

Article Overview

Q2 saw a strong rebound in optical module sales, driven primarily by 800G Ethernet modules, with major companies reporting significant revenue growth and market momentum.

Market Trends

The global optical transceiver market experienced a 10% quarter-over-quarter growth in Q2, following a flat Q1, largely fueled by demand for 800G Ethernet modules and the initial commercial shipments of 1.6T modules . While 400G module shipments declined as hyperscalers like Amazon and Meta transitioned to higher-speed optics, 400G and 800G active optical cables (AOCs) continued to perform strongly, supporting short-reach interconnects in data centers . Overall, the data center optics market is projected to grow over 60% in 2025, with revenue exceeding \$16 billion, driven by 400G and 800G modules .

Technological Drivers

The 800G optical module is a key driver of growth, featuring high-performance DSP chips, laser drivers, and transimpedance amplifiers. It uses PAM4 modulation and an 8-channel parallel architecture, enabling 100Gbps per channel and optimized for high-bandwidth, low-latency GPU interconnects in AI clusters . Initial 1.6T modules are entering the market but currently contribute only modest revenue, with shipments expected to remain below one million units until 2026 .

Company Performance

- o Lumentum reported \$665.5 million in net revenue for its fiscal Q2 2026, representing over 65% year-over-year growth, with strong profitability and expansion in non-GAAP operating margins . The company highlighted growth opportunities in optical circuit switches (OCS) and co-packaged optics (CPO), with backlogs exceeding \$400 million and multi-hundred-million-dollar orders for future delivery .
- o Fabrinet saw a 24% year-over-year increase in telecom revenue, which now accounts for 54% of its optical sales, reflecting strong demand in telecom and data center segments .
- o Analysts note that companies investing in silicon photonics and innovative optical solutions are better positioned for sustainable growth, while those relying solely on traditional EMLs may face margin pressures .

Regional and Market Dynamics

While US technology giants continue to increase investment in optical modules, China's major telecom operators have reduced capital expenditures by 10% year-over-year, totaling \$39.8 billion in 2025 . M&A activity is active, with US operators acquiring fiber assets and European operators divesting non-core businesses to optimize operations .

Summary

Q2 marked a recovery and growth phase for optical modules, with 800G modules leading the market, initial 1.6T shipments entering, and strong performance from major players like Lumentum and Fabrinet. The market is being driven by data center expansion, AI workloads, 5G deployment, and hyperscaler infrastructure upgrades, positioning optical modules as a critical component in next-generation connectivity solutions .

Next-generation 1.6T modules are expected to begin deliveries in Q4 2024, which will primarily be paired with

The optical link module, known as Optical Transceiver in English, is a general term for various module categories, including optical

800G modules drive optical market recovery in Q2 2025, with initial 1.6T shipments. This

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

How Optical Modules Operate Transmitter Optical Sub Assembly (TOSA) The TOSA manages light emission,

Cisco Transceiver Modules - Learn product details such as features and benefits, as well as hardware and software specifications.

Each module is optimized for different media and reach (ranging from 0.5 meters to 80 kilometers). All interface speeds, from 1G to

By 2025, its 800G optical module shipments will exceed 5 million units, making it the global "shipment champion" in

Science - Grade 10 Alternative Delivery Mode Quarter 2 -Module 5: Optical Instruments First Edition, 2020 Republic

LightCounting expects a 10% sequential growth in sales of optical transceivers in the current quarter, after a flat Q1. Most of the

The deployment of 400GE client optics was accelerated by the demand from hyperscale web players and service providers, along

The optical module market is expected to grow to nearly \$12 billion by 2026 as 1.6T technologies emerge.
Market

Sales of optical transceivers for telecom applications remained weak, but there are some signs of improvement, suggesting a

100G SR4 QSFP28 Optical Module Teardown 6 That rear connector is what is exposed to the outside of the QSFP28

Emerging innovations, including silicon photonics, integrated photonic chips, and coherent

Optical modules, which encompass transceivers, cables,

Web: <https://www.in-au.co.za>

