

Solution Enterprise-grade 200G Optical Router



Article Overview

Enterprise-grade 200G optical routers leverage QSFP56 modules and PAM4 optical technology to deliver high-bandwidth, scalable, and cost-efficient connectivity for data centers and AI workloads.

Overview of 200G Optical Technology

200G optical routers utilize high-speed optical transceivers such as QSFP56 modules to achieve 200 Gbps per port. These modules convert electrical signals into optical signals using PAM4 (4-level Pulse Amplitude Modulation), which doubles data transmission efficiency compared to traditional NRZ modulation by encoding 2 bits per signal cycle . This enables higher throughput, improved port density, and lower power consumption, making it ideal for enterprise backbones and AI computing centers .

Key Components

- **QSFP56 Modules:** These modules support 4×50G PAM4 channels aggregated to 200G, with breakout options to 4×50G SFP56 links for flexible deployment . They are widely used in data center switches, routers, and server NICs .
- **Optical Transceivers and Cables:** Vendors like FS provide 200G HDR InfiniBand optical transceivers and cables for high-bandwidth data transmission in AI and HPC environments . Cisco offers QSFP-200-CuxM passive copper cables for short links and QSFP-4S50-CUxM for breakout connectivity

Article Content

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Utilizing the QSFP56 form factor, this module supports the 200GBASE-SR4 standard and operates over a wavelength

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200G QSFP56 Modules

200G QSFP56 transceivers with PAM4 modulation for high-speed data center connectivity. SR4 and FR4 options supporting 100m to

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Cisco 200G QSFP56 Cables and Transceiver Modules Data Sheet

The Cisco 200G QSFP-200-CuxM module (Figure 1) primarily enables high-bandwidth 200G links and supports 200G

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Cisco 200G QSFP56 Cables and Transceiver Modules

It provides a port-to-port passive copper direct-attach solution. QSFP-200-CuxM cables are suitable for very short links and offer a

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Cisco ASR 9000 Series 400G and 200G Modular Line Cards Data Sheet

Product overview The Cisco ® ASR 9000 Series 400G (Figure 1) and 200G Modular Line Cards provide customers

Contact Us

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