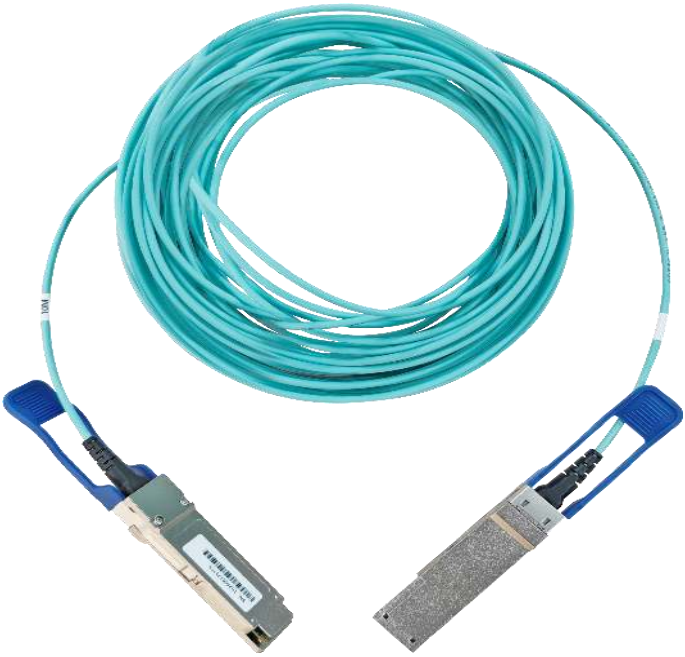
Foredge

100G AOC High-Speed Cable

HAOC-QSFP28-100G-10M
HAOC-QSFP28-100G-20M
HAOC-QSFP28-100G-30M

Product Introduction:

Foredge 100G QSFP28 AOC high-speed cable is used in short distance interconnection scenarios such as 100G Ethernet and Infiniband. Applied in 100G Ethernet and Infiniband short-distance interconnects, this product is 100% compatible with all major brands of servers, switches, routers, PDH/SDH transmission equipment, EPON, GPON, WDM PON base stations, and more. The high-speed cable meets the requirements of high-density port configurations for hardware communication devices and data centers with low cost and low power consumption. The length of the AOC cable can be customized, catering to various length demands.



Key Features:

- Full duplex 4 channel 850nm parallel active optical cable.
- Up to 27.952Gbps Data rate per channel.
- Maximum link length of 150m links on OM3 multimode fiber.
- High Reliability 850nm VCSEL technology.
- Electrically hot-pluggable.
- Case operating temperature range:0°C to 70°C.
- Power dissipation < 2.5 W per cable end.

Primary Applications:

1. Data Centers

AOC cables are most extensively used in data centers. Within data centers, high-speed cables are required for interconnections between servers, servers and storage devices, switches, etc. For example, in large-scale data centers, clusters of servers process data, and AOC cables enable high-speed data transmission to meet rapid data read/write and processing needs.

2. Telecommunications Industry

In telecommunications, AOC high-speed cables are primarily used to support high-speed data transmission and connections between communication devices, ensuring efficient network operation. 5G Base Stations: High-speed cables connect base station antennas to remote radio units (RRUs), enabling fast and stable signal transmission to meet the high-speed, low-latency demands of 5G networks. FTTx Networks: High-speed cables link central office equipment to customer premises equipment, providing high-speed broadband access. Optical Communication, Switches, and Routers: AOC cables play a critical role in key infrastructure, handling large data flows to support high-capacity, low-latency requirements for wireless communication, internet services, and cloud computing.

3. High-Performance Computing (HPC) & AI

In HPC centers, AOC high-speed cables are vital for connecting computing nodes, storage systems, network devices, and accelerator cards, ensuring ultra-low latency and high-bandwidth data transfer. For example, supercomputers rely on high-speed cables to link numerous computing nodes, enabling large-scale parallel computing and rapid transmission of massive datasets.

In AI, the enormous volume of data exchanged between AI servers requires high-speed cables to ensure fast transmission, improving training and inference efficiency. For instance, during AI training, high-speed cables facilitate frequent data transfers between server clusters, directly impacting training speed and performance. AOC cables are widely used in AI server cluster interconnects, particularly for short-distance scenarios due to their performance advantages.

Product Specifications:

Model	Speed	Interface Encapsulation	Cable Length
HAOC-QSFP28-100G-10M	100G	QSFP28-QSFP28	10M
HAOC-QSFP28-100G-20M	100G	QSFP28-QSFP28	20M
HAOC-QSFP28-100G-30M	100G	QSFP28-QSFP28	30M