# molex

## QSFP-DD 16F Cable Assemblies >

QSFP-DD 16F Cable Assemblies are designed to unleash 16-fiber high-speed capabilities tailored for the future of data centers, networking and a wide array of transceiver applications. These cable assemblies come equipped with jumpers and breakouts, empowering 16F systems to achieve groundbreaking performance with data rates of 400G, 800G and 1TB+.



### **ADVANTAGES AND FEATURES**

### **Delivers 16-fiber connectivity for high data-rate applications** Design permits use with transceivers in 400G, 800G and 1TB+ applications

### Helps ensure reliability and simplified installation with industry-standard MTP and LC connectors

MTP-to-MTP jumpers and MTP-to-LC breakouts are available

### Supports high-speed QSFP-DD data transmission rates

16F design transmits up to 28 Gbps NRZ or 56 Gbps PAM-4, with 800 Gbps or higher aggregate

### Provides quick and reliable connection

Cable assemblies are fitted with pushpull MTP connector housings

Fiber Types	Single-mode, multi-mode
Fiber Count	16
Connectors	MTP-to-MTP, MTP-to-MDC, MPO- to-MPO, MTP-to-LC
Cable Outside Diameter	3.00mm
Fiber (Core/Cladding)	9/125μm (SM), 50/125μm (MM)
Operating Temperatures	-40 to +70°C

### Affords multiple options for increased design flexibility

Cable options include single-mode and multi-mode OM3 or OM4 cable, MTP-to-MTP jumpers and breakouts, and various cable lengths

### Offers improved return loss performance with angle-polished connectors (APCs)

SM and MM cable assemblies are available with APCs, while multimode cables are also available with ultra-polished connectors (UPCs)







# molex

## QSFP-DD 16F Cable Assemblies >

### **APPLICATIONS**

**Server and Storage** 

400G/800G/1TB+ systems Servers Switches Routers

### Telecommunications

Optical transceivers Cable distribution and management Cloud computing



Servers and Storage



Switches

### **SPECIFICATIONS**

### **Reference Information**

Packaging: Individually bagged Fiber Count: 16 Wire/Cable Types: Single-Mode: SM Multi-Mode: OM3, OM4 Connector Types: MTP, MDC, MPO, LC Designed in: Millimeters RoHS: Yes Halogen Free: Yes LSZH (Low Smoke Zero Halogen) or OFNP (Plenum)

#### Optical

Connector Insertion Loss (IL): Single-Mode: 0.75 dB Multi-Mode: 0.35 dB Connector Return Loss (RL): Single-Mode: 55 dB (max.) Multi-Mode: 25 dB (max.) Low Loss Insertion Loss: 0.35 to 0.5 dB Low Loss Return Loss: Multi-Mode Flat Polish: 20 dB (max.) Multi-Mode APC: 20 dB (max.)

### **Physical**

Connector Housings: Single-Mode: Green APC Multi-Mode: Aqua UPC or Green APC Boot Type: Straight Cable Lengths: Jumpers: 1.0 to 15.0m Breakouts: 1.0m Fiber Core Diameter: 9µm (SM) or 50µm (MM) Fiber Cladding Diameter: 125µm Cable Outside Diameter: 3.00mm Operating Temperatures: -40 to +70°C

### www.molex.com