Cost of an 800g Optical Module

Article Overview

The current price of 800G optical modules ranges from approximately $700 to $1,900 depending on type, vendor, and volume.

Price Ranges by Module Type

o 800G OSFP-DR8: $1,100-$1,400 for volume orders of 1,000+ units, suitable for short-reach data center interconnects .
o 800G QSFP-DD-DR8: $1,000-$1,300 for large-volume purchases, commonly used in high-density rack deployments .
o 800G OSFP-FR4: $1,500-$1,900, designed for longer reach and more complex optics .
o 800G LPO (Linear Pluggable Optics): $700-$900, lower-cost option without DSP .

Factors Affecting Pricing

o Vendor Tier: OEM modules (e.g., Cisco, Arista) typically command a 30-50% premium over third-party compatible modules .
o Volume Discounts: Orders exceeding 1,000 units may receive 10-20% discounts, while orders over 5,000 units can see 20-30% reductions .
o Technology Maturity: Early-generation modules cost 40-60% more than mature products .
o Customization: Special wavelengths, extended temperature ranges, or additional testing can add 15-30% to the base price .
o Market Dynamics: Supply constraints or high demand can temporarily increase prices by 20-40% .

Market Trends

The 800G optical module market is experiencing rapid growth due to hyperscale data center expansion, AI workloads, and 5G network deployment. Shipment volumes are projected to increase significantly, with 800G modules being the fastest-growing segment in data center optics . While prices are expected to gradually decline as silicon photonics and manufacturing scale improve, current costs remain influenced by thermal management requirements and high-density deployment challenges . In summary, for standard 800G modules in 2026, expect prices between $700 and $1,900, with the exact cost depending on module type, vendor, order volume, and any customization or supply constraints .

The next key development is 800G, and the industry is already gearing up to deploy this next generation of client optics in hyperscale

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FS InfiniBand 800G/400G NDR optical modules and cables solution used for high-bandwidth data transmission, data center and AI

Optical module is the optoelectronic device that realizes photoelectric and photoelectric conversion in optical

Explore DCI Modules Marvell offers a portfolio of DCI modules designed to efficiently transmit data over regional fiber networks.

In contrast, the 800G tends to use 5nm DSP and traditional hybrid packaging. Additionally, the current power

800G optical modules are transforming data center transport, enabling networks to reach heights that previous

QSFP-DD price guide with 400G/800G module costs, OEM vs third-party comparison, volume discounts, and 3-year

The OSFP specification was expanded in 2021 to include support for 800G modules with 100G PAM4 lanes (OSFP800) and

This guide delivers clear, accurate pricing data. It breaks down the current costs for 400G and 800G modules,

800G Transceiver acts as a vital photoelectric conversion node for data transmission, enabling efficient and reliable

Explore the technical advantages and key applications of 800G OSFP optical modules. LSOLINK offers a comprehensive product

Traditional modules require additional lenses and mirrors to combine the eight laser beams into one before entering

200G/400G/800G optical module features up to 40km transmission distances using QSFP56/QSFP-DD footprints for data center

800G Optical Module Market size was valued at 1.5 billion USD in 2025 & is estimated to reach 5.0 billion USD by

FS offers a growing portfolio of 800/400/200/100/40G optical transceiver modules and cables. The super-high density and backwards

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

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