

AOC Cable - OSFP 800G

Variants

1M 100M 30M 5M 3M

Details

800G QSFP-DD to QSFP-DD Active Optical Cable (AOC) – OM3 / OM4

The **800G QSFP-DD Active Optical Cable (AOC)** is a next-generation high-speed optical interconnect solution designed for **AI infrastructure, hyperscale data centers, cloud computing, GPU clusters, HPC environments, and enterprise backbone networks.**

This cable supports ultra-high-speed **800Gbps data transmission** over **OM3 / OM4 multimode fiber** with integrated optical transceivers on both ends. It delivers reliable PAM4 high-speed communication with low latency, stable signal integrity, and efficient power consumption for modern high-density networking environments.

Key Features

Supports 800Gbps ultra-high-speed transmission
QSFP-DD to QSFP-DD Active Optical Cable
Supports OM3 and OM4 multimode fiber
850nm VCSEL optical transmitter technology
Built-in TX & RX CDR for stable signal performance
Advanced PAM4 modulation format

Low latency and low power consumption design
Supports DDM/DOM digital diagnostics monitoring
Suitable for AI, cloud, GPU, and high-density data center networks

Technical Specifications

Parameter	Specification
Form Factor	QSFP-DD to QSFP-DD
Maximum Data Rate	800Gbps
Cable Length	1M to 100M
Cable Type	OM3 / OM4 Multimode Fiber
Wavelength	850nm
Minimum Bend Radius	100mm
Transmitter Type	VCSEL
Receiver Type	850nm PIN
Maximum Power Consumption	8W Per End
Jacket Material	OFNP
CDR	TX & RX Built-in CDR
Modulation Format	PAM4
DDM / DOM	Supported
Operating Temperature	0°C to 70°C (32°F to 158°F)

Applications

800G Data Center Interconnect
AI & GPU Networking Infrastructure
Cloud Computing Networks
High Performance Computing (HPC)
Enterprise Backbone Connectivity
High-Speed Storage Networks
AI Training & Machine Learning Clusters

Note: Proper cable routing and maintaining the minimum bend radius are recommended to ensure stable 800G optical transmission performance and long cable lifespan.