

# 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 push-pull MTP connector housings

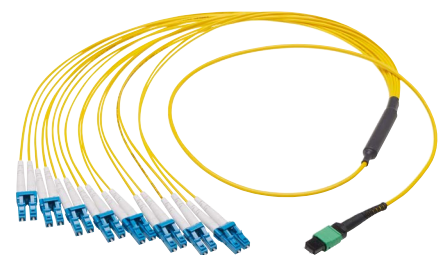
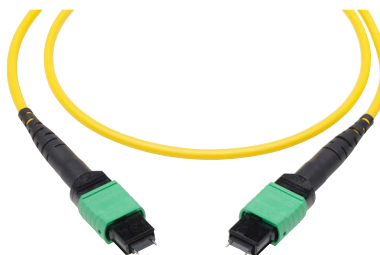
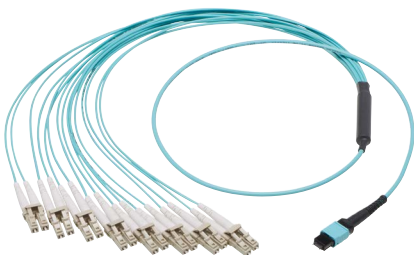
Fiber Types	Single-mode, multi-mode
Fiber Count	16
Connectors	MTP-to-MTP, MTP-to-MDC, MPO-to-MPO, MTP-to-LC
Cable Outside Diameter	3.00mm
Fiber (Core/Cladding)	9/125µm (SM), 50/125µm (MM)
Operating Temperatures	-40 to +70°C

### 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 multi-mode cables are also available with ultra-polished connectors (UPCs)



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## APPLICATIONS

### Server and Storage

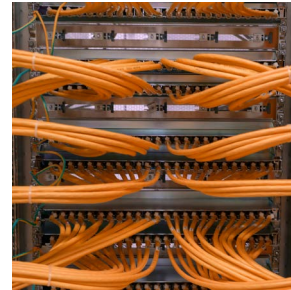
400G/800G/1TB+ systems  
Servers  
Switches  
Routers

### 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.)  
  Single-Mode APC: 50 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: 9 $\mu$ m (SM) or 50 $\mu$ m (MM)  
Fiber Cladding Diameter: 125 $\mu$ m  
Cable Outside Diameter: 3.00mm  
Operating Temperatures: -40 to +70°C

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