

Global Optical Transceiver Market

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Abstracts

The global market for optical transceivers was valued at \$15.4 billion in 2025 and is estimated to increase from \$17.6 billion in 2026 to reach \$34.4 billion by the end of 2031, at a compound annual growth rate (CAGR) of 14.3% from 2026 to 2031.

Report Scope

The report analyzes the global optical transceiver market across key segments, including form factor, data rate, fiber type, connector, optical wavelength, and application. By form factor, the market includes widely adopted modules such as Quad Small Form-factor Pluggable(QSFP)/QSFP28, Small Form-factor Pluggable (SFP)/SFP+, Quad Small Form-factor Pluggable Double Density (QSFP-DD), SFP28, QSFP56, Octal Small Form-factor Pluggable (OSFP), and the C Form-factor Pluggable (CFP) family, which enable flexible deployment across different networking environments. By data rate, the market spans transceivers operating at less than 10 gigabits per second (Gb/s), 10 gigabits per second (Gb/s) to 50 gigabits per second (Gb/s), 51 gigabits per second (Gb/s) to 100 gigabits per second (Gb/s), and more than 100 gigabits per second (Gb/s), reflecting the transition toward higher-speed connectivity driven by artificial intelligence (AI) and cloud infrastructure.

From a transmission perspective, the market is segmented by fiber type into single-mode fiber (SMF) and multi-mode fiber (MMF), supporting both long-haul and short-reach applications. By connector, the market includes Lucent Connector (LC), Multi-Fiber Push-On/Multi-Fiber Termination Push-On (MPO/MTP), and Subscriber Connector (SC), which facilitate interoperability and scalability in network deployments. By optical wavelength, transceivers operate across 850 nanometers (nm), 1310 nanometers (nm), 1550 nanometers (nm), and dense wavelength division multiplexing (DWDM) wavelengths, enabling varying transmission distances and bandwidth capacities. Across applications, optical transceivers are deployed in data centers,

telecommunication networks, and enterprise environments, where high-speed, low-latency, and reliable data transmission is critical for performance and scalability. The report provides a comprehensive regional analysis covering North America, Europe, Asia-Pacific, and the rest of the World (RoW), including the Middle East and Africa and Latin America. It evaluates market dynamics, including drivers, challenges, and emerging trends, while highlighting innovations in material design and performance enhancement. The study concludes with an analysis of major companies in the market and their products. The base year for the study is 2025, with projections from 2026 through 2031, including the CAGR for the forecast period

Report Includes

68 data tables and 41 additional tables

An overview and analysis of the global optical transceiver market

Analyses of global market trends, with revenue data for 2025, estimates for 2026, and projections of CAGRs through 2031

Estimates of the current market size and revenue growth prospects, accompanied by a market share analysis by form factor, data rate, fiber type, connector type, optical wavelength, application, and region

Facts and figures pertaining to market dynamics, including key drivers, restraints, opportunities, challenges, and the impact of macroeconomic factors

Insights derived from value chain analysis and Porter's Five Forces model to evaluate industry structure and competitive intensity

Review of regulatory frameworks across major regions and their influence on optical transceiver technologies

Discussion of emerging technologies and developments, including advances in silicon photonics, integrated optics, high-speed transmission, and energy-efficient designs

Patent analysis highlighting key granted and published patents related to optical transceiver technologies

Analysis of the competitive landscape, including ecosystem assessment, company market share rankings, strategic initiatives, product launches, mergers and acquisitions, and investments

Overview of sustainability trends and ESG developments in the global optical transceiver market

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OSFP

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SFP28

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51 GB/S TO 100 GB/S

10 GB/S TO 50 GB/S

Less than 10 Gb/s

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Key Takeaways

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Multi-Mode Fiber (MMF)

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MPO/MTP

SC

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1310 NM

1550 NM

850 NM

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BROADCOM
CIENA CORP.
CISCO SYSTEMS INC.
COHERENT CORP.
EOPTOLINK TECHNOLOGY INC. LTD.
FOCI
HUAWEI TECHNOLOGIES CO. LTD.
INNOLIGHT
LUMENTUM OPERATIONS LLC.
SMARTOPTICS
SMITHS INTERCONNECT
SOURCE PHOTONICS
SUMITOMO ELECTRIC INDUSTRIES LTD.

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