

Price list for SFP silicon photonics technology for data center interconnects



AI Overview

Silicon photonics SFP modules for data center interconnects typically range from \$200 to \$1,000+ per unit, depending on speed, reach, and vendor, with OEM modules costing significantly more than third-party compatible options. Typical Price Ranges

100G SFP28 / QSFP28: Entry-level short-reach modules can cost \$200-\$400 for OEM-branded units, while compatible third-party modules may be available for \$100-\$250 per unit.

400G QSFP-DD / OSFP: High-speed silicon photonics modules for AI and hyperscale data centers generally range from \$800-\$1,500+ per unit, with OEM modules at the higher end and compatible modules slightly lower.

800G OSFP / QSFP-DD: Cutting-edge modules for AI workloads and high-density interconnects are priced above \$1,500, reflecting advanced silicon photonics integration, energy efficiency, and multi-terabit throughput.

Factors Affecting Pricing

Vendor and Brand: OEM modules (Cisco, Broadcom, Lumentum, NeoPhotonics) are priced higher due to warranty, reliability, and certification, while third-party compatible modules can reduce costs by 30-60%.

Reach and Optical Complexity: Short-reach multimode modules are cheaper, whereas long-reach single-mode, DWDM, or coherent modules carry significant premiums.

Adoption for AI and Hyperscale: Silicon photonics modules are increasingly deployed in AI-focused data centers to support multi-terabit throughput with lower latency and up to 60% energy savings compared to copper interconnects.

Market Trends: The silicon photonics market for AI data centers is projected to grow from \$1.6 billion in 2026 to \$4.2 billion by 2034, reflecting rising demand for high-bandwidth, low-latency interconnects.

Cost-Saving Strategies

Third-Party Compatible Modules: For large-scale deployments, using certified third-party SFPs can significantly reduce CAPEX without compromising performance.

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The 2021 report on silicon photonics examines the technology's evolution and its applications in various sectors like optical communication, healthcare, and

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Why Hyperscale Data Centers Are Driving SFP Optical-Transceiver

Hyperscale data centers increasingly standardize on single-vendor SFP/optical transceivers — learn how LINK-PP and other silicon-photonic providers are reshaping the optics

Silicon Photonics Optical Transceiver Market Size | Forecast 2025 To

The Silicon Photonics Optical Transceiver Market Report highlights a transformative shift in data transmission technologies, driven by the physical limitations of traditional copper and legacy

Top Vendors For 10G Sfp+ Modules — Enterprise & Data Center

This guide profiles the most important vendors to consider for 10G SFP+ deployment decisions — latency, power, density, compatibility and total cost of ownership are the selection filters used below.

Silicon Photonics and Co-Packaged Optics at the Heart of Next ...

Yole Group unveils its latest photonic market and technology analyses, "Silicon Photonics 2025" and "Co-Packaged Optics for Data Centers 2025," which explore how AI-driven demand is

Silicon Photonics Technology For Next-Gen Data Center Interconnects

Silicon photonics technology advances data center interconnects with co-packaged optics, offering improved signal integrity, speed, bandwidth density, and lower power consumption.

Silicon Photonics Transceivers: 400G & 800G Data Center Guide

Silicon Photonics transceivers explained in depth. Learn how SiPh compares to traditional optics for 400G and 800G data centers in performance, power, cost, and scalability.

800G Silicon Photonics Guide: Costs, Power & AI Applications | 2026 ...

Explore how 800G Silicon Photonics (SiPh) reduces TCO by 18-25% and power consumption by up to 50% compared to discrete optics. Discover why SiPh is the mainstream solution for AI clusters and

Optical Transceiver Market Size, Share, and Trends Analysis 2032

The global Optical Transceiver market size was estimated at USD 13.08 Billion in 2024 and is estimated to grow at a CAGR of 15.41% from 2025 to 2032.

Development trends in silicon photonics for data centers

An explosive increase in volume of global network and data center traffic requires an interconnection scheme with low cost, high energy efficiency, and high bandwidth capacity. The

Silicon Photonics Optical Transceiver Market Size & Opportunities ...

Approximately 52% of hyperscale data centers rely on silicon photonics for efficient interconnects, while around 40% of telecom operators use it to modernize 5G networks. New

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Cisco optics are foundational to AI data centers. They deliver performance, efficiency, and reliability for AI workloads that maximize uptime and return on AI investments.

Optical Modules Market Research Report 2034

These structural tailwinds, combined with ongoing cost reductions enabled by silicon photonics integration and wafer-scale manufacturing, position the optical modules market for robust

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Global Optical Transceiver Market Strategic Audit 2026

Institutional analysis of the global optical transceiver market (2025-2031). Examines the 1.6T AI super-cycle, Silicon Photonics adoption, LPO/CPO power architectures, and China+1 supply

Contact Us

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