Cost 800G Optical Module OSFP



Overview

800G QSFP-DD800/OSFP optical module includes two architecture solutions, 2x400G and 8X100G. Its optical interfaces include MPO-16, Dual MPO-12, Dual CS, Duplex LC.

Key Takeaways

The price of 800G OSFP optical modules typically ranges from $1,100 to $1,900 depending on type, reach, and vendor.

Acquisition Costs800

G OSFP-DR8: $1,100–$1,400 per module for volume orders of 1,000+ units. 800G OSFP-FR4: $1,500–$1,900 per module for longer reach and more complex optics. 800G LPO (Linear Pluggable Optics): $700–$900, generally lower cost due to no DSP.

Price variations depend on vendor tier (OEM modules like Cisco or Arista can be 30–50% more expensive than third-party compatible modules), order volume (10–30% discounts for large orders), technology maturity (early-generation modules cost 40–60% more), market supply constraints (can increase prices 20–40%), and customization options such as special wavelengths or extended temperature ranges (adds 15–30%).

Operational Costs

Power consumption: 800G OSFP modules typically consume 15–20W, with annual electricity costs around $20–$25 per module including cooling overhead (PUE 1.3–1.5). 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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Vendor Examples

Cisco OSF

P 800G modules: Premium OEM modules with high reliability, IEEE 800GE compliance, and interoperability with multiple 100GE, 200GE, and 400GE interfaces.

YTLIN

K 800G OSFP 2FR4 modules: Third-party modules with built-in Broadcom 7nm DSP, power consumption of 16.5W, and customizable options.

FS and QSFPTE

K: Offer a range of 800G OSFP modules suitable for AI data centers and enterprise networks, often with volume pricing and nearby warehouse availability.

Summary

For budgeting purposes, expect to pay $1,100–$1,400 for standard 800G OSFP-DR8 modules, $1,500–$1,900 for longer-reach FR4 modules, and $700–$900 for simpler LPO modules. Operational costs, including power, cooling, maintenance, and monitoring, add roughly $20–$50 per module annually. Prices vary significantly based on vendor, volume, and customization, so large-scale deployments should consider total cost of ownership for accurate planning.

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

Cisco OSFP 800G Transceiver Modules Data Sheet

The Cisco ® OSFP 800G transceiver modules provide 800 Gigabit Ethernet (GE), 2x 400GE, 4x 200GE, and 8x 100GE connectivity options,

800G OSFP Transceiver Guide: AI & Hyperscale Modules

By moving from 400G optics to 800G OSFP DR8 modules with breakout connectivity, the engineering team significantly reduced cabling complexity while increasing network scalability for

800G OSFP Optical Transceiver Modules

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NVIDIA/Mellanox MMS4X00-NM16 (980-9I30J-F4NM00) Compatible 800GBASE-DR8 OSFP IHS/Closed Finned Top PAM4 1310nm 500m MPO-16/APC DDM SMF Ethernet Optical Transceiver

800G/400G Coherent OSFP/QSFP-DD Transceiver Modules | Optical

FS 800G/400G Coherent OSFP/QSFP-DD optical transceiver module solutions offer a range of OSFP/QSFP-DD modules 120km/500km reach, and used for Edge DCI, LH, Regional, Metro and

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

Cisco QSFP-DD and OSFP 800G coherent optical modules are supported on Cisco switches and routers. For more details, refer to the Cisco

200G/400G/800G Optical Transceiver Modules | FiberMall

OSFP-400G-SR8 400G SR8 OSFP PAM4 850nm MTP/MPO-16 100m OM3 MMF FEC Optical Transceiver Module $ 400.00 5 Reviews Add to Cart

800GBASE OSFP/QSFP-DD800 Optics Transceivers Module | FiberMall

800G QSFP-DD800/OSFP optical module includes two architecture solutions, 2x400G and 8X100G. Its optical interfaces include MPO-16, Dual MPO-12, Dual CS, Duplex LC.

Cisco OSFP 800G Transceiver Modules Data Sheet

The OSFP 800G transceiver modules are Cisco''s new generation of pluggable transceiver modules based on the OSPF specification. They offer

800G QSFP-DD

SULITON 800G OSFP/QSFP-DD Optical Transceiver Module OSFP 800G SR8 is an Eight-Channel, Parallel, Pluggable, Fiber-Optic OSFP for 800Gigabit Ethernet applications. This transceiver is a high

Amazon : YTLINK 800G OSFP 2FR4 Optical Transceiver Module ...

800G OSFP 2FR4 Optical Transceiver Module, Compatible with 800GBASE 2 x FR4 OSFP Ethernet Single-Mode Optical modules with Heat Sinks on top, 2 x LC, 2xCWDM4 2km

1.6T OSFP224 | AI Ethernet Modules

FS provides an expanding portfolio of 800G OSFP/QSFP-DD solutions featuring high-performance, high-bandwidth, and backward compatibility. The 800G transceiver modules are ideal choice for AI

A Deep Dive into 800G Optical Modules

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Explore the technical advantages and key applications of 800G OSFP optical modules. LSOLINK offers a comprehensive product portfolio to meet your high-speed, high-density networking needs.

800G Optical Module: osfp vs qsfp-dd

Nowadays, 400G optical modules are widely used, but 800G optical module technology has also been slowly used in data centers and other scenarios, becoming indispensable in the field

800G OSFP Optical Transceiver Module

AscentOptics offers the 800G OSFP Optical Transceiver Module to light up your network with high-speed connectivity. Ideal for 800G Ethernet, cloud networks, and data centers.

OSFP 8x100G DR8 Optical Transceiver Module | FiberMall

OSFP-800G-DR8 OSFP 8x100G DR Optical Transceiver Module (SMF, 1310nm, 500m, MPO-16, DDM) OSFP 8x100G DR transceiver modules are designed for 800 Gigabit Ethernet links over 500m of

Cisco OSFP-800G-DR8 OSFP 800GBASE-DR8 Module | FiberMall

Cisco OSFP-800G-DR8 Compatible 800G-DR8 OSFP Optical Transceiver Module (SMF, 1310nm, 500m, Dual MTP/MPO-12, DOM) OSFP 8x100G DR transceiver modules are designed for 800

A Guide to 800G Optical Module Form Factors

Explore the different form factors of 800G optical modules, including OSFP, QSFP-DD800, CFP2-DCO, and more. Learn about their applications in data centers, DCI, and

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North American project location: Research Triangle Park, North Carolina, United States

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

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