

Optical module shipments in 2024



AI Overview

Shipments of 400G and 800G optical modules exceeded 20 million units in 2024, generating nearly \$9 billion in revenue. Market Overview In 2024, the high-speed datacom optical module market experienced exponential growth, driven primarily by AI applications and hyperscale data center expansion. Unit shipments of 400G and 800G modules quadrupled compared to the previous year, surpassing 20 million units, with total revenue reaching approximately \$9 billion. The market is projected to continue expanding, with forecasts estimating nearly \$12 billion by 2026 as operators transition to 1.6T 200G/lane technology. Technology Trends 400G Modules: Remained widely deployed across hyperscale, cloud, and telecom networks. Coherent 400G pluggables more than doubled YoY, supporting large-scale datacenter builds. 800G Modules: Growth slowed slightly in late 2024 after a surge in 2Q24, but 800G optics became the standard for AI clusters and high-density data centers. Coherent led 800G shipments, followed by Nvidia's 800G solutions sourced from Fabrinet. 1.6T Modules: Early 1.6T sales began emerging in 2024, signaling the next phase of high-speed optical interconnects. Vendor Leadership Innolight: Leading supplier for 400G datacom modules. Coherent: Top position for 800G modules. Nvidia/Fabrinet: Third-largest source of 800G modules, primarily for AI applications. Market Drivers AI and GPU Clusters: Increased demand for high-bandwidth, low-latency interconnects in AI training clusters drove optical module adoption. Telecom Bandwidth Expansion: Telecom bandwidth deployment surged 51% YoY in Q3 2024, reflecting strong demand for 400G coherent pluggables. Hyperscale Data Centers: Large-scale cloud and enterprise deployments continued to adopt 400G and 800G modules to support growing east-west traffic. Outlook The optical module market is expected to maintain strong growth through 2025, with 800G shipments peaking and early adoption of 1.6T modules. While growth may moderate in later years, the market remains robust...

Article Content

Economic Watch: From optical modules to chips -

BEIJING, June 7 (Xinhua) -- With the global push for AI computing power unleashing an unprecedented wave of infrastructure buildout, China-made optical modules that shuttle data and the chips that

Datacom optical modules demand reaches record levels

Hyperscale network operator demand drove purchases of 400GbE and 800GbE datacom and 400ZR telecom optical modules to record levels,

Camera modules reimagined: new drivers, new

CCM shipments rebounded to 7 billion units in 2024, driven by a recovery in the smartphone market and renewed consumer momentum.

Market Insights: 800G & 1.6T Silicon Photonics Optical

Traditional modules require additional lenses and mirrors to combine the eight laser beams into one before entering the fiber. These optical

Over 20 Million 400G & 800G Datacom Optical Module Shipments

BOSTON (January 7, 2025) - Total shipments of leading-edge datacom optical modules are projected to tally over \$9 billion for 2024, according to the latest Optical Components Report from research firm

OFC 2024: Broadcom extends AI optical component

"We expect shipments of 8x100G optical transceivers to exceed 5 million units in 2024 and first 8x200G modules delivered to customers by the end

Optical AI Photonics Industry Statistics | Fact-Checked

Integrated photonics module shipments grew as reported to 1.5 million units in 2023 (LightCounting; photonics supply chain) AI-enabled

Optical Transceiver Market Size, Growth Drivers

The Optical Transceiver Market worth USD 15.42 billion in 2026 is growing at a CAGR of 13.67% to reach USD 29.26 billion by 2031. Coherent

Datacom optical component revenue doubles in 2Q24 - report

For the first time, unit shipments of 400/800GbE Datacom optics topped 5 million in a quarter. The report also says that spending on Datacom optical components in 2Q24 doubled YoY

Google's High-Speed Interconnect Architecture to Push

TrendForce estimates that the global shipment share of 800G and above optical transceiver modules will climb from 19.5% in 2024 to over 60% by

Yole Group

Yole Group - Access daily business, market & technology updates in the semiconductor industry, our Analysts' Analysis and Presentations and more

Yole sees automotive camera module market approaching \$9BN by

According to Yole's figures, the market for automotive camera modules reached almost \$6 billion in 2024 and is forecast to climb to \$8.7 billion by 2030, growing at a CAGR of 6.6%. Unit

Cignal AI: 400G and 800G Optical Module Shipments Quadruple

The demand for high-speed datacom optical modules has surged, with shipments of 400G and 800G units exceeding 20 million in 2024, totaling over \$9 billion in revenue, according to Cignal

Optical Transceiver Market Size, Share, Industry Report

Optical Transceiver Market Size The global optical transceiver market was valued at USD 13.4 billion in 2025. The market is expected to grow from USD 15.4 billion in

AI Data Center Optical Component Shortage: Nvidia's

AI data center optical component shortage is pushing 800G transceiver production 40-60% below demand through 2027, McKinsey warns.

Demand for Datacom Optical Modules Reaches Record

"While some vendors have reported that lead times are coming down, the demand for 400GbE and 800GbE modules remains exceptionally strong and

NVIDIA Optical Interconnect 2026, \$500M Ayar Labs Round

Optical Interconnect Projects, NVIDIA \$4 B Investment, and 1.6 T Module Adoption
The industry has shifted from identifying the optical interconnect bottleneck before 2025 to pursuing aggressive, large

800G Optical Modules Drive Market Recovery in 2025

800G modules drive optical market recovery in Q2 2025, with initial 1.6T shipments. This article highlights key trends in data center optics and AI

Optical Transceiver Market Size, Growth Drivers

The optical transceiver market for modules above 400 Gbps is on track for a 14.69% CAGR, aided by IEEE 802.3df and the forthcoming 802.3dj

AI drives ramp-up in datacom optics - report

Total shipments of leading-edge datacom optical modules are projected to tally over US\$9 billion for 2024, according to the latest Optical

Google's Ironwood TPU and Apollo OCS to Drive 800G

Google's Ironwood TPU features a 3D Torus network and Apollo optical circuit switch to meet rising AI data center demands. TrendForce predicts

AI Reshapes the Global Optical Communications Market,800G Shipments

More notably, shipments of 800G optical transceivers are expected to achieve a year-on-year increase of 100% in 2025.

Demand for Datacom Optical Modules Reaches Record Levels in 1Q24

Spending on Datacom optical components was up more than 90% YoY as AI applications of 400GbE and 800GbE optical modules for AI applications drove demand to record levels.

Eoptolink: The development history of a domestic optical module giant

After its establishment, Eoptolink will focus its main efforts on the research and development and production of optical modules. An optical module is a core optoelectronic device used in fiber-optic

Demand for Datacom Optical Modules Reaches Record Levels in 1Q24

BOSTON (June 11, 2024) – Hyperscale network operator demand drove purchases of 400GbE and 800GbE datacom and 400ZR telecom optical modules to record levels, according to the 1Q24

Pluggables, Power, and Geopolitics: Mapping the 800G

As of December 5, 2025, the market for high-speed datacom optical transceivers, specifically at the 800G and nascent 1.6T nodes, has been split into two distinct,

Optical Module Market Analysis And Forecast In 2026--ETU-LINK

AI computing power has driven explosive growth in the optical module market,with 800G and 1.6T technologies leading the industry transformation. Chinese companies occupy a dominant

Deep Dive: Optical Module Market

Optical modules are typically defined by their bandwidth capacity, with the highest currently available being 800G modules. Next-generation 1.6T modules are expected to begin

LightCounting :: Updated forecast for sales of Ethernet transceivers ...

It leverages extensive historical data on shipments of Ethernet modules combined with extensive market research to forecast sales of these products in 2024-2029. The forecast includes more than 50

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