

# **Infrastructure sector and optical modules**





## Overview

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Explore optical communication industry trends in 2026, driven by AI infrastructure, 800G and 1.6T gaining momentum and 400G/lane, the industry is moving beyond component innovation toward power-efficient, integrated, and deployment-ready optical architectures. Yole Group attended OFC 2026 with a dedicated team of analysts on site, actively engaging with major players in the photonics. How can players be categorized and the type of construction involved—retrofitting, new build, or expansion. This article explores current trends in networking optics technology as well as the market factors affecting. The optical module and data center interconnect (DCI) market is experiencing significant expansion, driven by the escalating demand for high-bandwidth connectivity, cloud computing, 5G networks, and data-intensive applications. Networking unlocks computing capability for single AI chips, connecting multiple chips (working together), enabling seamless data exchange and low latency, and driving AI to the next level. To address these demands, operators are increasingly adopting 400G optical modules—compact, pluggable transceivers capable of delivering up to 400.



## Infrastructure sector and optical modules

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### Optical Transceiver Market Size, Share, Industry Report

This shows the public sector commitments to advance digital infrastructure and huge compute clusters. In turn, it enables higher adoption of high-speed optical

### China Top 10 Fiber Optic Cable Manufacturers in 2025

The fiber optic cable industry in China has solidified its position as a global powerhouse, driving the expansion of high-speed networks, 5G infrastructure, and smart cities. As of November



### NVIDIA, Corning Strike Massive Optical Fiber Deal to Power AI Boom

The company pioneered low-loss optical fiber technology in 1970 and now supplies fiber and connectivity products used throughout data center networks. The NVIDIA agreement builds on



### McKinsey Direct Opportunities in networking optics

components in advancing AI and data center infrastructure build-outs. To move the massive amounts of data required for AI training and inferencing, hyperscalers and other data center operators need



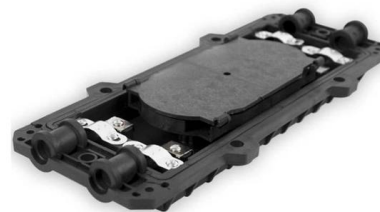
### AI server tracker: Optical module suppliers show mixed momentum as

Taiwan's optical module supply chain delivered mixed April 2026 results, reflecting uneven demand patterns across AI infrastructure and data center networking markets. According to the latest



### POET Stock Is Lighting Up -- But These 3 AI Optics Plays

AI infrastructure stocks have outperformed the equal-weight S& P 500 by 115% since December 2023, according to The Kobeissi Letter. POET's momentum has been driven by optical



50KW modular power converter



**Flexible Configuration**

- Modular Design, Expanding as Required
- Small/light, VME Mounted
- Installed in Parallel for Expansion

**Powerful Function**

- Support PFC/ESS
- Grid Support, Equipped with SVG Technology
- On-Grid and Off-Grid Operation

**Reliable Protection**

- Double PFC Design
- Sufficient Protection Functions Equipped

### Optical Module Stocks Surge Over 6% as 1.6T Era Begins

Driven by accelerating AI infrastructure demand, key optical module stocks like InnoLight and Eoptolink surged after a Huatai Securities report confirmed 1.6T modules have entered



## Silicon photonics and co-packaged optics at the heart of

While linear-drive pluggable modules remain competitive, CPO is expected to offer unmatched customization and scalability, with large-scale



## 200G Optical Module Market Report: Size, Growth,

200G Optical Module Market size was valued at USD 2.5 Billion in 2023 and is projected to reach USD 5.1 Billion by 2031, growing at a CAGR of 14.2% The

## Tower Semiconductor Teams with NVIDIA to Advance

Home » Press Releases Tower Semiconductor Teams with NVIDIA to Advance AI Infrastructure with 1.6T Data Center Optical Modules Tower's



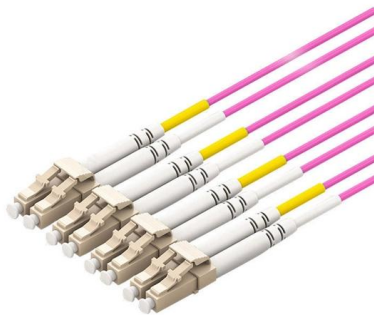
## Tower Semiconductor, NVIDIA advance 1.6T AI optics

New 1.6T optical modules on Tower's silicon photonics platform enable up to 2x data rates for NVIDIA-based AI infrastructure, boosting data center



## LightCounting Calendar

It analyses the impact of these projects on the demand for optical networking equipment, optical modules and components. It includes profiles of the leading Chinese Cloud companies and



## Tower Semiconductor and NVIDIA Advance 1.6T AI Optics

Tower Semiconductor teams with NVIDIA on 1.6T silicon photonics optical modules to boost AI data center speed and bandwidth.

## Optical Modules Market Size, Growth Trends & Forecast

Situated within the broader optical communications industry, the Optical Modules Market is a vital subset of the telecommunications equipment



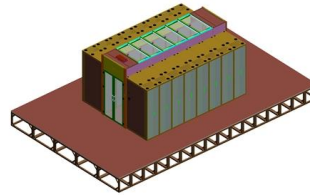
## Optical Module Package Market 2025

In South America, the Optical Module Package market is in a nascent growth phase, with Brazil leading in telecommunication infrastructure upgrades. Demand is concentrated in urban centers where



## Optical Communication Industry Trends 2026: AI, 800G/1.6T Optical

Explore optical communication industry trends in 2026, driven by AI infrastructure, 800G and 1.6T optical modules, silicon photonics, and next-generation data center connectivity solutions.

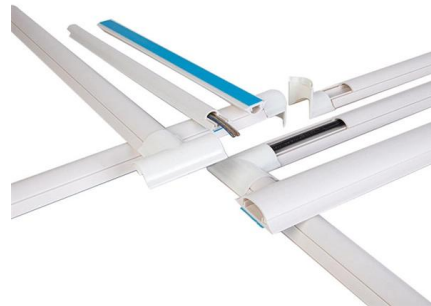


## Co-Packaged Optics Market Market Report 2026-2036 , Future

Global co-packaged optics market report 2026-2036. Covers CPO architecture, AI data centre adoption, NVIDIA vs Broadcom CPO strategies & forecasts.

## McKinsey Direct Opportunities in networking optics

Networking optics are mission-critical components in advancing AI and data center infrastructure build-outs. To move the massive amounts of data required for AI training and inferencing, hyperscalers



## SuperX Partners with TFC to Expand AI Optical

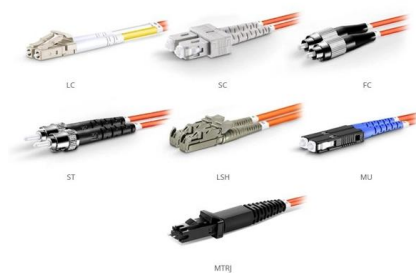
By providing one-stop optical connectivity solutions for AI customers worldwide, the collaboration is uniquely positioned to capitalize on the increasing demand within the AI infrastructure

## Optical Networking: The Next Mega Trend



## in AI Infrastructure

Goldman Sachs Research forecasts the total addressable market (TAM) for the AI networking sector to increase by 9 times to \$154 billion.



OM3 Fiber Patch Cable Family

## AI infrastructure accelerates the shift to scalable optical systems

OFC 2026 confirmed that AI infrastructure is now the main demand driver for optical networking, with most major announcements focused on bandwidth scaling, power efficiency, and

## Why China's optical communications sector is the latest AI boom

Optical modules, also known as optical transceivers, convert electrical signals to optical signals, and vice versa, for high-speed data transmission in networking and AI infrastructure systems.



## Optical Modules Market Research Report 2034

Optical modules, which encompass transceivers, cables, amplifiers, splitters, and associated components, serve as the backbone of high-speed data transmission



### **LITE, COHR Surge as Optics Becomes Critical \$576B**

Optical interconnects are emerging as a crucial component of AI infrastructure as demand intensifies, with Lumentum and Coherent positioned as major winners.



### **Optical Communications White Paper\_EY Design\_v3**

Driven by both technological advancement and demand in the enterprise market, fiber optic networks featuring all-optical connectivity are creating a new round of infrastructure construction and

### **Next-Gen AI Infrastructure Networks , Future Optical Module**

Comprehensive analysis of emerging network demands for next-generation AI infrastructure, including 100,000+ GPU clusters, energy-efficient optical technologies, and the path to



### **Comprehensive Overview of Optical Module and DCI Trends: 2026-2034**

The optical module and DCI market is booming, projected to reach \$40 billion by 2033, driven by cloud computing, 5G, and data-intensive applications. Learn about market trends, key



## How 400G Optical Modules Are Shaping Next-Gen

Discover key factors driving the rapid adoption of 400G optical transceivers, including AI, 5G, coherent optics, and market trends shaping next



## Contact Us

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For datasheets, pricing, or custom high-speed optical interconnect solutions, please visit:  
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