

Tariff Costs for an 800G Optical Module SFP



AI Overview

The cost of 800G optical modules ranges from approximately \$700 to \$1,900 per unit, depending on form factor, reach, vendor, and volume discounts.

Acquisition Costs

- 800G OSFP-DR8: \$1,100–\$1,400 per unit for bulk orders of 1,000+ modules
- 800G QSFP-DD-DR8: \$1,000–\$1,300 per unit for similar volume
- 800G OSFP-FR4: \$1,500–\$1,900 per unit for longer reach, more complex optics
- 800G LPO (Linear Pluggable Optics): \$700–\$900 per unit, lower cost due to no DSP

OEM vs Third-Party Pricing: Modules from OEMs like Cisco or Arista typically carry a 30–50% premium over compatible third-party modules. Early-generation modules can cost 40–60% more than mature products due to technology maturity.

Volume Discounts

- Orders of >1,000 units may receive 10–20% discounts.
- Orders of >5,000 units may receive 20–30% discounts.

Operational and Associated Costs

Power Consumption: 800G OSFP modules typically consume 15–20W, QSFP-DD 15–18W, and LPO 8–12W. Annual electricity cost per module is roughly \$20–\$25 including cooling overhead (PUE 1.3–1.5) at \$0.10/kWh.

Switch Infrastructure: A 64-port 800G switch costs \$150,000–\$250,000 depending on features.

Cabling: MPO-16 trunk cables \$50–\$150, LC duplex \$20–\$50 per cable.

Patch Panels: \$500–\$1,500 per 48-port panel.

Maintenance & Support: Spare inventory (10–15%), replacement modules (2–5% annual failure), and support contracts (8–12% of purchase price annually) add to TCO.

Cost Optimization Strategies

- Avoid Over-Specification:** Use modules that match required reach and performance to avoid unnecessary costs.
- Consider Third-Party Compatible Modules:** High-quality third-party modules can reduce CapEx while maintaining reliability.
- Standardize Inventory:** Reducing the number of module types simplifies operations and lowers procurement costs.
- Use DAC/AOC for Short Links:** F...

Article Content

Data Center Optical Transceiver Market Size, Share, Trends

Chinese module makers — Accelink, Eoptolink, and HG Genuine — are leveraging manufacturing scale to compete on cost in the 100G–400G range while upgrading capabilities for 800G.

QSFP-DD Price Guide 2026: 400G/800G Costs & TCO Analysis

This guide delivers clear, accurate pricing data. It breaks down the current costs for 400G and 800G modules, provides an objective comparison between OEM and third-party products,

800G Client Optics in the Data Center

The next key development is 800G, and the industry is already gearing up to deploy this next generation of client optics in hyperscale data centers. Developments in three distinct areas are needed for 800G

CROSS Ruling

In your letter dated December 4, 2018, you requested a tariff classification ruling. The merchandise concerned is referred to as non-coded and non-programmed optical transceivers (part

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

800G Optical Transceiver Overview: QSFP-DD and

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

Optical Transceiver Pricing: Cost Ranges by Speed and

See practical price ranges for 1G–100G optical transceivers, DAC/AOC options, and why cost varies by speed, reach and technology — buying tips included.

Transceiver Types for High-Speed Networking Explained

☐☐ Transceiver Types at a Glance – The Backbone of High-Speed Networking! ☐☐✂ As network infrastructures continue to evolve, selecting the right transceiver module is essential for ...

Customs Ruling NY N336394

This item is a single mode transceiver in a small form-factor pluggable (SFP) module for serial optical data communications with an operating data rate of 11.3Gbps and transmission distance of up to 10

SFP Optical Transceivers: How Pluggable Optics Are Reshaping

A typical SFP module consumes under 1 watt, while an 800G OSFP module may draw 15–20 watts. Weunion 's engineering team selects laser and DSP chipsets that prioritize energy

800G Transceivers — Transceiver USA

800G Transceivers Transceiver USA's optical OSFP modules are used in enterprise and datacenter networks. View price, stock and buy direct from Transceiver USA.

800G Optical Modules Explained: Standards, Types

Discover everything about 800G optical modules—standards, packaging, types & applications. Learn how they power AI, HPC & next-gen data

800GBASE OSFP/QSFP-DD800 Optics Transceivers

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

800G OSFP

Display: 24 per page Sort by: Featured View opticswave 800GBASE-XDR8 OSFP PAM4 1310nm 2km DOM MTP/MPO-16 SMF Optical Transceiver Module

SFP Modules: The Unsung Heroes of Modern Networks

KEY VARIANTS OF SFP MODULES 1□ SFP (1G) The original standard, supporting up to 1.25 Gbps. Common in Legacy Telecom technologies, Ethernet, and Fibre Channel networks. 2□ SFP+ (10G)

Global 800G Transceiver Market Size, Growth Trends,

Global 800G Transceiver Market Size By Product Type (QuartZ Transceivers, Optical Transceivers), By Connector Type (LC Connector, SC

SFP Module Price: Strategic Cost Analysis and TCO Factors

Compare SFP module prices, OEM vs third-party costs, and total cost of ownership (TCO). Learn what drives SFP pricing and how to choose the best value.

Optical Transceiver Market Price Trends 2026: TCO & Risks

Procurement forecasts frequently project aggressive price drops for 800G optics by 2026, ignoring the non-linear power density scaling required at the physical layer.

Cisco Transceiver Modules

Cisco Transceiver Modules - Learn product details such as features and benefits, as well as hardware and software specifications.

Pluggables, Power, and Geopolitics: Mapping the 800G

Technologically, the industry is embroiled in a debate between Digital Signal Processor (DSP)-based retimed optics, which remain the standard for

Everything You Need to Know About 800G/1.6T Optical

Introduction to 800G/1.6T Pluggable Optics Modules The Evolution of Optical Transceivers: From 100G to 1.6T Driven by the demand for computing power in

800G Optical Module Market Research Report 2034

The 800G optical module market was valued at \$4.8 billion in 2025 and is projected to reach \$28.6 billion by 2034, growing at a CAGR of 22.1%.

Optical Transceiver Market Size, Growth Drivers

Optical Transceiver Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031) The Optical Transceiver Market Report is

Optical Transceiver Modules Prices & Specifications

What is Optical Transceiver Modules/SFP? Optical Transceiver Modules/SFP, also called fiber optic transceiver or optical transceiver, is a typically hot-pluggable

800G Optical Modules Explained: Standards, Types & Use Cases

800G optical modules represent the next generation of high-speed data transmission technology, crucial for modern data centers and communication networks. These modules can be

800G OSFP/QSFP-DD | Transceiver Modules

The 800G transceiver modules are ideal choice for AI data centers, enterprise networks and service provider networks. Click to get your 800G transceiver

QSFP-DD Price Guide 2026: 400G/800G Costs & TCO Analysis

QSFP-DD price guide with 400G/800G module costs, OEM vs third-party comparison, volume discounts, and 3-year TCO analysis for data center buyers.

Contact Us

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