

# QSFP DD 200G Active Optical Cable Assemblies

## DOUBLE DENSITY, COST EFFICIENT, HIGH PERFORMANCE

Amphenol QSFP DD to QSFP DD 200G Active Optical Cable assemblies increase the number of lanes from 4 to 8 and double the port density as compared to 100G QSFP28 AOC. The QSFP DD AOCs operate up to 25Gb/s NRZ modulation and provide solutions up to 200Gb/s aggregate bandwidth, supporting 100meters over parallel multimode fiber. They are an ideal choice to be adopted for higher capacity networks and data center applications.

- Twice the port density of QSFP28
- Data rate up to 25.78125Gb/s per lane
- 100m over parallel multimode fiber
- Up to 200G aggregate bandwidth



### FEATURES

- Optical connectivity enables length up to 100m over a 3.0mm round jacket
- 25G NRZ signaling per channel
- Accessible through two-wire serial interface
- Programmable equalization, output swing, emphasis
- Programmable clock and data recovery circuits
- Excellent power consumption
- 0°C to +70°C operating case temperature

### BENEFITS

- Allows easy installation and flexible cable routing
- 200G aggregate bandwidth capacity
- Allows for connection discovery and cable management
- Provides flexible compensation for the losses
- CDR operational bit rate of 25.5–26Gb/s
- Supports legacy data rates (CDR bypassed)
- 3.3W (typ.) per cable end (CDR ON)
- Supports commercial temperature range

## TECHNICAL INFORMATION

### MATERIAL

- OM3 and OM4 fiber cable is selectable with plenum rated or LSZH rated
- Halogen free PCB material

### ELECTRICAL PERFORMANCE

- Power Supply Voltage: 3.3V
- Transmitter Type: 850nm VCSEL Laser
- Receiver Type: PIN Photodiode
- Bit Error Rate: < 10<sup>-12</sup>

### MECHANICAL PERFORMANCE

- Module Insertion Force: 90N Max
- Module Extraction: 50N Max
- Module Retention: 90N Min
- Cage Retention In Host Board: 114N Min
- Durability: 250 Cycles

### ENVIRONMENTAL

- Storage Temperature Range: -40°C to 85°C
- Operating Case Temperature Range: 0°C to 70°C
- Storage Humidity Range: 0 to 85% RH
- Operating Humidity Range: 0 to 55% RH

### APPROVALS AND CERTIFICATION

- Class I laser product
- RoHS 6/6 Compliant

### SPECIFICATION

- IEEE Std 802.3bs
- IEEE Std 802.3cd
- QSFP DD MSA CMIS Rev.3.0
- QSFP DD MSA Hardware Specification Rev.4.0

### PACKAGING

- ESD Bag

### TARGET MARKETS/APPLICATIONS



Network Interface Cards (NICs)  
Routers  
Switches



Data Center  
High Performance Computing  
Network Storage Systems  
Server



Industrial Controls & Instruments

## PART NUMBER SCHEME

