

DATASHEET 6.0

QSFP-DD-4XQSFP56 400G AOC

QSFP-DD to 4xQSFP28, Active Optical Cable (AOC), 400G to 4x 100G Eth, 1-30m

AQD003-XXXC-SO

The AQD003-XXXC-SO is an Active Optical Cable (AOC) break-out solution. AQD003-XXXC-SO is a direct-attach assembly (i.e. QSFP56 connectors with integrated cable) for quick and simple connections within racks and across adjacent racks as compared to using discrete optical transceivers and optical patch cables.

A typical application for break-out cables is between an QSFP-DD port on a 400Gbps switch and feed up to four upstream 100GbE-QSFP56 enabled switches. Each QSFP-DD-QSFP56 splitter cable features a single QSFP-DD connector (QSFP-DD MSA) rated for 400Gbps on one end and 4x QSFP56 connectors (SFF-8665), each rated for 100Gbps, on the other.

The QSFP-DD operates with the electrical signaling of four asynchronous 100GAUI-2 streams, resulting in an aggregate of 400G. Each QSFP56 connector operates with the electrical signal of 100GAUI-2.

Forward Error Correction (FEC) is required in the host equipment to ensure reliable system operation. The FEC type shall be as defined in IEEE802.3bj, i.e. Reed Solomon RS(544,528). Without FEC the bit error ratio (BER) will be less than 2.4×10^{-4} .

With FEC the BER will be better than 1×10^{-12} .

The AQD003-XXXC-SO utilizes a MultiMode fiber and is provided in lengths from 1 to 30 meters.

PRODUCT FEATURES

- 400G QSFP-DD to 4x 100G QSFP56
- 100G to 400G Ethernet services
- 8x 26.5625GBd (PAM4) to 2x 26.5625GBd (PAM4) Electrical Interface
- Digital diagnostics functions via the I2C interface (CMIS4.0 & SFF-8636)
- Up to 30m interconnects
- Operating case temperature 0°C to +70°C (+32°F to +158°F)
- Hot pluggable
- Power consumption QSFP-DD; <10W
- Power consumption QSFP56; <3W
- RoSH compliant
- Storage temperature -20°C to +85°C (-4°F to +185°F)

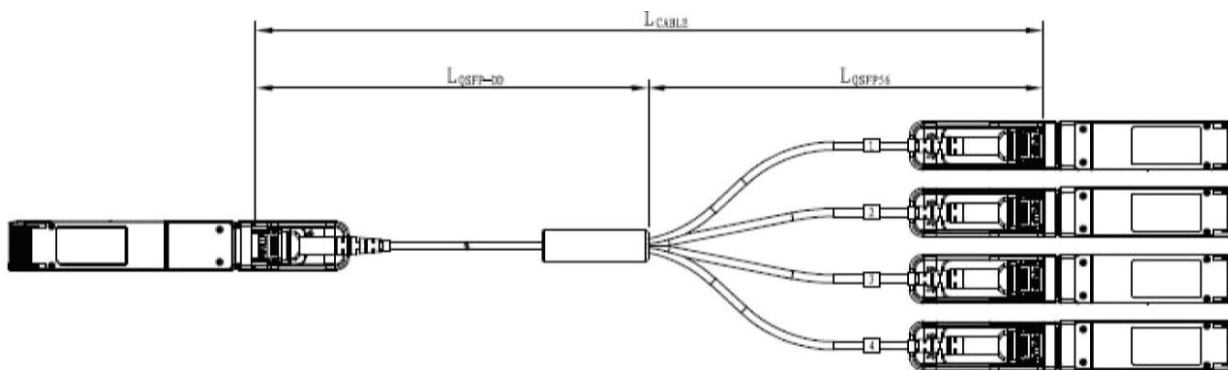
APPLICATIONS

- Data Center cabling infrastructure
- Storage Area Network (SAN)
- Hub, switches, routers, servers etc

ORDERING INFORMATION

Ordering number	Description
AQD003-001C-SO	QSFP-DD to 4xQSFP56, Active Optical Cable (AOC), 400G to 4x 100G Eth, 1m
AQD003-002C-SO	QSFP-DD to 4xQSFP56, Active Optical Cable (AOC), 400G to 4x 100G Eth, 2m
AQD003-003C-SO	QSFP-DD to 4xQSFP56, Active Optical Cable (AOC), 400G to 4x 100G Eth, 3m
AQD003-005C-SO	QSFP-DD to 4xQSFP56, Active Optical Cable (AOC), 400G to 4x 100G Eth, 5m
AQD003-007C-SO	QSFP-DD to 4xQSFP56, Active Optical Cable (AOC), 400G to 4x 100G Eth, 7m
AQD003-010C-SO	QSFP-DD to 4xQSFP56, Active Optical Cable (AOC), 400G to 4x 100G Eth, 10m
AQD003-015C-SO	QSFP-DD to 4xQSFP56, Active Optical Cable (AOC), 400G to 4x 100G Eth, 15m
AQD003-030C-SO	QSFP-DD to 4xQSFP56, Active Optical Cable (AOC), 400G to 4x 100G Eth, 30m

MECHANICAL DRAWING



Total length	Breakout point (measured from QSFP-DD)
1m	20cm
2m	1m
3m	1m
5m	1m
7m	1m
10m	1m
15m	1m
30m	1m