

Global Optical Module Production Capacity Forecast



Summary of Content

The global optical module market is projected to grow from \$17.6 billion in 2024 to over \$56.8 billion by 2031, with production capacity expanding rapidly to meet AI, cloud, and 5G-driven demand.

Market Growth and Production Trends

Global optical module production is experiencing strong double-digit growth, driven by hyperscale data centers, AI training clusters, and 5G network rollouts. Market size estimates vary slightly by source: QYResearch projects growth from \$17.59 billion in 2024 to \$56.79 billion by 2031 at a CAGR of 15.8%, while DataIntel forecasts \$14.8 billion in 2025 reaching \$39.6 billion by 2034 at 11.5% CAGR. WorldMetrics reports a market of \$13.2 billion in 2022 growing to \$35.8 billion by 2030 at 11.6% CAGR. These figures reflect both unit volume growth and rising adoption of high-speed modules.

High-Speed Module Adoption

The transition to 400G, 800G, and 1.6T optical modules is accelerating, particularly in AI and cloud data centers. High-speed modules are becoming critical for dense GPU clusters and next-generation compute infrastructure, with switch port bandwidth and line-rate per port increasing in tandem. Silicon photonics and co-packaged optics (CPO) are expected to dominate the 1.6T segment, while traditional SFP+ and QSFP-DD modules remain significant for 100G-400G applications.

Regional Production Dynamics

Article Content

Optical Module Chip Market 2025

This market research report provides a comprehensive analysis of the global and regional Optical Module Chip markets, covering the

Optical Modules

The global market for Optical Modules was estimated to be worth US\$ 17590 million in 2024 and is forecast to a

Optical Module Industry Statistics 2026

The global production of optical modules for industrial IoT applications is projected to grow from 8 million units in 2022

Global Optical Modules Market 2024-2030

In Global Optical Modules Market, The VITA 66.5 draught standard, set to be published, defines NanoRF optical

Photovoltaics Report

PV module prices fall by an average of about 26.7% for every doubling of cumulative production, and the typical LCOE

Optical Module & DCI Market: 16.4% CAGR to \$14.7 Billion

The Optical Module and DCI market's 16.4% CAGR to \$14.7 billion by 2025 is driven by surging data traffic and

Optical Modules Market Size, Growth Trends & Forecast

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

Optical Transceiver Market Size, Share, Analysis 2030

The global Optical Transceiver Market size in terms of revenue was estimated to be worth \$13.6 billion in 2024 and is poised to reach

Global AI Optical Transceiver Market to Reach US\$26 Billion in 2026 ...

TrendForce's latest research indicates that the global market for AI-focused optical transceivers has entered a phase

Data Center Optical Module Charting Growth Trajectories 2026-2034 ...

The booming Data Center Optical Module market is projected to reach \$15 billion in 2025, growing at a 15% CAGR

Global solar PV supply chain

Global solar PV manufacturing capacity 2015-2024, by component Renewable Energy
Global solar PV cell production 2015-2023, by

Global Optical Modules Market Insights, Forecast to 2030

This report presents an overview of global market for Optical Modules, capacity, output, revenue and price. Analyses

Global 100G Optical Module Market Size, Industry Share, Growth

Delve into detailed insights on the 100G Optical Module Market, forecasted to expand from USD 3.2 billion in 2024 to USD 8.5 billion

Optical Modules Market Size, Future Growth and Forecast 2033

The global optical modules market is projected to reach a valuation of USD 15.8 billion by 2033, growing at a compound annual

Solar PV manufacturing capacity and production by country and

Manufacturing capacity and production in 2027 is an expected value based on announced policies and projects. APAC = Asia-Pacific

The global Optical Modules market size will be USD 9425.5 million in

The global Optical Modules market size was USD 9425.5 million in 2024. Data center expansion is expected to boost sales to USD

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

Optical Modules

This report provides a comprehensive assessment of recent tariff adjustments and international strategic

Worldwide Optical Modules Market 2026

Between 2025 and early 2026, optical modules moved deeper into the compute fabric, with vendors shifting designs toward higher

SEMI Forecasts 69% Growth in Advanced Chipmaking Capacity

Advanced process capacity is projected to maintain a robust 14% CAGR from 2025 through 2028, beginning with 982

Global 25G Optical Module Market Research Report 2025(Status and

Report Overview The 25G Optical Module is a high-speed, next-generation optical transceiver designed for data communication

Global Optical Module Chip Market Analysis and Forecast 2026-2032

This report presents an overview of global market for Optical Module Chip, capacity, output, revenue and price.

Global Optics Module Market Size, Share, Trends & Forecast 2026-2034

Current acceleration in the optics module market is primarily driven by technological breakthroughs in photonic

Global Data Center Optical Module Market Size, Share & Industry ...

Data Center Optical Module Market Overview 2026-2033 The Data Center Optical Module Market constitutes a

Global Data Center Optical Module Market Research Report

Global Data Center Optical Module Market: Market Segmentation Analysis This research report provides a detailed segmentation of

Optical Modules Market by Type and Application

Optical Modules Market By Type (Optical Receiver Modules, Optical Transceiver Modules, Optical Transmitter Modules, Optical

Optical Modulators Market Trend, Outlook, Forecast 2025-2035

Optical Modulators Market Size and Share Forecast Outlook (2025 to 2035) The deployment of high-speed optical

Global Optical Module and DCI Market Size, Growth

The Optical Module and Data Center Interconnect (DCI) market represents a critical

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