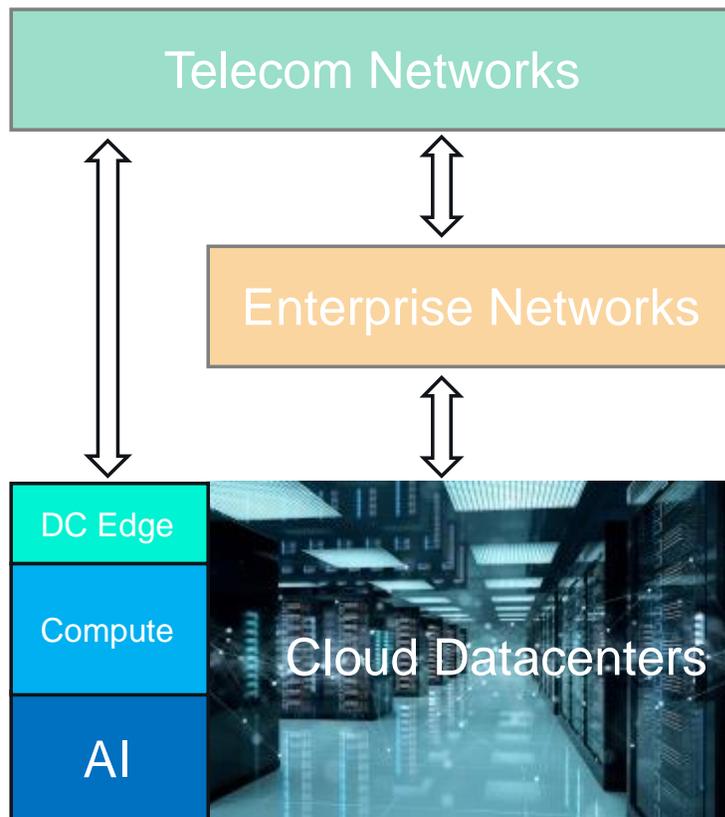




HIGH-SPEED ETHERNET OPTICS: CLOUD, ENTERPRISE AND TELECOM

SEPTEMBER 2023



Source: LightCounting and Equinix

Table of Contents

Abstract.....	3
Executive Summary	4
Changes to the forecast	5
Chapter 1: Forecast by Market Segment.....	8
Segments of the Global Ethernet transceiver market.....	8
Data traffic growth in mega datacenters	10
Cloud market segment	13
Telecom market Segment.....	14
Enterprise market Segment	16
Chapter 2: Market Forecast by Data Rate	18
Sales of Ethernet transceivers will return to growth in 2024.....	18
Tracking Ethernet speeds.....	19
25G and 50G transceivers.....	24
40G transceivers	27
100G transceivers	28
200G transceivers	31
400G transceivers	32
800G optical modules.....	35
1.6T optical modules	37
Chapter 3: Beyond 1.6T	39
New modulation formats and higher Baud rates	40
More lanes or wavelength channels	41
Co-Packaged Optics and Linear Drive/Pluggable Transceivers	44
Appendix A: Forecast Accuracy and Methodology	46
Forecast accuracy	46

Abstract

This report analyzes the impact of growing data traffic and the changing architecture of data centers on the market forecast for Ethernet optical transceivers with a focus on the high-speed modules used in data centers. It leverages extensive historical data on shipments of Ethernet modules combined with extensive market research to forecast sales of these products in 2023-2028. The forecast includes more than 50 product categories, including 1GbE, 10GbE, 25GbE, 40GbE, 50GbE, 100GbE, 200GbE, 2x200GbE, 400G, 800G and 1.6T transceivers, sorted by reach and form factors. It includes historical shipment data and forecasts for units, prices, and sales of these products to each of the three main market segments: Cloud datacenters, Enterprise and Telecom networks.

The report is based on confidential sales information and on detailed analysis of publicly available data released by leading component and equipment manufacturers along with considerable input from industry experts.

LightCounting Market Research

7726 Gunston Plaza, Unit 1480, Lorton, VA 22079

408-962-4851

www.lightcounting.com

LightCounting is a market research company focused on the in-depth study of high-speed interconnects for the datacom, telecom, and enterprise communications markets. Our research covers the complete supply chain from optical and semiconductor components, to modules, sub-systems, and their applications in telecom and datacom systems.

Our industry reputation was built by providing solid market data and objective analysis to help industry executives make tactical and strategic business decisions, and to see past all the market hype, rumors, press reports, blogs and other distortions that so often complicate and confuse many decision-making processes.

This LightCounting market report contains material that is a confidential, privileged, company product for the sole use of the intended recipients being LightCounting clients and subscribers. Any review, reliance on or redistribution by others or forwarding without LightCounting's expressed permission is strictly prohibited.

For more information, go to: www.lightcounting.com