

# Major Manufacturers of 400g Optical Modules

## Article Overview

Leading manufacturers of 400G optical modules include InnoLight, Intel, Cisco, Juniper, Arista, Mellanox/NVIDIA, Dell, Amphenol, Broadex, Lumentum, Accelink, Sumitomo Electric, and Topstar Technology.

## Key Manufacturers and Their Focus

InnoLight Technology Corporation - Specializes in high-volume production of data center interconnect modules, serving hyperscale cloud operators and enterprise networks, with a focus on QSFP-DD and OSFP form factors for 400G deployments . Intel - Leverages Silicon Photonics to produce integrated 400G transceivers, emphasizing power efficiency, high-density solutions, and compatibility with cloud and enterprise data centers . Cisco - Integrates 400G modules into its routing and switching platforms, supporting interoperable solutions across large-scale networking environments . Juniper Networks - Offers a broad portfolio of 400G coherent and direct-detect optical transceivers for metro, edge, core, and data center networks, ensuring compliance with industry standards . Arista - Provides high-performance networking solutions for cloud data centers and large enterprises, requiring cutting-edge 400G optical modules for scale and speed . Mellanox Technologies (NVIDIA Networking) - Supplies 400G Ethernet and InfiniBand transceivers for high-performance computing (HPC) and AI clusters . Dell - Integrates 400G modules into servers and networking solutions, focusing on system compatibility and robust performance for enterprise and data center clients . Amphenol Corporation - Manufactures interconnect solutions, including connectors and cable assemblies essential for 400G deployments . Broadex Technologies - Produces cost-effective 400G optical transceivers and components for various market segments . Lumentum Operations LLC - Designs and manufactures high-speed optical transceivers for 400G and 800G data rates, supporting data center and cloud infrastructure globally . Accelink Technology Co. Ltd - Based in China, develops optical transceivers, components, and modules for high-speed network applications, emphasizing cost-efficient and reliable 400G solutions . Sumitomo Electric Industries Ltd - Offers optical transceivers and components for datacom, metro, and long-haul applications, incorporating advanced photonic integration technologies . Topstar Technology Industrial Co., Ltd. - Provides a range of optical transceivers including SFP, QSFP28, CFP, and 400G modules, designed for high-speed data transmission in data centers and telecom networks .

## Market Context

The adoption of 400G optical modules is driven by hyperscale data centers, 5G/5.5G deployments, and AI workloads requiring high-bandwidth, low-latency connectivity. Modules typically use PAM4 modulation, DSP, and coherent optics to achieve 400 Gbps per port, with compact form factors like QSFP-DD and OSFP enabling dense deployment . The market is projected to reach USD 14.8 billion by 2025, reflecting strong demand for next-generation networking infrastructure . These companies collectively cover a wide range of

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applications, from short-reach data center interconnects to long-haul coherent transport, providing both standardized and custom 400G solutions for global networking needs.

The application of 400G optical modules is mainly concentrated in high-speed, low-latency, and high-throughput

optical modules with different rates have been launched one after another, among which

The QSFP-DD 400G optical module has become a key element in the fast-changing field of data transmission

Applications of 400G/800G QSFP-DD Optical Modules The 400G/800G QSFP-DD optical

In the past two years, the demand for 400G optical modules in high-performance data centers, intelligent computing centers, super

As demand for bandwidth continues to accelerate, evaluating the top companies in the 400G Optical Module market is

Collaborations between chip manufacturers, optical module vendors, and network operators are driving the

To help you choose the best partner, this article will analyze and introduce 10 companies in the optical transceiver

Cisco Systems, Inc. offers optical transceiver modules used in various networking applications, ranging from campus to data centers

Compare optical modules for data centers and AI clusters. Learn key differences in standards, power, cabling, and

ZR/ZR+ play a key role in long-distance DCI applications. Choosing the right module type based on your specific

In 2020, the 100G data center Ethernet market is in full swing, which is the main battlefield for major optical module

According to our latest research, the global 400G Optical Module market size reached USD 2.87 billion in 2024.

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As networks continue to evolve to support emerging technologies such as 5G connectivity, IoT, and artificial

400G Coherent Optics is a complex system that integrates key photonic and electronic components to enable high

As part of a broader upgrade of its interconnect portfolio, Molex has introduced new 100G and 400G optical

Web: <https://www.millstraining.co.za>

