Have optical modules increased in price recently



Overview

The reasons behind the recent sharp price increase of optical modulesThe price of new technologies is higher, with 800G optical modules being 50%-100% high.

Key Takeaways

Yes, optical module prices have increased significantly, particularly for high-speed modules like 800G and 1. 6T, driven by supply shortages, rising raw material costs, and technological upgrades. Recent Price IncreasesHigh-speed optical modules, such as 800G modules, are currently priced 50%-100% higher than 400G modules due to strong demand from AI-driven data centers and cloud infrastructure expansion.

The introduction of 1. 6T modules is also contributing to higher costs as these are still in early adoption stages. Even mid-range modules like 100G SFP28 have seen cost increases due to rising prices of metals such as gold and copper, which are critical for PCB boards and connectors.

Key Drivers

Supply and Demand: Exploding demand for AI computing and cloud services has led to a shortage of high-speed optical modules, with lead times extending beyond 12 weeks for many manufacturers. Raw Material Costs: Prices of essential materials, including indium phosphide, gold, copper, and tin, have risen sharply, directly increasing production costs. For example, a 10% rise in gold and 20% rise in copper can increase the metal cost of a single 100G module by 8-10 yuan.

© 2026 METRA FIBER MARKET - All rights reserved

Technological Barriers: Advanced modules require significant R&D investment and specialized production capacity, such as CoWoS packaging, which is limited to a few manufacturers like TSMC and ASE. Geopolitical and Policy Factors: Efforts to diversify supply chains and domestic subsidies for key materials have also contributed to short-term price increases.

Market Context

While 400G modules have seen some price reductions due to intensified competition, the overall market is growing rapidly, with the global optical module market projected to reach $35. 8 billion by 2030, driven by AI, cloud computing, and 5G infrastructure. High-speed modules remain the primary driver of price increases, whereas lower-speed modules face competitive pressures that can moderate price growth.

Summary

Optical module prices have risen sharply for high-speed and next-generation modules due to a combination of supply shortages, raw material cost increases, technological complexity, and strong demand from AI and cloud applications. Mid-range modules may experience more stable or slightly declining prices due to competition, but the overall trend for advanced modules is upward.

Article Content

The reasons behind the recent sharp price increase of optical modules

The price of new technologies is higher, with 800G optical modules being 50%-100% higher than 400G. Technological barriers and R&D investment: Leading manufacturers enjoy pricing power,

Why the Logic Behind Optical Module Price Hikes Is More ''Healthy''

Guosheng Securities notes that the pricing logic for optical modules is more sustainable: as specs advance from 400G to 1.6T, unit prices rise while cost per bit continues to fall. This ''tech-driven

Rising Fiber Optic Prices and Supply Challenges: Cost Trends

Taking high-speed optical transceiver modules as an example, prices have been rising steadily since their initial market launch.

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

Optical fibre prices rise as preform availability tightens

© 2026 METRA FIBER MARKET - All rights reserved

In the latest Optical Fibre and Cable Market Outlook, CRU examines the recent acceleration in fibre pricing and the tightening supply conditions

Goldman Sachs: AI chip ratio increases, optical module ...

Goldman Sachs predicts that even if AI chip sales slow down, the demand for optical modules will continue to grow due to the increase in the ratio.

Optical Module MCUs Become Critical as AI Data Centers Drive

MCU chips powering optical modules have emerged as a critical semiconductor segment driven by the AI data center construction boom, with prices rising approximately 40% year-to-date

Optical Module Package Market 2025

The optical module market has become increasingly competitive, with average selling prices declining at approximately 15-20% annually for mainstream products. Chinese manufacturers have significantly

The Breakthrough Path for the Optical Communications Industry Amid ...

Rising raw material prices are being passed on from the cost side to business operations, and optical module manufacturers are facing the dual challenges of squeezed profits and supply

The Breakthrough Path for the Optical Communications ...

Although optical modules are high-tech products, raw material costs account for as much as 60%-70% of the total cost, with metal materials being one of the major cost items.

Optical Module Industry Statistics (2026): Expert Analysis

Optical module demand is reshaping faster than most forecasts, with 2026 growth pointing to a clear change in where capacity is being built and what

Optical Module Chip Market 2025

While investment in fiber-optic networks is increasing, the market remains price-sensitive, with a preference for cost-effective 10/25G solutions over high-end modules. Middle East & Africa The MEA

Optical module "Yi Zhongtian" has fallen! Demand relies on ...

Citigroup recently raised its target prices for Eoptolink, Zhongji Xuchuan, and Tianfu Communication. Citigroup stated that although profit-taking is inevitable after the sharp rise in

Understanding Optics Module Trends and Growth Dynamics

© 2026 METRA FIBER MARKET - All rights reserved

The Optics Module market is expanding rapidly, driven by data center proliferation and 5G deployment. Analyze the 12% CAGR to $42 billion by 2033 with our market insights.

WORLD WIDE WEB JOURNAL Home

By clicking download, will open to start the export process. The process may take but once it finishes a file will be downloadable from your browser. You may continue to browse the DL while the export

Rising Fiber Optic Prices and Supply Challenges: Cost Trends

For instance, the retail price of a 1.6T optical module has increased from approximately $1200 to over $2000, an increase of over 70%, and order backlogs have been extended to 2026.

''Solar module prices will soon go back to over $0.12/W''

Hryshko expects prices of high-quality Tier 1 solar modules to soon exceed $0.12/W. “This means module prices will at least match production costs

AI Boom Strains Supply of Lasers, Fiber Optics and Photonics

Companies that provide optical components—such as laser diode makers, fiber cable producers, and photonics module suppliers—may gain pricing power in the short term, which could

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.

© 2026 METRA FIBER MARKET - All rights reserved