

# Optical modules increased by 27 times



## Overview

Our research indicates that demand for 400G/800G and even 1.6T optical modules for cloud data centers and AI training clusters has been accelerating over the past two years, with the overall market sustaining strong double-digit growth and Ethernet optical modules growing the. 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. The key growth driver is the rising demand for 800G Ethernet optical modules. Data Center Optical Module by Application (Large Data Center, Small and Medium-sized Data Center), by Types (40G, 100G, 200G, 400G, 800G, Other), by North America (United States, Canada, Mexico), by South America (Brazil, Argentina, Rest of South America), by Europe (United Kingdom, Germany). The global Optical Modules market is projected to grow from US\$ 17590 million in 2024 to US\$ 56786 million by 2031, at a CAGR of 15.8% (2025-2031), driven by critical product segments and diverse end-use applications, while evolving U. tariff policies introduce trade-cost volatility and. Data centers will keep dominating optical module demand as AI and cloud drive revenue growth through 2030. Optical module

demand is being pulled in two directions at once, faster bandwidth for dense networks and tighter constraints on power, security, and lead times. 5 billion in 2024 and is estimated to reach USD 8.

## Optical modules increased by 27 times



As optical modules proliferate in data centers, the benefits of silicon photonics will be amplified, making high-speed optics more widely available in the market.



The number of patent applications for optical module technologies increased by 35% from 2020 to 2023, with fiber optic design and signal processing being the most active areas.



The proliferation of internet-connected devices and the rise of data-intensive applications are driving the need for advanced optical modules that can support higher bandwidths and faster data rates.



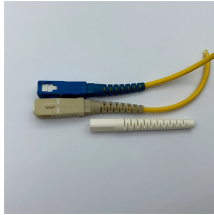
Our research indicates that demand for 400G/800G and even 1.6T optical modules for cloud data centers and AI training clusters has been accelerating over the past two years, with the ...



Today, I'm excited to share an in-depth analysis of the global optical module market, an industry I find particularly compelling due to its critical role in data center networks for the ...



Access detailed insights on the Optical Modules Market, forecasted to rise from USD 3.5 billion in 2024 to USD 8.2 billion by 2033, at a CAGR of 10.3%. The report examines critical market trends, key ...



The shift towards higher-speed optical modules (400G and beyond) is crucial, as these modules significantly increase data transmission capacity, enabling faster data processing and ...



The key growth driver is the rising demand for 800G Ethernet optical modules, alongside the initial commercial shipments of 1.6T modules, which are beginning to contribute modest revenue.



The shift towards higher-speed optical modules (400G and beyond) is crucial, as these modules significantly increase data transmission capacity, ...



Telecommunication providers are deploying advanced optical modules to handle increased data transmission speeds and bandwidth requirements. SFP+ and QSFP28 modules, capable of ...



Optical circuit switching suits organizations with dynamic workload patterns and scale matching Google's deployment profile. The power and cost savings prove substantial at hyperscale. ...

## Contact Us

For more information, pricing, or custom energy solutions, please contact us:

Website: <https://www.gdroofing.co.za>

Email: [sales@gdroofing.co.za](mailto:sales@gdroofing.co.za)

Phone: +27 72 418 9365

Address: 22 Electron Avenue, Isando, Johannesburg, 1600, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

