

Prices of different optical modules



Overview

Optical Modules This report aims to provide a comprehensive presentation of the global market for Optical Modules, focusing on the total sales volume, sale.

Key Takeaways

Optical module prices vary widely, from as low as \$5 for basic 1G SFPs to several thousand dollars for high-speed 400G/800G modules, depending on type, speed, and vendor. Typical Price Ranges by Speed and Type 1G SFP Modules: \$5-\$120 per unit. Generic or compatible modules are at the low end (\$5-\$25), while OEM-branded or industrial-grade modules can reach \$60-\$120+ (Cisco, HPE, Juniper).

10G SFP+ Modules: \$20-\$300 per unit. Compatible 10G SR modules often sell for tens of dollars, whereas OEM long-reach or DFB modules can cost several hundred dollars. 100G Modules: Typically \$150-\$200 per unit on average, with prices influenced by brand, reach, and technology.

400G/800G Modules: Prices are higher due to advanced technology and integration, often exceeding several hundred dollars per unit, with some specialized modules for AI or hyperscale data centers costing significantly more.

Factors Influencing Optical Module Prices

Technology and Speed: Higher-speed modules (100G, 400G, 800G) require more complex photonic components, increasing costs.



Brand and OE

M vs Third-Party: OEM-branded modules generally cost more due to warranty, reliability, and compatibility assurances, while third-party or compatible modules are cheaper. Raw Materials and Manufacturing: Lasers, silicon chips, and precision cleanroom manufacturing contribute significantly to module costs.

R&

D and Innovation: Modules with new technologies, such as silicon photonics or pluggable coherent optics, carry higher premiums. Market Dynamics: Supply-demand imbalances, data center expansion, and competition, especially from Chinese manufacturers, can drive prices down or up temporarily.

Market Trends

Average selling prices for mainstream modules are declining 15–20% annually due to competition. Emerging high-speed modules (400G/800G) are seeing increased adoption, with prices stabilizing as production scales. Silicon photonics and co-packaged optics are expected to reduce costs by up to 40% in the future.

In summary, optical module prices range from a few dollars for basic 1G modules to several thousand dollars for advanced high-speed modules, with costs influenced by speed, technology, brand, and market conditions.

Article Content

Optical Modules

This report aims to provide a comprehensive presentation of the global market for Optical Modules, focusing on the total sales volume, sales revenue, price, key companies market share and

Optical Transceiver Pricing: Cost Ranges by Speed and Type

This article compares typical cost ranges across speeds and transceiver types, explains why prices vary, and gives practical guidance for choosing the right optics for a given budget and performance

Cost of optical module electronic chips | Weyland

In low-speed optical modules, their cost share is relatively low. However, in 400G, 800G, and future 1.6T optical modules, electronic chips can account for 20%–40% or more of total cost,

Deep Dive: Optical Module Market

In terms of pricing, 800G LPO modules have been sold at around \$600 this year, which is cheaper than single-mode conventional optical modules priced above \$700 but more expensive

The Most Comprehensive Guide Of Optical Modules

Explore the ultimate guide to optical modules. Learn types, functions, performance metrics & how to choose the right module for your fiber network.

Optical Transceiver Modules Prices & Specifications

Optical Transceiver Modules/SFP, also called fiber optic transceiver or optical transceiver, is a typically hot-pluggable device used in high-bandwidth data

Optical Modules Market Research Report 2034

The optical modules market was valued at \$14.8 billion in 2025 and is projected to reach \$39.6 billion by 2034, growing at a CAGR of 11.5%.

Cost structure of optical module chips | Weyland

Like other large-scale data centers, these modules rely heavily on optical chips, enabling them to transmit, process, and convert signals efficiently. Understanding the cost structure of optical

Optical Module Chip Market 2025

Average selling prices for 100G optical modules have declined approximately 70% over the past five years, forcing chip vendors to achieve aggressive cost reductions while maintaining performance.

OPTICAL MODULE Price

Optical Protection Switching Module. ONS 15454 Optical Service Channel Module. ONS 15454 Enhanced Optical Booster Amplifier Module. ONS 15454 Optical Booster Amplifier Module. ONS

What is SFP Port? Everything You Need to Know

What is an SFP port? The SFP port also refers to a Small Form-factor Pluggable port. It is a compact mechanical slot that accepts an SFP

Understanding Single-mode and Multi-mode Optical Modules and Optical ...

Multi-mode Optical Module: · Paired with Multi-mode Fiber: Multi-mode optical modules are specifically designed to work with multi-mode optical fibers. This combination offers efficient transmission over

Cisco 10GBASE SFP+ Modules Data Sheet

The Cisco® 10GBASE SFP+ modules (Figure 1) give you a wide variety of 10 Gigabit Ethernet connectivity options for data center, enterprise

Google's High-Speed Interconnect Architecture to Push 800G+ Optical ...

Based on TrendForce's projection that nearly 4 million Google TPUs will be shipped in 2026, demand for 800G-plus optical modules is expected to exceed 6 million units. Beyond

Internal Structure of Optical Modules

Optical modules are key components in fiber optic communication systems, responsible for electro-optical conversion, meaning the conversion of electrical signals to optical signals or vice

Zhongji Innolight (SHE:300308) Stock Price & Overview

About Zhongji Innolight Zhongji Innolight Co., Ltd., together with its subsidiaries, researches, designs, develops, packages, tests, and sells optical communication

800G vs. 1.6T Transceivers for AI Data Centers:

Compare 800G and 1.6T transceivers for AI data centers in 2026. Learn the differences in performance, power efficiency, use cases, and deployment

Differences Between Optical Modules SFP, SFP+, CFP, XFP, QSFP?

At present, 40G optical module and 100G optical module price is too high, power consumption is too large, and 10G optical module rate can not meet the network demand, so 25G

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Contact Us

Continue your research online:

Website: <https://metramarket.es>

Technical inquiry: <https://metramarket.es/contact.html>

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

