

Price List for 800G Pluggable Optical Modules for Data Center Interconnection



Overview

Equipment and electrical serdes can evolve through 3 generations (25 Gb/s, 50 Gb/s or 100 Gb/s) without changing the optical interface that interconnects your equipment.

Key Takeaways

800G optical modules for DCI range from \$700 to \$1,900 depending on form factor, reach, and vendor, with volume discounts available for large deployments. Pricing by Module Type and Form Factor 800G OSFP-DR8 (short-reach, in-rack/cross-row): \$1,100–\$1,400 per module for orders of 1,000+ units, with third-party options often cheaper than OEMs (30–50% premium for OEMs). 800G QSFP-DD-DR8 (short-reach): \$1,000–\$1,300 per module for volume purchases.

800G OSFP-FR4 (longer reach, inter-row or campus links): \$1,500–\$1,900 per module. 800G LPO (Linear Pluggable Optics, no DSP): \$700–\$900, representing the lower-cost option for simpler deployments. Volume discounts are common: 10–20% for orders over 1,000 units and 20–30% for orders exceeding 5,000 units.

Early-generation modules can cost 40–60% more than mature products, and customizations such as special wavelengths or extended temperature ranges can add 15–30% to the base price.



Cost Considerations Beyond Acquisition

Power Consumption: OSFP modules typically consume 15–20W, QSFP-DD 15–18W, and LPO 8–12W. Annual electricity cost per module is approximately \$15–\$25 including cooling overhead (PUE 1.3–1.4).

5). Maintenance and Support: Spare inventory (10–15% of modules), replacement for 2–5% annual failure rate, and vendor support contracts (8–12% of purchase price annually) contribute to ongoing costs. Monitoring and Management: DCIM software and telemetry storage add \$6–18 per module per year.

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M vs Third-Party Modules OEM modules (e.g., Cisco, Arista) command a 30–50% premium over third-party compatible modules, especially for long-reach coherent optics like LR4, ZR, and ZR+. Third-party modules can provide significant savings without compromising performance for standard DCI deployments.

Summary

For a typical data center interconnect deployment, the entry-level 800G modules (DR8 short-reach) cost around \$1,000–\$1,400, while longer-reach or more complex modules (FR4, coherent ZR+) can reach \$1,500–\$1,900 or higher. Volume purchases and third-party sourcing can reduce costs substantially, and operational expenses such as power, cooling, and support should be factored into the total cost of ownership. For specific quotes and availability, vendors like EPS Global, QSFPTEK, and Mouser provide detailed product listings and can tailor pricing to deployment scale and module specifications.

Article Content

800G Optical Module Cost Analysis | TCO Optimization Guide

Complete guide to 800G optical module costs and TCO optimization for AI data centers. Includes pricing analysis, cost comparison, vendor strategies, and ROI calculations for informed

400G, 800G, and Terabit Pluggable Optics:

Equipment and electrical serdes can evolve through 3 generations (25 Gb/s, 50 Gb/s or 100 Gb/s) without changing the optical interface that interconnects your equipment.

FS Launches 800G LPO Module: A Power Efficiency and Latency

FS introduces an 800G LPO optical module, powering AI and HPC data centers with ultra-low power consumption, reduced latency, and proven reliability.

Cisco OSFP 800G Transceiver Modules Data Sheet

They offer flexible connectivity, with options for 800GE, 400GE, 200GE, and 100GE, for use in data centers, high-performance computing networks, enterprise core and distribution layers,

Arista LPO-800G-2DR4 Compatible 800G OSFP 2xDR4/DR8 Linear

NADDOD OSFP-800LPO-2DR4 is a cost-effective module with high performance, which is optimized for AI Datacenter, supporting data rate of 8x112Gb/s PAM4 Optical interface and 8x112Gb/s PAM4

Heavy Reading White Paper: 800G Client Optics in the Data Center

By understanding the key developments for 400G and 800G, as well as the standards planned for 800G and 1.6T, data center operators can ensure that they benefit from 800G upgrades as solutions evolve.

DCI Optical Modules | Delivering high bandwidth over distance

The Marvell data center interconnect portfolio includes COLORZ®, COLORZ® 400 and COLORZ® 800 modules in multiple form factors to connect regional data centers.

400G, 800G, and Terabit Pluggable Optics:

High-Speed Interconnects: Backend network requires high speed 100G/200G or 800G optics to connect servers and network switches. These high bandwidth connections are essential for handling the data

QSFP-DD Product Family » Acacia

Ideal for AI scale across, metro/regional Ethernet data center, and service provider network interconnects. Learn more about 800G coherent pluggables in this video.

Pluggable Optical Modules – GIGALIGHT

GIGALIGHT provides 100G, 200G, 400G and 800G pluggable digital coherent optical transceiver modules (DCO) and non-coherent transceivers for data center interconnection (DCI), 5G backhaul,

Global AI Optical Transceiver Market to Reach US\$26

As the 1.6T generation gradually enters mass production, demand for edge computing and data center interconnect (DCI) will also drive expansion of

Optical Transceiver Market Size, Share, Industry Report – 2035

Industrial cloud deployments and edge data center growth supporting Industry 4.0 initiatives further drive adoption of high-speed 100G to 800G optical modules.

Germany's combination of dense

800G Data Center Interconnect Guide: DAC, AEC, AOC & Optical

Optical Transceivers + Fiber is the modular approach — a pluggable OSFP module in the cage connects to a separate fiber patch cord. If a transceiver fails, swap the module, keep the

Hot-Pluggable Optical Transceiver Market Trends & 2033 Outlook

The Hot-Pluggable Optical Transceiver market is expanding due to hyperscale data center demand and AI infrastructure build-outs. Analyze key segments and market share to inform strategy.

OSFP Optical Module Growth: What Drives 25% CAGR to 2034?

The OSFP Optical Module market expands rapidly. Analyze key applications like Cloud Services & AI driving a 25% CAGR. Get data on market size, companies, and future trends.

Multimode Optical Modules Market: \$9.54B, 11.6% CAGR Outlook

Multimode Optical Modules market sees 11.6% CAGR, driven by AI, data center expansion, and cloud services. Access critical market share and growth projections.

SFP, QSFP, QSFP-DD & OSFP Cages: The 10G-to-800G Selection

SFP, QSFP, QSFP-DD & OSFP Cages: The 10G-to-800G Selection Guide Cages and their connectors decide your port density, thermals and upgrade path. Here is how to choose the

OSFP Optical Transceiver Market: \$10.4B (2021), 15% CAGR Analysis

OSFP Optical Transceiver market valued at \$10.4B in 2021, projecting 15% CAGR. Growth is propelled by cloud services, data center expansion, and AI demand. Access key insights.

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

