

Article Overview

100G optical transceiver modules, primarily in QSFP28 form factor, provide high-speed 100GbE connectivity for data centers, enterprise networks, and service provider applications.

Overview

100G optical transceivers are critical components that convert electrical signals into optical signals and vice versa, enabling high-speed data transmission over fiber networks. They are widely used in data centers, AI clusters, cloud computing, and enterprise core networks to support high-bandwidth applications and low-latency communication .

Common Types and Form Factors

- o QSFP28: The most common 100G module, supporting 100GbE links using 4x25Gbps channels. Available in short-range (SR4) multimode and long-range (LR1/LR4) single-mode variants .
- o CFP, CFP2, CFP4: Larger form factors used for longer distances or DWDM applications, suitable for metro and long-haul networks .
- o QSFP-DD/QSFP56: Next-generation modules supporting 200G and 400G, backward compatible with QSFP28 for high-density deployments .

Reach and Connectivity

- o Short-Range (SR): Typically up to 100 meters over OM4 multimode fiber.
- o Long-Range (LR): Up to 10 km over single-mode fiber (OS1/OS2).
- o Extended Reach: Some modules support DWDM links up to 300 km .

Key Features

- o MSA Compliance: Ensures compatibility with major OEM hardware like Cisco, Arista, HP, and Alcatel .
- o High Reliability: Factory-tested modules with low latency and thermal efficiency.
- o High-Density Deployment: QSFP28 modules allow multiple 100G ports in compact switch designs.
- o DAC and AOC Support: Direct Attach Copper (DAC) and Active Optical Cables (AOC) are available for short-range connections .

Suppliers and Availability

- o FS: Offers a wide portfolio of 100G QSFP28 modules with nearby warehouse stock and 30-day free returns .



100G of stock optical transceiver modules

- o UnitekFiber: Wholesale supplier providing MSA-compliant 100G QSFP28 modules, DAC/AOC cables, and next-gen 200G/400G modules .
- o Pro Optix: ISO-certified 100G transceivers compatible with multiple OEMs, supporting short- and long-reach applications with next-day delivery .
- o QSFPTEK and Cables on Demand: Provide 100GBASE-LR4 and 100GBASE-SR4 modules with guaranteed compatibility and high-speed performance .

Applications

- o Data Centers: Leaf-spine architectures, server uplinks, and high-density switch interconnects.
- o AI and HPC Clusters: High-throughput, low-latency connections for AI workloads.
- o Metro and Long-Haul Networks: DWDM and high-capacity optical links.
- o Enterprise Networks: Core and distribution layer aggregation, cloud service connectivity. 100G optical transceivers are essential for modern high-speed networks, offering flexibility in reach, form factor, and compatibility while supporting the growing demands of cloud, AI, and enterprise applications.

NADDOD Ethernet transceivers are purpose-built for AI data centers (AIDC) and high-performance computing (HPC) applications.

With data consumption surging across cloud services, AI workloads, and high-performance applications,

Learn how to future-proof your investment as the optics industry transitions to new 100G pluggable form factors. The

FS offers a growing portfolio of 100G QSFP28 modules. The 100G QSFP28 module solution provides high-performance 100GbE

The 100G QSFP28 module solution provides high-performance 100GbE connectivity for data centres, enterprise core & distribution

Cisco QSFP-100G-ER4L-S Compatible 100GBASE-ER4 Lite QSFP28 1310nm 40km with FEC, 30km without FEC (Rx Type APD)

QSFP28 Optical Transceiver Modules (100G-SR/LR) Buy 100G QSFP28 Optical Transceiver Modules by Amphenol XGIGA Factory

QSFP-DD-200G-SR8 2x 100G QSFP-DD SR8 850nm 70m/100m OM3/OM4 MPO-16(APC) MMF Optical Transceiver Module \$



100G of stock optical transceiver modules

100G QSFP28 DR Single Lambda is a transceiver module designed for 500m optical communication applications. The module

FS provides 100G QSFP28/SFP-DD, free & fast delivery, expert tech support, outstanding warranties.

FiberMall offers 25G SFP28/40G QSFP+/100G QSFP28 Transceiver Modules designed with form factor, optical/electrical

FS 100G DWDM QSFP28 optical transceiver module solutions offer a full range of QSFP28 modules 80km reach. Purchase from

Shop high-speed optical transceivers from Unitekfiber. We offer 100% compatible 40G, 100G, and 400G QSFP-DD modules for data

FiberMall offers 100G QSFP28 Optical Transceiver Modules provides 100 Gigabit Ethernet connectivity for up to 100km transmission

100G Transceivers by JTOPTICS deliver high-speed optical data transmission and are ideal for data centers, enterprise networks,

Optical transceivers have revolutionized data transmission, providing high-speed, long-distance, and secure data transmission

Web: <https://bssoda.pl>

