data Sheet

The Cisco family of QSFP-DD800 modules leverages the cornerstone of high-speed, high-density pluggable form factors, QSFP. The QSFP-DD800

Cisco QSFP-DD800 Transceiver Modules Data Sheet

Product overview The Cisco QSFP-DD800 modules introduce 8x100G and 2x400GGBASE Quad Small Form-Factor Pluggable Double-Density (QSFP-DD) modules, offering customers super-high-density

Common 400G QSFP-DD Transceiver Types in the Market

400G QSFP-DD optical module is a high-speed hot-pluggable transceiver. Here it will help you learn what 400G QSFP-DD optical modules exactly are, and the classification, and application

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

Applications of 400G/800G QSFP-DD Optical Modules The 400G/800G QSFP-DD optical modules leverage a double-density design to

OEM 800G QSFP-DD Optical Modules: Technical Overview and

OEM 800G QSFP-DD modules must be fully compatible with major switch and NIC vendors to ensure market acceptance and reduced integration risk.

© 2026 EXF OPTICAL NETWORKS - All rights reserved

Cisco 400G Digital Coherent Optics QSFP-DD Optical Modules Data

The latest addition to the Cisco portfolio pushes this boundary further with the introduction of the 400G DIGITAL COHERENT QSFP-DD PLUGGABLE OPTICAL MODULE. Figure 1. From

100G/400G QSFP-DD DCO-Product Solutions-INNOLIGHT

100G/400G QSFP-DD DCO Coherent QSFP-DD product family is designed based on dual polarization quadrature phase shift keying (DP-QPSK) or dual polarization quadrature amplitude modulation (DP

800G Multimode Optical Module Selection: QSFP-DD vs OSFP, SR8

A comprehensive guide to 800G multimode optical module selection: compare QSFP-DD and OSFP form factors, analyze SR8 vs 2xSR4 application scenarios, and master fiber patch cable

Related Video Reference

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

Contact Us

Continue your research online:

Website: https://explosivefunctions.co.za
Technical inquiry: https://explosivefunctions.co.za/contact.html
EU project coordination: Parque das Nações, Lisbon, Portugal

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

© 2026 EXF OPTICAL NETWORKS - All rights reserved