

Optical module shipments decline



Overview

Why now: — Each GPU in a modern AI cluster requires 6 fiber transceivers at 30W each — Generative AI clusters demand 10-100× more fiber than traditional cloud — 800G modules are in mass deployment; 1.6T is entering low-volume shipments — AMD, Broadcom, and NVIDIA jointly formed. The transition to 800G and 1.6T architectures has collided with a severe supply chain reality. In hyperscale data center and telecom environments, procurement strategies built on legacy forecasting models are failing. Alphabet, Amazon, Meta, Microsoft and Oracle continued to spend significantly more in 2024 than in 2023, with their. According to the latest June 2025 Quarterly Market Update by renowned research firm LightCounting, the global optical transceiver market is set to rebound in Q2 2025 with a projected 10% quarter-over-quarter growth. That structure is reversing in 2026 — optical module value share is climbing toward 60-70%. With global R&D projected to exceed \$2.1 billion by 2025 and 35 percent of manufacturers reporting lead times beyond 12 weeks, the. A hyperscale network operator recently discovered that 12% of their 400G DR4 modules—all from an AVL-approved supplier—failed within 90 days of deployment. Root cause analysis traced the failures not to a design flaw, but to a contract manufacturer switching laser bonding adhesive without.



Article Content

InP is the real chokepoint behind every 1.6T optical module shipping ...

TrendForce has 800G+ optical transceiver shipments going from roughly 24M in 2025 to 63M in 2026 (2.6x), with the AI optical transceiver market expanding from \$16.5B to \$26B. Win

Optical Modules Market Size, Growth Trends

The global rollout of 5G networks has created an unprecedented demand for high-speed, low-latency optical links. 5G infrastructure relies heavily

1Q22 Optical Components Report

Optical Components Unit Shipments Highlights Datacom Components 400GbE shipments jumped back this quarter after a relatively

AI Drives Doubling of 800G Optical Transceiver Shipments in 2025

Furthermore, driven by escalating demands from AI technology, shipments of 800G optical transceivers are projected to grow by 100% year-over-year in 2025. The market will also see the initial shipments

Optical Transceiver Market Price Trends 2026: TCO & Risks

Optical Transceiver Market Price Trends 2026: The 800G Shift Procurement forecasts frequently project aggressive price drops for 800G optics by 2026, ignoring the non-linear power

Supply Chains and Pricing in Optics and Photonics

Prices decline in the long term Short-term price fluctuations, attributable to shifting end-product demand and variations in factory utilization, are common in large-volume manufacturing of optics and

South Korea's LetinAR raises \$18.5M to build the optics behind next ...

South Korean optics startup LetinAR raised \$18.5 million from investors including Korea Development Bank and Lotte Ventures, bringing total funding to \$41.7M and securing LG backing to

LightCounting :: Component shortages limit growth in

Demand for optical connectivity remains strong, but component shortages hobbled growth in sales of optical transceivers in Q4 2024. The first half of 2025 will be

Demand for datacom optical modules reaches record

Innolight led all vendors in shipments of Datacom modules. Telecom optical module shipment growth was concentrated in 400G coherent pluggables,

JinkoSolar PV module reach lowest volume since Q1 2023

Leading solar PV manufacturer JinkoSolar's module shipments have continued to decline in the first quarter of 2026, with 13.7GW.

Optics Transceiver Module Market 2025

The optics transceiver module market is experiencing robust growth driven by the exponential rise in data center investments globally. Hyperscale data center operators are deploying 400G and 800G

Wireless Optical Module Market 2025

Wireless Optical Module market was valued at 1910 million in 2024 and is projected to reach US\$ 4433 million by 2032, at a CAGR of 13.1%

1Q23 Optical Components Report

1Q23 Optical Components Report Datacom revenue and module shipments plummeted as inventory adjustment hit hard this quarter.

Datacom optical modules demand reaches record levels – Signal AI

Datacom optical modules demand reaches record levels – Signal AI Research firm Signal AI reports that 400GbE and 800GbE optical module shipments for datacom and telecom applications

Optical Module Industry Statistics 2026

Supply chain disruptions in 2022 caused a 15% delay in delivering high-speed optical modules to data center clients, primarily due to semiconductor shortages. Global R&D spending in

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

Global logistics for optics: 2026 Lead times & Risks

Discover how 2026 global logistics for optics and DSP lead times impact 800G data center deployments. Learn to troubleshoot PAM4, FEC, and CMIS failures.

2025 Optical Module Market Share and Demand Report

Global AIDC CAPEX is projected at \$400-480 billion in 2025, with optical modules accounting for 3% of total costs, translating to a \$12-14.4 billion

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

Supply Chain Resilience for Optical Modules: Failure Analysis

The bottom line is that supply chain resilience for optical modules isn't about having three vendors on a preferred list and signing multi-year purchase agreements.

CPU Shortage Deepens, Optical Module Value Restructuring

In traditional data center interconnect (DCI) systems, optical modules held ~30% of total system value. That structure is reversing in 2026 — optical module value share is climbing toward...

800GbE Optics Shipments to Grow 60% in 2025

Additional Findings from the 4Q24 Optical Component Report: The datacom optical component market will grow 60%+ to reach over \$16B in

Which Optics Stock Has Dominated in 2026: Applied Optoelectronics ...

The optics complex has been one of 2026's most rewarding corners of the AI infrastructure trade, and the spread among the three leaders is surprisingly wide. Applied

LightCounting :: Component shortages limit growth in

Chinese optical module manufacturers will report Q4 results together with the full year results in April, but several of them have already released very high net

Comprehensive Overview of Optical Module and DCI Trends: 2026-2034

The optical module and DCI market is booming, projected to reach \$40 billion by 2033, driven by cloud computing, 5G, and data-intensive applications. Learn about market trends, key

LetinAR AI Glasses Optical Module: Major Funding Win

The LetinAR AI glasses optical module just secured an \$18.5 million funding round. Discover how PinTILT technology is reshaping the smart glasses industry.

Over 800G optical transceiver shipments to soar 2.6x by 2026

High-speed optical interconnects are now central to performance and scalability, especially as AI data centers grow into large clusters, according to TrendForce. The report predicts

1Q24 High-speed Datacom Optical Module Shipments

2.This quarter, over 3 million high-speed datacom optical modules were shipped. These modules are used to support connections for AI clusters

Demand for Datacom Optical Modules Reaches Record

Spending on Datacom optical components was up more than 90% YoY as AI applications of 400GbE and 800GbE optical modules for AI

Contact Us

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