LINK®
American Cabling

AMERICAN STANDARD

INTERCONNECT
DATA CENTER
CATALOG 2025

V 2.0

LINK DATA CENTER INTERCONNECT OPEN CABLING

The rapid expansion of cloud computing, artificial intelligence (AI), and big data has significant increased the demand for data centers. However, the true challenge lies not only in constructing more data centers but in developing sustainable ones that align with the future of technology and environmental responsibility."

Technology plays a crucial role in transforming the world, driving advancements that reshape industries and daily life. As a result, LINK USA places great emphasis on continuous innovation, particularly in the development of high-speed connectivity systems. These systems are essential for powering the AI-driven data centers, often referred to as Hyperscale Data Centers. These advanced facilities are revolutionizing the way we live, work, and conduct business by enabling faster data processing, improved efficiency, and seamless communication between devices. Moreover, LINK USA is prepared to extend its services to government agencies in the near future, ensuring that the benefits of this cutting-edge technology reach both the public and private sectors.
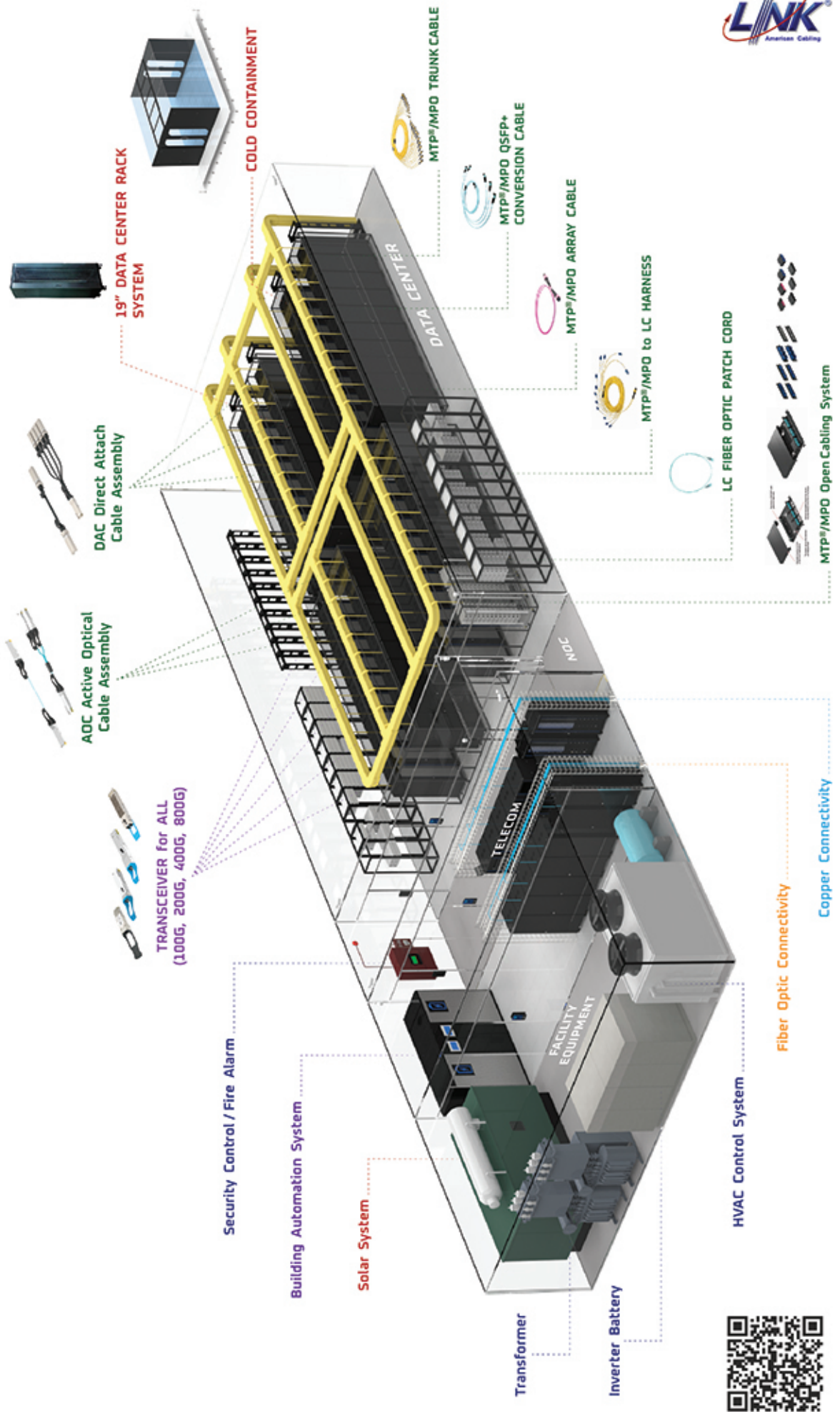
Enhancing Data Center Quality with Hyperscale and Cloud Solutions: An Academic Overview Abstract The transformation of data centers in the modern business world hinges on advanced technologies like Hyperscale and Cloud Solutions. These technologies enable superior performance, scalability, security, and operational efficiency.
This article delves into the core aspects of data centers, identifying key features such as high-performance computing, redundancy, and security measures that contribute to business success. Additionally, energy efficiency and disaster recovery plans are emphasized to ensure sustainable and reliable operations.

Introduction: Data centers are the backbone of modern business operations, supporting a wide array of digital services and processes. With the increasing demand for scalability and security, Hyper-Scale and Cloud Solutions have emerged as indispensable in improving data center quality. This paper provides a comprehensive analysis of the core components of these modern data centers and their impact on operational efficiency.

Key Features of Modern Hyper-Scale & Cloud Data Centers:
1. High Performance and Throughput Data centers today leverage high-performance CPUs and GPUs to handle massive amounts of data efficiency. By incorporating high-speed networking technologies, latency is minimized, and throughput is maximized, ensuring optimal performance across various business operations.

2. Reliability and Uptime Redundancy in power supplies, cooling systems, and network connections is crucial for ensuring continuous operation. Regular maintenance and monitoring further guarantee high availability, minimizing potential downtime.

3. Scalability Modern data centers are designed to scale seamlessly, handling increasing workloads without compromising performance. Resources can be dynamically allocated based on demand, enabling exible and efficient management.

4. Advanced Security Measures Implementing sophisticated security systems, including rewalls, encryption, and intrusion detection systems, helps protect the integrity and condentiality of data. Physical security measures like access controls and surveillance systems further bolster security.

5. Cabling Infrastructure and Data Center Design Efficiency cabling infrastructure plays a significant role in data center performance. Below are some of the key components: Telecommunication and Equipment Room: This serves as the interface between external infrastructure and the internal networks . Key elements include routers, switches, power supplies, and fiber distribution hubs.

DATA CENTER INTERCONNECT SOLUTIONS

LINK®
American Cabling

COLD CONTAINMENT

19" DATA CENTER RACK SYSTEM

DAC Direct Attach Cable Assembly

AOC Active Optical Cable Assembly

TRANSCEIVER for ALL (100G, 200G, 400G, 800G)

MTP®/MPO TRUNK CABLE

MTP®/MPO QSFP+ CONVERSION CABLE

MTP®/MPO ARRAY CABLE

MTP®/MPO to LC HARNESS

LC FIBER OPTIC PATCH CORD

MTP®/MPO Open Cabling System

DATA CENTER

NOC

TELECOM

FACILITY EQUIPMENT

Security Control / Fire Alarm

Building Automation System

Solar System

Transformer

Inverter Battery

HVAC Control System

Fiber Optic Connectivity

Copper Connectivity

Connecting Tomorrow, Effortlessly Today : Plug & Play

LINK American Cabling manufactures advanced Data Center Interconnect Cabling Systems specially designed for seamless connectivity in your data center. Our cabling offer effortless 'Plug-and-Play' functionality, ensuring instant integration and reliable performance right out of the box. With cutting-edge technology and precision engineering, our solutions simplify your infrastructure while maximizing efficiency."

LINK American Cabling understands that the ultimate goal in data center networks is to achieve zero downtime or extreme network availability. Given the strict schedule constraints and tight budgets, reliability and performance without compromise are critical. LINK American Cabling delivers fast deployment with built-in reliability, combined with guaranteed performance and headroom.

Save Time & Money
- No testing or troubleshooting required
- UP to 90% reduction in installation time and labor cost
- Fast delivery to meet short project turn-around deadlines

Easy & Plug & Play
- Easy to order: simplified ordering process eliminates errors
- Easy to install immediately
- Easy to configure: a complete range to choose from to build a system

Never Pray
- Built-in reliability with ultra-robust assemblies and connectors
- Strictly test process at the factory
- Fully trained employee in production line

Make it "Green"
- Small, flexible and efficient cable assembly design mean less cable to be deployed and no unnecessary slack
- Up to 50% material reduction in Data Center cabling topology
- All system components can be easily re-deployed and reused

Complexity in the data center increases expense and risk. For new technology deployments to meet business requirements, they must be simple to manage, maintain, and provision. Infrastructure reliability, performance, exibility, and availability are essential, and trade-offs between these factors are no longer acceptable.

Deploying a modular high-density MTP®/MPO-based structured wired cabling system in the data center signicantly improves responsiveness to Moves, Adds, and Changes (MACs). LINK American Cabling offers a comprehensive range of MTP®/MPO products: adapters, connectors, array cables, trunk cables, distribution cables, direct harnesses, and trunk harnesses. This system introduces the practical application of MTP®/MPO technology, demonstrating the migration path from 10 Gigabit to 40/100 Gigabit, and even up to 400 Gigabit.
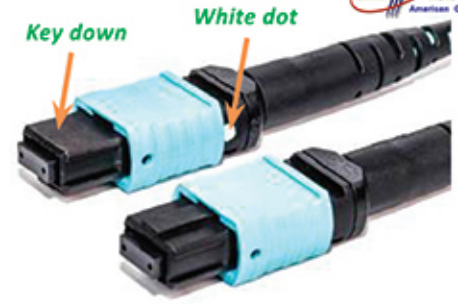
MTP®/MPO Connector

The MTP®/MPO connectors are multi-fiber transmission connectors compatible with IEC-61754-7 and TIA-604-5. MPO stands for "Multi-Fiber Push On". These connectors were developed by Nippon Telegraph and Telephone (NTT) in the early 1990s. MTP® is a variation of the MPO-style connector, manufactured by US CONEC. A common misconception is that MTP® and MPO are different styles of connectors; in fact, they share the same footprint. Both MPO and MTP® connectors are available in pinned and unpinned versions. The pinned MTP®/MPO is referred to as male, while the unpinned MTP®/MPO is called female.
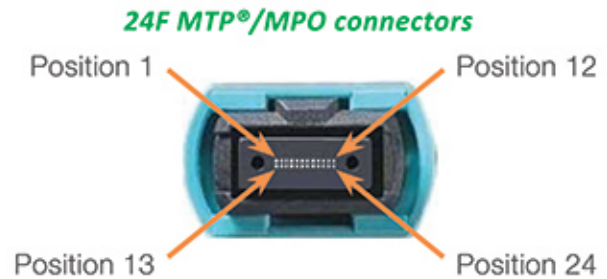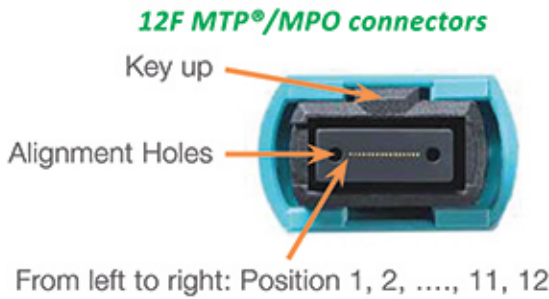
Left : female (unpinned) ; Right : male (with pin)

MTP®/MPO Connectors have a key on one side of the connector body. When the key is positioned at the top of the connector, it is referred to as the "key up" position. Conversely, when the key is at the bottom, it is called the "key down" position. Viewing the MTP®/MPO connector's front face with the key up, you will notice a white dot on the left side, indicating Position 1.

MTP®/MPO connectors are available with multiple ber congurations including 12F, 24F, 16F, and 32F in a single interface. The positional layout for 12F and 24F connectors is demonstrated below:

Key down   White dot

12F MTP®/MPO connectors

Key up

Alignment Holes

From left to right: Position 1, 2, ..., 11, 12

24F MTP®/MPO connectors

Position 1   Position 12

Position 13   Position 24

16F and 32F MTP®/MPO connectors maintain the same external dimensions as traditional 12F and 24F connectors, with an offset key. This offset key ensures that incorrect connections between the transceiver and the cable are prevented.

Offset key

16F MTP®/MPO Ferrule

5.3mm
1   16
3.75mm

12F MTP®/MPO Ferrule

4.6mm
1   12
2.75mm

Alignment Holes
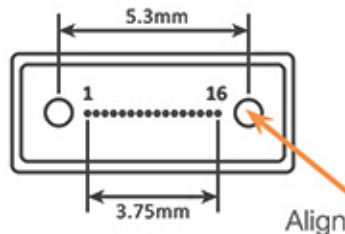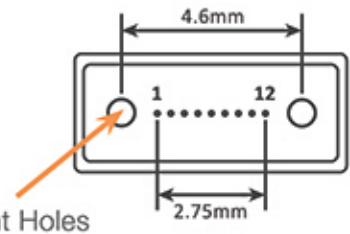
For multimode MTP®/MPO connectors, the standard practice is at polishing. However, single-mode connectors use an 8-degree angle polished (APC) end-face. In comparison to UPC connectors, APC polished connectors offer superior performance.


8°

8 degrees down-angled end-face

MTP®/MPO Transmission

MTP®/MPO array patch cables are utilized to transmit optical signals between transceivers. Each transceiver is equipped with Tx (transmission) and Rx (reception) channels. Understanding the Tx and Rx channel positions within the transceiver is crucial for proper functionality.

For example, the 12F MTP®/MPO connector is used for 40G QSFP+/ QSFP28 direct connections. However, only eight optical bers are necessary. The four bers on the left manage transmission, while the four on the right are for reception. The remaining four central bers are not used. Each ber transmits data at a rate of 10Gbps, resulting in an overall data rate of 40Gbps (4 x 10Gbps).
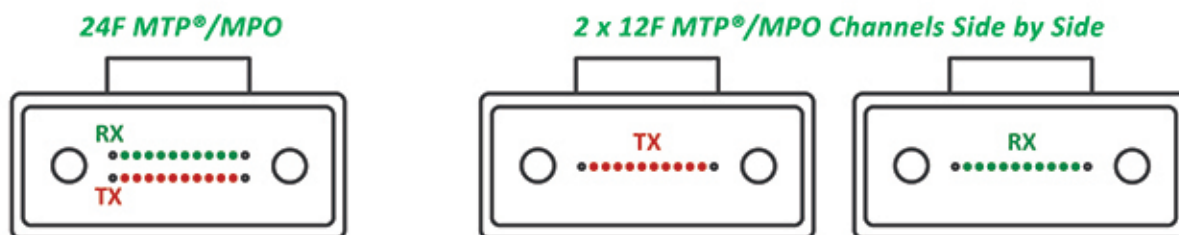
12F MTP®/MPO

TX   RX
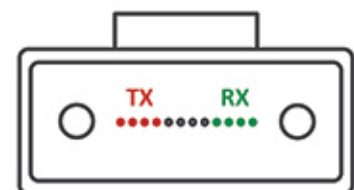
View into Transceiver, optical lane assignments for 40GBase-SR4, 40GBase-PLR4, 100GBase-SR4, 100GBase-PSM4

IEEE 802.3 recommends using 24F MTP®/MPO for 100GBASE-SR10, which is two rows of 12 fibers. For 100G applications that require 20 fibers, the ten fibers in the upper row receive and the ten fibers in the lower row transmit. (10 x 10Gbps). The first and the last fibers in each row are not used.

IEEE 802.3 also recognizes the use of two 12F MTP®/MPO connectors beside side by side with each other. The transmitter is on the left and the receiver is on the right. For vertically stacked MDI receptacles, the receiver is on the top and the transmitter is on the bottom.

24F MTP®/MPO

View into Transceiver, 100GBase-SR10 optical lane assignments

2 x 12F MTP®/MPO Channels Side by Side

View into Transceiver, 100GBase-SR10 optical lane assignments

The 400GBASE-SR8 optics module uses a single row, angled (APC) 16F MTP®/MPO connector for use with parallel multimode fiber. Use 100% of the connector capacity: eight transmission and eight receiving fibers. Each fiber will run at 50Gbps (8 x 50Gbps)

When the 24F MTP®/MPO connector supports 400GBASE-SR8, there are only 16 active channels within a total of 24 positions. There are four transmission fibers on the left side of each row and four receiving fibers on the right side of each row. The four center positions in each row are not used. Each fiber with a speed of 50Gbps will support 400GbE
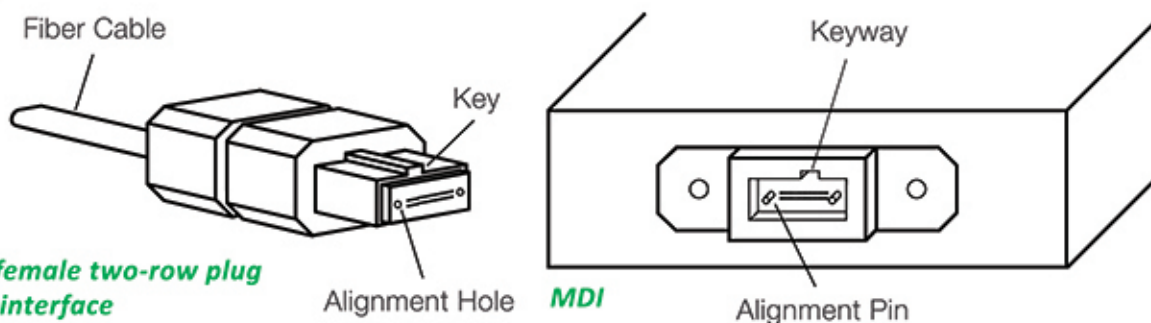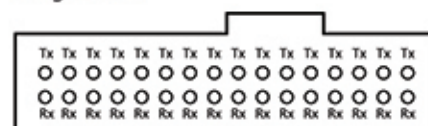
16F MTP®/MPO

View into Transceiver, 400GBase-SR8 optical lane assignments

24F MTP®/MPO

View into Transceiver, 400GBase-SR8 optical lane assignments

【IEEE802.3bs-2017】 The 16 transmit and 16 receiver optical lanes of 400GBase-SR16 shall occupy the positions depicted in Figure-123.4 when looking into the MDI receptacle with the connector key way feature on top. The interface contains 32 active lanes. The transmit optical lanes occupy the upper 16 positions. The receive optical lanes occupy the lower 16 positions.

Figure 123.4 400GBASE-SR16 optical lane assignments

Fiber Cable

Key

Keyway

MPO-16 female two-row plug with flat interface

Alignment Hole

MDI

Alignment Pin

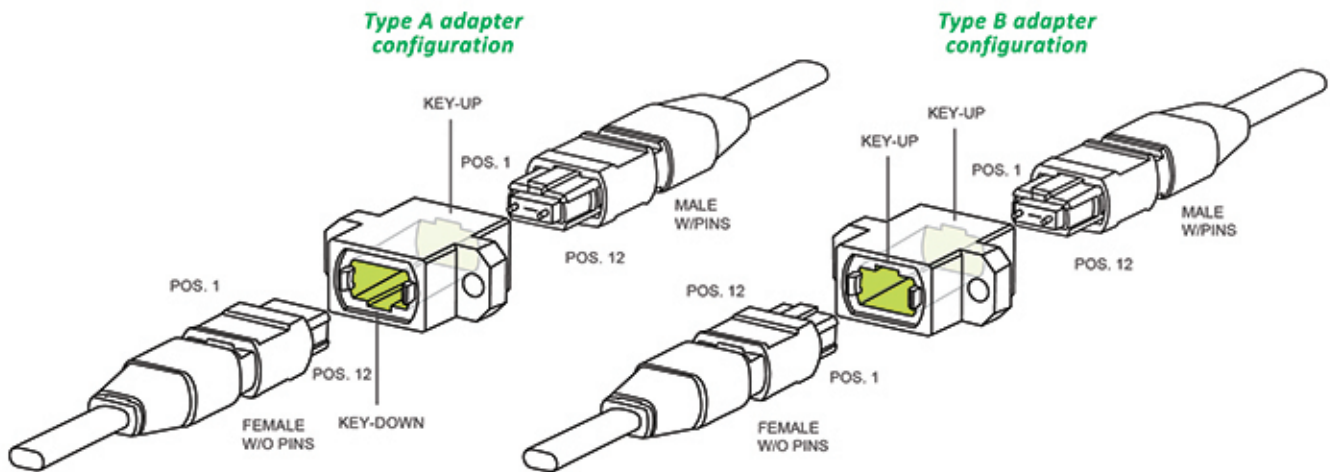*Figure 123.5 MPO-16 female two-row plug with flat interface, and MDI*

MTP®/MPO Adapter

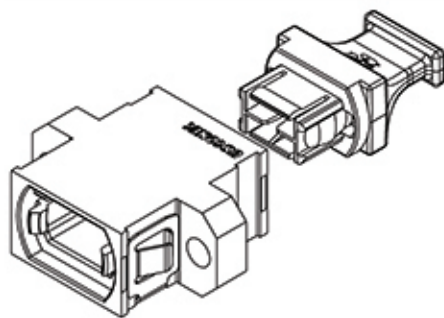There are two types of MTP®/MPO adapters, according to the placement of the key:

Type A Opposed-key: Key-up to Key-down, the key is up on one side, and the other is down. The two connectors are connected turned 180°.

Type B Aligned-key: Key-up to Key-up, the key is up at both sides. MTP® aligned-key adapters are light grey.
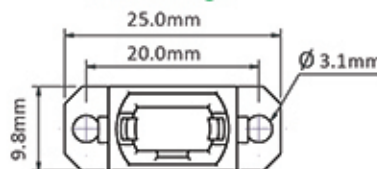
When making an MTP®/MPO connection, use one male connector and female connector plus one MTP®/MPO adapter. MTP®/MPO connector with guide pin is called male. Don't connect a male to a male; otherwise, the guide pin will hit against the pin and damage the connector.
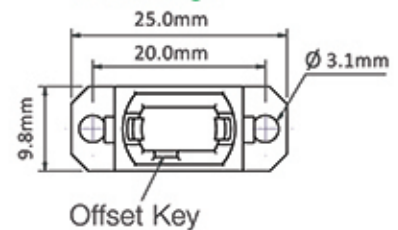

Type A adapter configuration

KEY-UP
POS. 1
MALE W/PINS
POS. 12
POS. 1
POS. 12
FEMALE W/O PINS
KEY-DOWN

Type B adapter configuration

KEY-UP
KEY-UP
POS. 1
MALE W/PINS
POS. 12
POS. 12
POS. 1
FEMALE W/O PINS

MTP® and MTP®-16 Standard Full Flange

MTP® Standard Full Flange
25.0mm
20.0mm
Ø 3.1mm
9.8mm

MTP®-16 Standard Full Flange
25.0mm
20.0mm
Ø 3.1mm
9.8mm
Offset Key

MTP® Standard Footprint and SC Footprint

MTP® Standard Type and Recommended Mounting Cutout
25.0mm
20.0mm
Ø 3.1mm
9.8mm
20.0mm
15.1mm
10.1mm
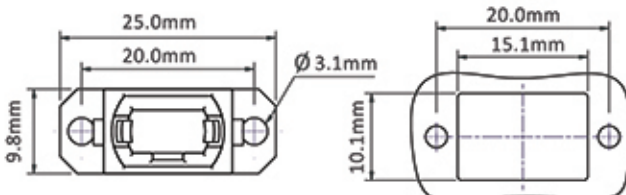
MTP® SC Footprint Type and Recommended Mounting Cutout
23.0mm
18.0mm
9.4mm
18.0mm
13.25mm
9.75mm
Ø 2.9mm
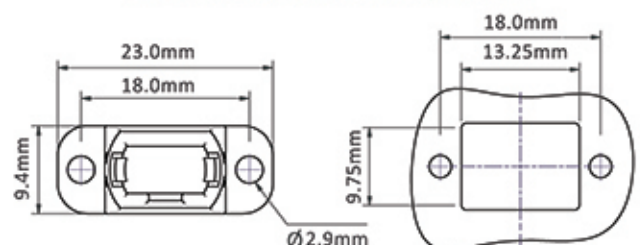
MTP®/MPO Polarity Methods

TIA-568-C defines three polarities, A, B, C. The primary purpose is to guarantee the right bi-directional allocation. When connecting two transceivers, you must always ensure the proper polarity, correct interconnection and orientation.

【TIA-568.3-D】 The figure below shows the 12F MTP®/MPO polarity A, B and C backbone patch cables.

【Polarity A】
key-up to key down

【Polarity B】
key-up to key up

【Polarity C】
pair-wise flipped, key-up to key down
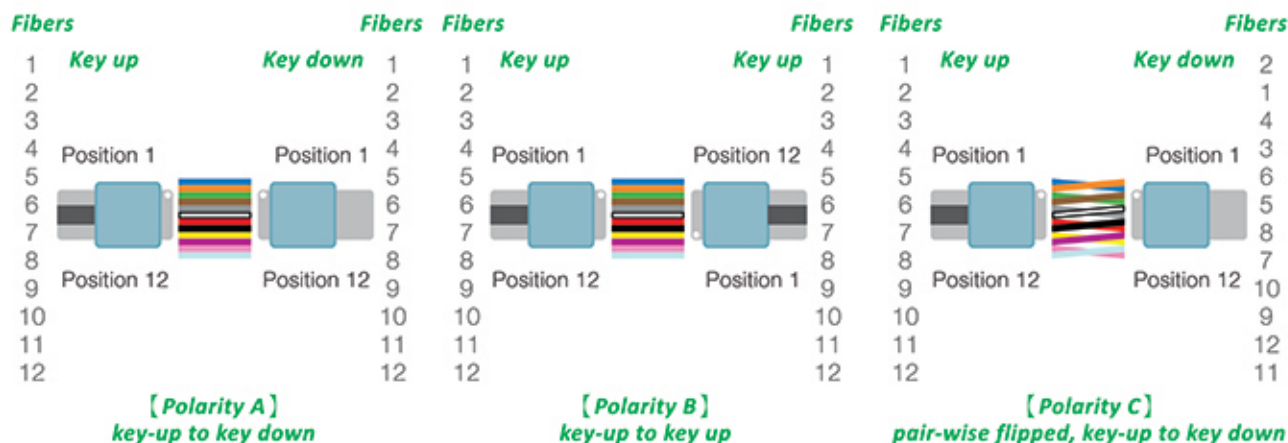
Polarity B female-to-female array patch cables are usually used to directly connect two transceivers with a short distance of 5 meters to 10 meters. In most cases, the connection between the two transceivers requires a longer link. Method B indirect parallel connection is as follows:

QSFP Tx & Rx Positions

Polarity B Array Patch Cord

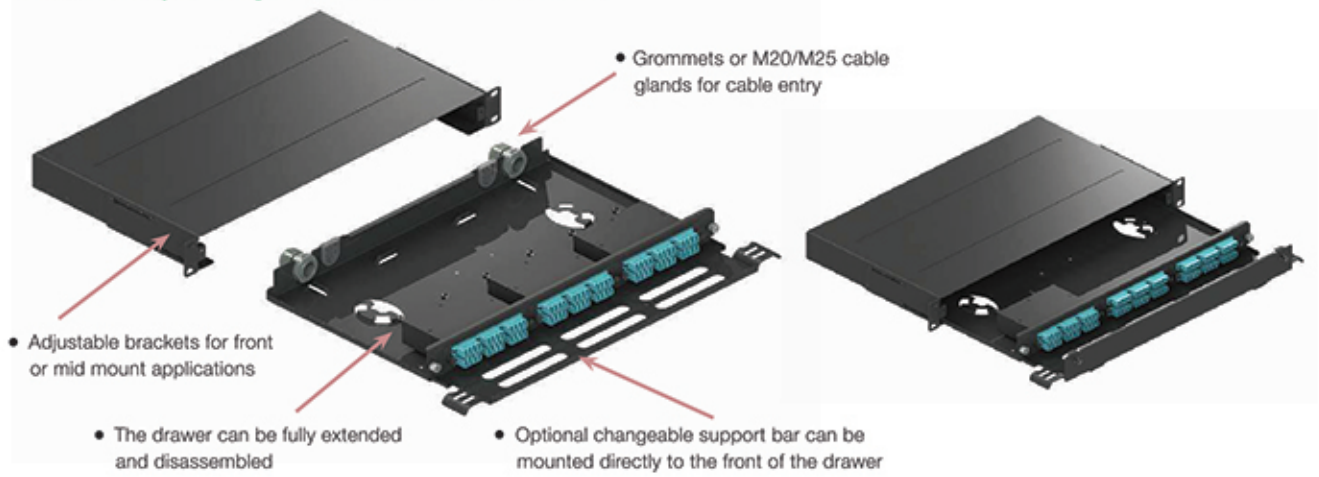Polarity B Trunk Cable

Polarity B Array Patch Cord
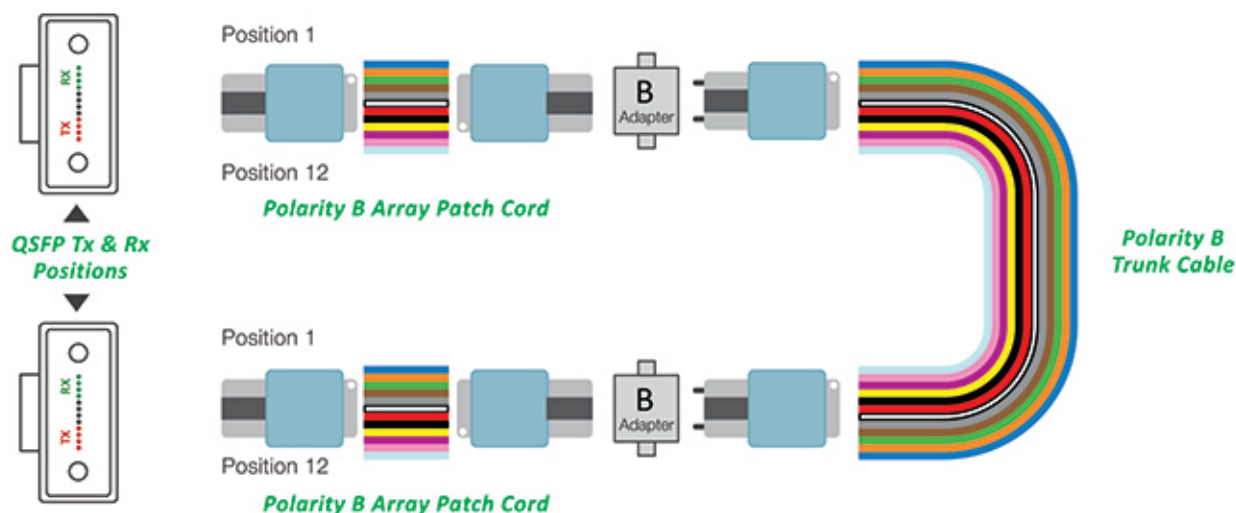
To connect two 400G-SR8 QSFP-DD, it needs enhanced return loss performance to support next-generation high-speed link applications. US Conec announces the release of 16 fiber multimode MT Elite® ferrule optimized for angled physical contact (APC). The new 1x16 multimode APC MT Elite® ferrule enables return loss of > 50dB and low insertion loss performance.

LINK also provides the following solutions, please contact our sales.
- 24F, 16F and 32F polarity methods and customized polarity methods
- 10G, 25G, 40G, 100G, 200G and 400G direct connectivity solutions, interconnect solutions and optimized solutions
- 10G to 40G interconnect solutions, 40G to 100G interconnect solutions, 10G to 100G interconnect solutions

Fiber Patch Panel , Double Q Series

Cassette/Adapter Plates Solution

- Grommets or M20/M25 cable glands for cable entry
- Adjustable brackets for front or mid mount applications
- The drawer can be fully extended and disassembled
- Optional changeable support bar can be mounted directly to the front of the drawer

This series is designed to increase flexibility for any environment in the data center. Stylish and innovative design is ideal for today's most advanced networks and stetting. The changeable front bulkhead supports both cassette and adapter plate. The maximum capacity is 144 fiber LC connectors. An optional cable support bar helps route and organize cables on enclosures. With the convertible ears, this panel facilities the recessed depth, up to 60mm. The sliding tray glides 15 degrees forward (with stop) and backward and removes easy field terminations and splicing.

Dimension

460.0mm
338.5mm
255.0mm
40.0mm
43.65mm
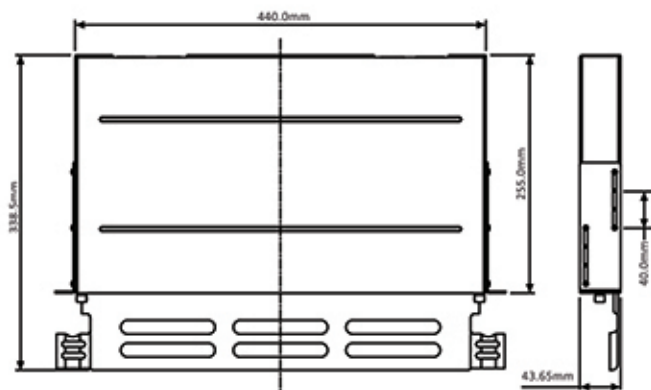
Changeable Front Bulkhead
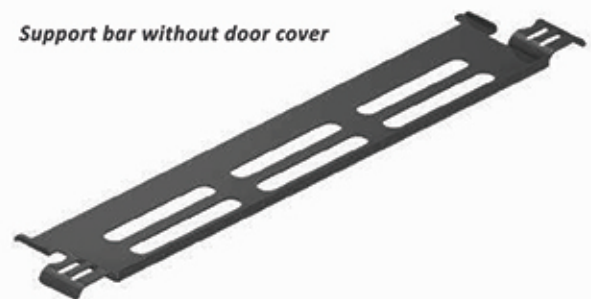
LGX Bulkhead

HD Bulkhead

Support Bar

Support bar with door cover

Support bar without door cover

LGX Adapter Plates , Double Q Series Adapter

The LGX format is an industry-standard for fiber cassette and adapter plate, which can be installed in LGX compatible racks, panels and wall-mounted enclosures. Multi-Function 10D fiber patch panel supports 3 slots LGX cassettes or adapter plates, and the maximum port number is up to 72 fiber LC connectors.

LC, SC, FC, ST, and MTP®/MPO adapter plates and keystone jack types can meet fiber and copper applications on the same 1RU fiber panel.

(A) **6 x LC Duplex Adapter**
6 x SC Simplex Adapter

(B) **3 x LC Quad Adapter**
3 x SC Duplex Adapter

(C) **6 x LC Quad Adapter**
6 x SC Duplex Adapter

(D) **6 x ST Adapter**
6 x FC Adapter

LGX Cassettes , Double Q Series Adapter

- SM OS2 G.657.A and MM OM3/OM4/OM5 bend-insensitive fiber grades
- Supports polarity method A/B/C and customized wiring
- 100% Factory terminated and tested to ensure superior performance and quality
- Both MTP® and MPO are available
- Transmission performance:

Harness	BIMMF OM3/OM4/OM5			OS2 G.657.A		
	Insertion Loss		Return Loss	Insertion Loss		Return Loss
	Std. Loss	Low Loss		Std. Loss	Low Loss	
LC	< 0.30 dB	< 0.15 dB	> 35 dB	< 0.20 dB	< 0.15 dB	> 55 dB
MTP®/MPO	< 0.50 dB	< 0.35 dB	> 20 dB	< 0.75 dB	< 0.35 dB	> 60 dB

106.0mm

75.0mm

118.0mm

130.0mm

30.0mm
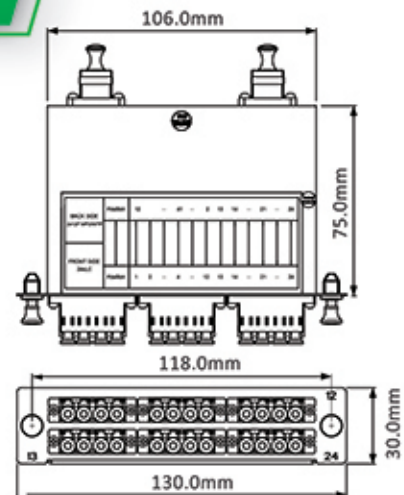
(I) **12F MTP® to 8C LC Cassette**
- 1 x MTP® adapter on rear and 4 x Duplex LC adapter on the front
- 1 x 12F MTP® male (pinned) to 8C LC harness

(J) **12F MTP® to 12C LC Cassette**
- 1 x MTP® adapter on rear and 6 x Duplex LC adapter on the front
- 1 x 12F MTP® male (pinned) to 12C LC harness

(K) **2 x 12F MTP® to 24C LC Cassette**
- 2 x MTP® adapters on rear and 6 x Quad LC adapters on the front
- 2 x 12F MTP® male (pinned) to 24C LC harness

(L) **1 x 24F MTP® to 24C LC Cassette**
- 1 x MTP® adapters on rear and 6 x Quad LC adapters on the front
- 1 x 24F MTP® male (pinned) to 24C LC harness

(M) **2 x 12F MTP® to 3 x 8F MTP® Migration Cassette**
- 2 x MTP® adapters on rear and 3 x MTP® adapters on the front
- 2 x 12F MTP® male to 3 x 8F MTP® male Y cable

(N) **2 x 24F MTP® to 4 x 12F MTP® Migration Cassette**
- 2 x MTP® adapters on rear and 4 x MTP® adapters on the front
- 2 x 24F MTP® male to 4 x 12F MTP® male Y cable

(O) **2 x 24F MTP® to 6 x 8F MTP® Migration Cassette**
- 2 x MTP® adapters on rear and 6 x MTP® adapters on the front
- 2 x 24F MTP® male to 6 x 8F MTP® male Y cable

Fiber Patch Panel - Ultra High-Density Solution

LINK new ultra high-density patch panel offers the user superior versatility and robustness. It combines optical fiber and copper applications in the same 1U rack unit, which is ideal for flexible deployment in data centers. The maximum capacity is 144 LC fiber connectors or 24-port keystone Jack. The plates and cassettes are easily plugged in and extracted from the panel for easy connector installation.

1RU 4pcs cassette / plate, up to 144 fiber LC connectors or 24port keystone jack

Keystone Jack Plates , Super S Serise

6 x UTP Super-S Keystone

6 x STP Super-S Keystone grounding wire design
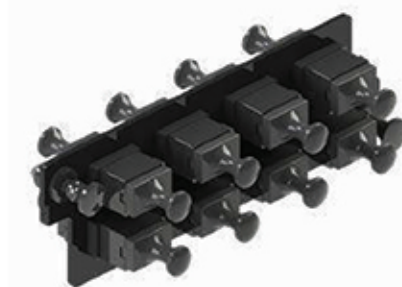
Adapter Plates , Double Q Series Adapter
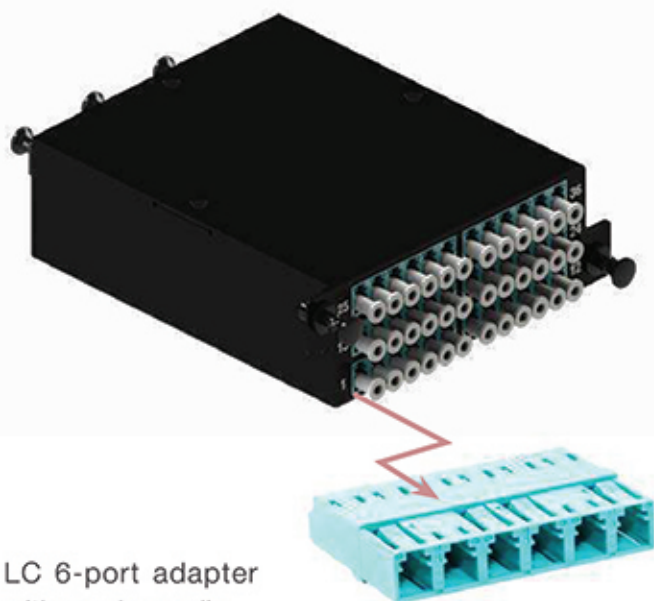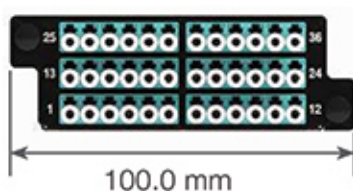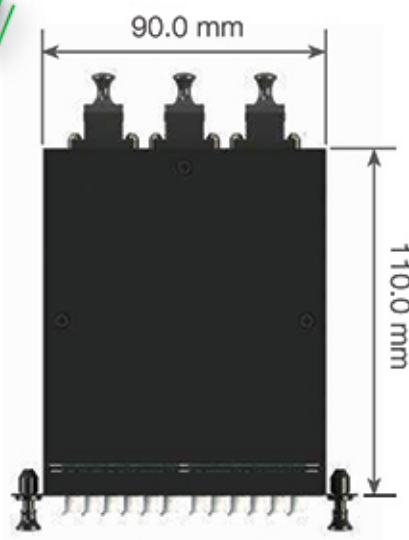
6 x LC 6port Adapter

6 x LC Quad Adapter
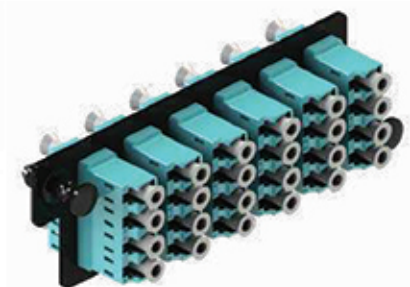
8 x MTP®/ MPO Adapter

36 - fiber MTP® to LC Cassette, Double Q Series Adapter

LC 6-port adapter
with up-down clip

90.0 mm

110.0 mm

100.0 mm

- Both MTP® and MPO are available
- Each Cassette can terminate up to 36 fiber LC Connectors
- SM OS2 G.657.A and MM OM3/OM4/OM5 G.651 bend-insensitive fiber grades
- Supports polarity method A/B/C and customized wiring
- 100% Factory terminated and tested to ensure superior performance and quality
- Transmission performance :

Harness	BIMMF OM3/OM4/OM5			SM OS2 G.657.A		
	Insertion Loss		Return Loss	Insertion Loss		Return Loss
	Std. Loss	Low Loss		Std. Loss	Low Loss	
LC	< 0.30 dB	< 0.15 dB	> 35 dB	< 0.20 dB	< 0.15 dB	> 55 dB
MTP®/MPO	< 0.50 dB	< 0.35 dB	> 20 dB	< 0.75 dB	< 0.35 dB	> 60 dB

MTP®/MPO Array Cable

MTP®/MPO array cables with a single jacket are sometimes called round cables due to the cable jacket's shape. These small diameter cables are typically used for patching in cabinets and racks to maximize high-density space.

Cable O.D	2.0mm	3.0mm	3.5mm
8C/12C	√	√	
16C		√	
24C/32C			√

- MTP® and MPO are available
- Available for 8F, 12F, 16F, 24F and 32F in one MTP®/MPO connector interface
- Support polarity method A, B, C and customized polarity methods; option for male or female
- Options with multimode OM3, OM4, OM5 bend-insensitive fiber and single-mode OS2 G.657.A fiber
- Flexible micro cable reduces weight and carriage costs
- Parallel optic transmission 40G / 100G / 400G Ethernet
- "Plug and Play" solution eliminates in-filed termination, reduces installation cost and time
- 100% Factory terminated and tested to ensure superior performance and quality

MTP® SM APC Elite

MTP® SM APC

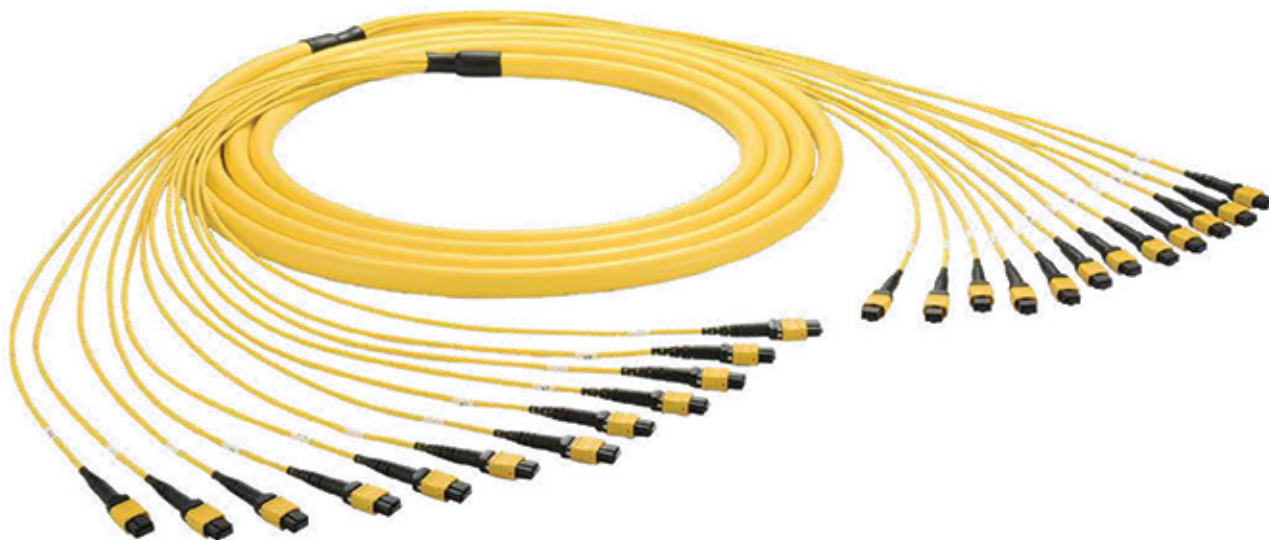*MTP® OM4 Elite*

MTP® OM3 Elite

The 400G-SR8 module uses a single-row, angled (APC) MTP®-16 connector with parallel multi-mode fiber.

The MTP® Push-Pull tabs are compatible with MTP® and LINK MPO connectors for easy insertion and extraction in high-density applications.
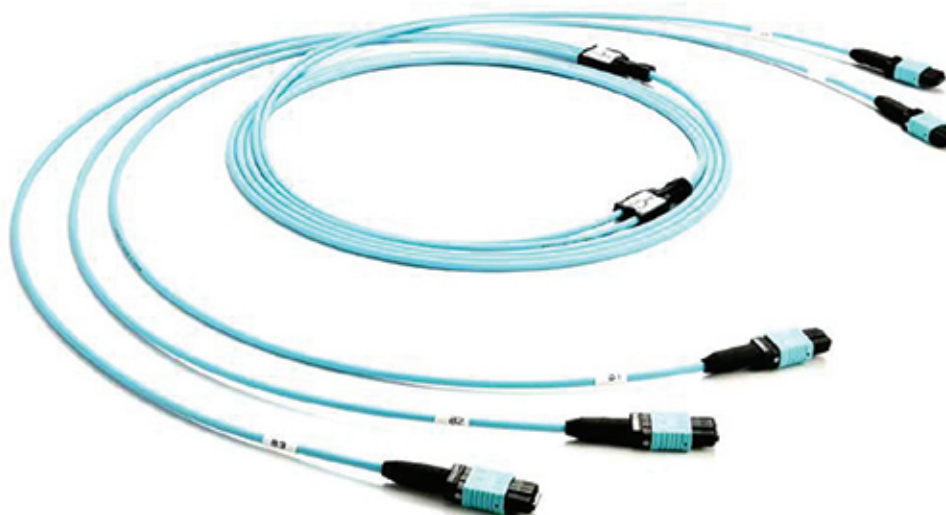
MTP®/MPO Trunk Cable

MTP®/MPO double-jacketed backbone cables have a more robust dual jacket sheath, providing higher compressive strength. These cables are typically designed for longer lengths between horizontal applications and to connect different distribution areas.

All MTP®/MPO cabling are pre-terminated, and factory inspected and tested to ensure superior performance and quality. It provides a proper plug-and-play solution for fast and efficient field deployment, reducing installation costs and time.

- MTP® and MPO are available
- Fiber counts from 8, 12, 24, 36 cores.....up to 144 cores are available
- Support polarity method A, B, C and customized polarity methods; option for male or female
- Options with multimode OM3, OM4, OM5 bend-insensitive fiber and single-mode OS2 G.657.A fiber
- Parallel optic transmission 40G / 100G / 400G Ethernet
- "Plug and Play" solution eliminates in-filed termination, reduces installation cost and time
- 100% Factory terminated and tested to ensure superior performance and quality
- Transmission performance:

MTP®/MPO Mated Pair	BIMMF OM3/OM4/OM5			OS2 G.657.A		
	Std. Loss	Low Loss	Ultra Low Loss	Std. Loss	Low Loss	Ultra Low Loss
Insertion Loss	< 0.50 dB	< 0.35 dB	< 0.25 dB	< 0.75 dB	< 0.35 dB	< 0.25 dB
Return Loss	> 20 dB	> 25 dB	> 25 dB	> 60 dB	> 60 dB	> 60 dB

MTP®/MPO QSFP+ Conversion Cables

MTP®/ MPO trunks when migrating to 40G, 100G and 400G.

- Parallel optic transmission 40G / 100G / 400G Ethernet
- Standard polarity method and customized polarity methods are welcome
- 1x24F to 2x12F / 1x24F to 3x8F / 2x12F to 3x8F are available
- Options with multimode OM3, OM4, OM5 bend-insensitive fiber and single-mode OS2 G.657.A fiber
- 100% Factory terminated and tested to ensure superior performance and quality

Table 1

End A Position (Key up)	Fiber Color		End B Position (Key down)
1	Blue		1
2	Orange		2
3	Green		3
4	Brown		4
5	Gray		5
6	White	B1	6
7	Red		7
8	Black		8
9	Yellow		9
10	Purple		10
11	Pink		11
12	Aqua		12
13	Blue		1
14	Orange		2
15	Green		3
16	Brown		4
17	Gray		5
18	White	B2	6
19	Red		7
20	Black		8
21	Yellow		9
22	Purple		10
23	Pink		11
24	Aqua		12

Table 2

End A Position (Key up)	Fiber Color		End B Position (Key down)
1	Blue		1
2	Orange	B1	2
3	Green		3
4	Brown		4
5	Gray		1
6	White	B2	2
7	Red		3
8	Black		4
9	Yellow		1
10	Purple	B3	2
11	Pink		3
12	Aqua		4
13	Blue		12
14	Orange	B1	11
15	Green		10
16	Brown		9
17	Gray		12
18	White	B2	11
19	Red		10
20	Black		9
21	Yellow		12
22	Purple	B3	11
23	Pink		10
24	Aqua		9

Table 3

End A Position (Key up)		Fiber Color	End B Position (Key up)	
	1	Blue		12
	2	Orange		11
	3	Green		10
	4	Brown	B1	9
A1	5	Gray		4
	6	White		3
	7	Red		2
	8	Black		1
	9	Yellow		12
	10	Purple		11
	11	Pink		10
	12	Aqua	B2	9
	1	Blue		4
	2	Orange		3
	3	Green		2
	4	Brown		1
A2	5	Gray		12
	6	White		11
	7	Red		10
	8	Black		9
	9	Yellow	B3	4
	10	Purple		3
	11	Pink		2
	12	Aqua		1

MTP®/MPO to LC Harness , Double Q Series Connecter

MTP®/MPO to LC harness series is for direct connection or the transition from trunk backbone assemblies to the fiber rack system. MTP®/MPO on one side and single-fiber connectors on another side. MTP®/MPO is available in 12, 16, 24, and 32-fiber interfaces. LC side can use single boot duplex LC or high-density LC series: LC uni-boot, LC extractor, LC 1 second polarity change. Rx and Tx on the LC side are assembled in pairs. Flexible micro cables are easy to manage, high-density data center applications and blade services.

16F MTP® Elite Angled (non-pinned) Female to 8 x LC UPC Duplex Short Boot, MM OM4 Breakout Cable, LSZH

QSFP+ to SFP+ Solution: 8F MTP®/MPO to LC harness can directly connect between 1x40G QSFP+ transceivers and 4x10G SFP+ transceivers. Each fiber cable transmits 10Gbps for 10G to 40G migration.
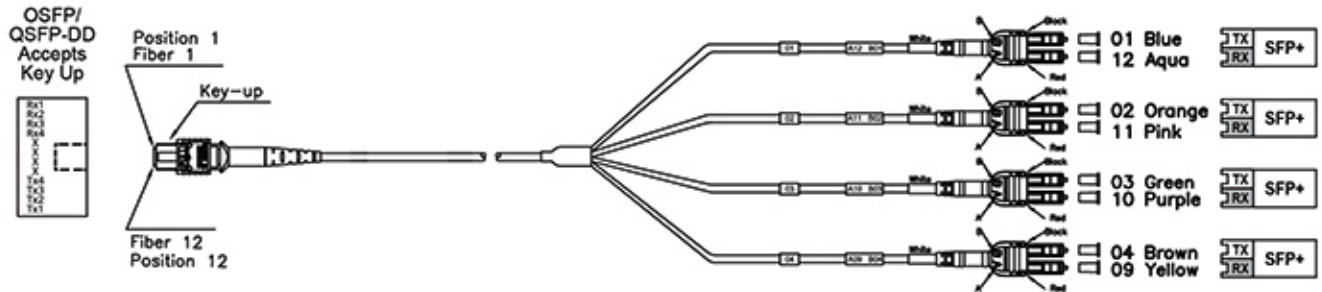
CFP/CXP to SFP+ Solution: 24F MTP®/MPO to LC migration path from 1x100G CFP/CXP to 10x10G SFP+ for 100G to 10G parallel transmission.
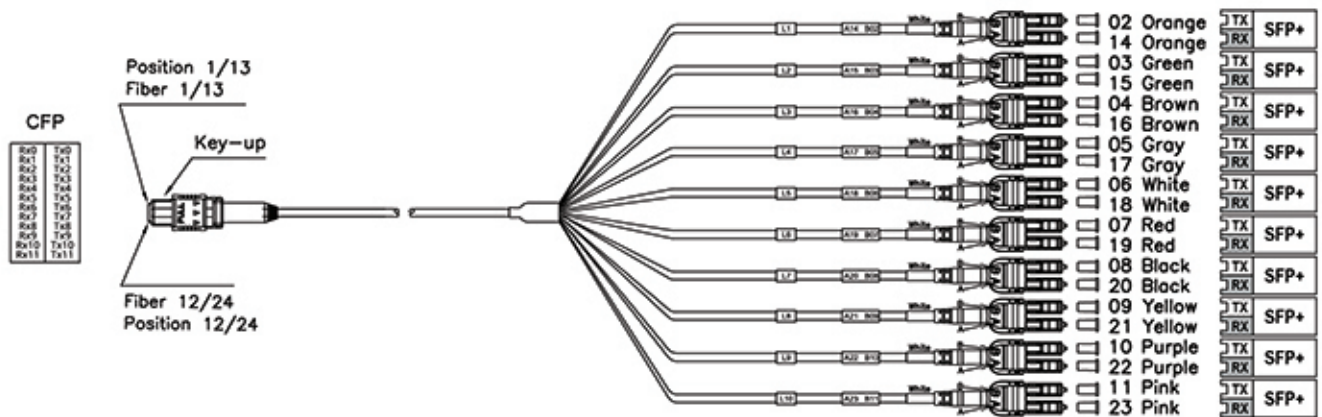

OSFP/QSFP-DD to SFP+ Solution: 16F MTP® to LC migration path from 1x400G OSFP/QSFP-DD to 16x25G SFP+ for 400G to 10G parallel transmission. Highest density physical contact for multi-fiber connectors.
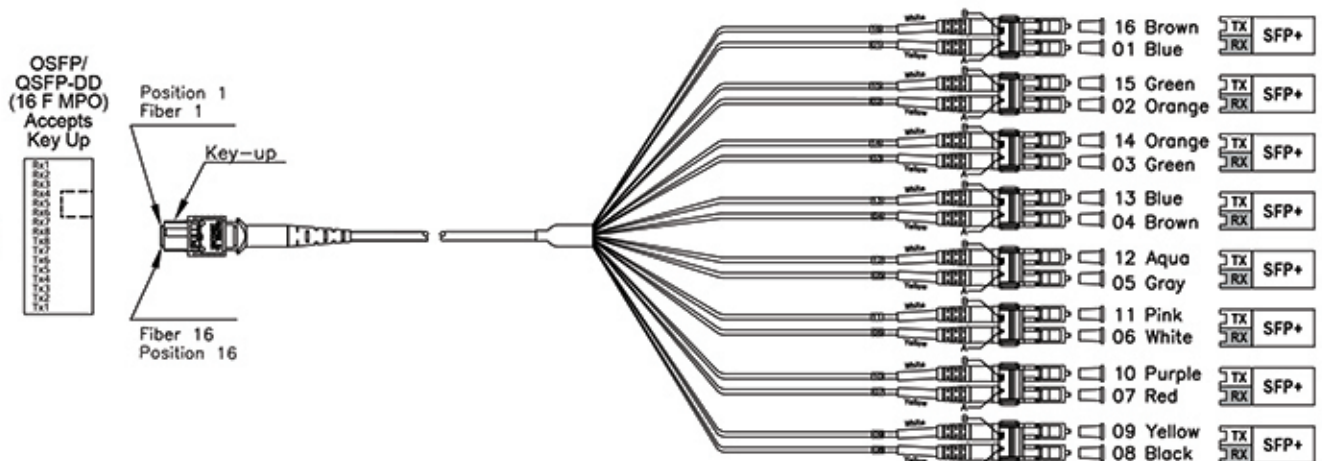
LC Uniboot & LC Extractor

LC Uniboot has two LC connectors in the housing and one boot terminated on a unique 3.0mm "Dualan Cable", allowing duplex transmission.

LC Extractor combined with LC Uniboot and patented "Seesaw Tab" design makes LC connectors easily inserted and removed from high-density structures without special tools. LC Extractor patch cords can move closer together, increasing density and maximizing valuable space.
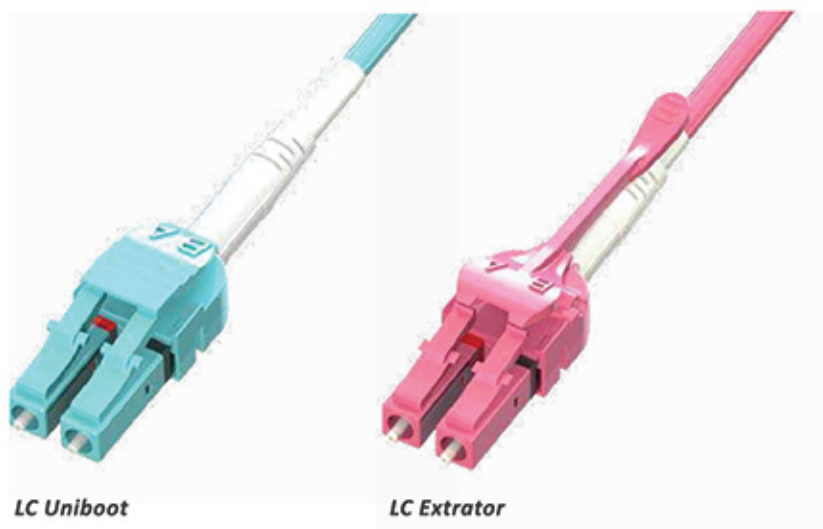

LC Uniboot   **LC Extrator**

- Particular Red/Black housing design, clear identification with polarity A-A and A-B
- Ultra Low Loss LC ferrule, IEC 61753-1 random mating IL Grade B
- LC Extractor see-saw tab design makes LC connector easy extraction in high-density construction without any tools
- 3.0mm cable O.D. improve airflow, routing and maximize value space
- Compared with traditional zip-cord cable, round duplex cable reduces the number of cables in half and simplifies cable management
- Reduces weight and lower carriage costs
- Options with MM OM3, OM4, OM5 bend-insensitive fiber and SM OS2 G.657.A fiber

Structure Comparison: Dualan Cable vs Zip-cord Cable
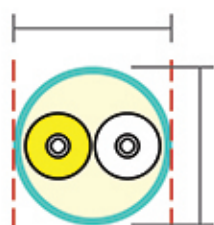
Dualan Cable (Single Jacket Round Duplex Cable)
- Cable diameter: Ø 3.0mm with 2 x 0.9mm tight buffer
- Compared to 2.0mm zip-cord, it cuts tube counts in half and simplifies cable management; 50% less space than 3.0mm zip-cord
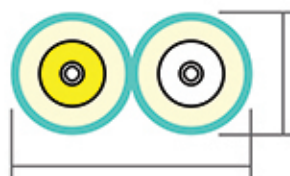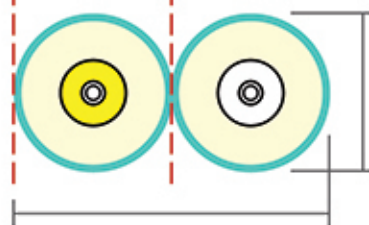
Traditional Zip-cord Cable

X Cable diameter: Ø 2.0mm x 4.2mm or Ø 3.0mm x 6.0mm

# LC 1 Sec. Polarity Change Uniboot & Extractor

LC 1 Second Polarity Change Uniboot makes polarity switching easier, significantly saving time and money. The end user can quickly release the clip and reverse polarity throughout the process without any tools.

LC 1 Second Polarity Change Extractor has a 1-second polarity change function with an extractor, which provides more convenience for high-density construction.

LC 1 Sec. Polarity Change Uniboot

LC 1 Sec. Polarity Change Extractor

- Patented design, changing LC polarity in 1 second without twisting the fiber
- Particular Red/Black housing design, clear identification with polarity A-A and A-B
- Ultra Low Loss LC ferrule, IEC 61753-1 random mating IL Grade B
- LC Extractor see-saw tab design makes LC connector easy extraction in high-density construction without any tools
- 1.6 or 2.0 mm cable O.D. improve airflow, routing and maximize value space
- Compared with traditional zip-cord cable, round duplex cable reduces the number of cables in half and optimizes space by 68%
- Simplifies cable management, Reduces weight and lower carriage costs
- Options with MM OM3, OM4, OM5 bend-insensitive fiber and SM OS2 G.657.A fiber

Polarity A-B (Tx-Rx) for 1 Sec. Uniboot and Extractor
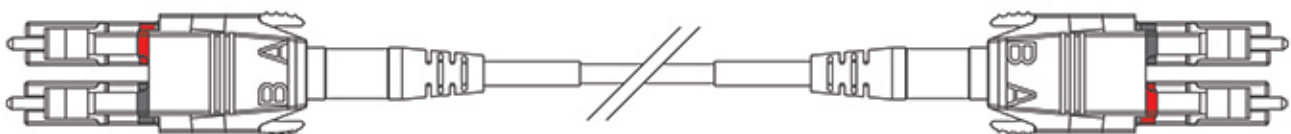
Fiber #1 A (Red) -------------- Fiber #1 B (Black)
Fiber #2 B (Black) -------------- Fiber #2 A (Red)

19" LINK DATA CENTER CURVE-WAVE RACK CABINET

(Extra Design enhanced 120% heat ventilation)

● The premium innovation design, an elegant appearance, delivered with best enterprise service,support and reliability. LINK Curve-Wave offered high strength product, high durability and efficiency at work, also can support to install 19" equipment.
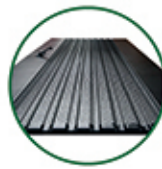

Front Door

Side Panel

Rear Door
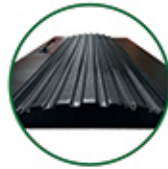
Curve Wave Door (Front)
Hexa Perforated
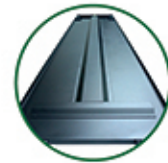for 120% Ventilation

Wave Door (Rear)
Hexa Perforated
for 110% Ventilation

Side Panel
Easy to Remove by Slide Lock
and Security Lock

Side Panel Support
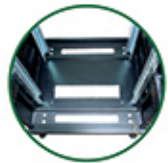I-Frame to Strengthen

Security Locks
Press and Swing
Handle Lock

Top Cover
Provided the Space
for Cable Access with Cover

Base
with Slide Shutter
and the Space Cable Access

Mounting Pole
Rack Unit (U) Screen on Pole

Grounding System
Connecting Between
all Removable Part of Rack
with Copper Ground Wire 2.5mm²

LINK Logo
Front Door with LINK Logo

**Castor & Stand**
Up and down movable stand
with 360° caster

Data Center Rack Cabinet

120%

Cold Aisle Containment is an area where cool air flows continuously inside the room, while hot air flows through the remaining parts of the data center. It is installed with two rows of racks facing each other, with doors at both ends of the rack rows. The space above the racks is sealed with transparent material, allowing ceiling lighting to pass through so that operators can work without installing additional lighting. This design guides and directs the flow of both cool and hot air.
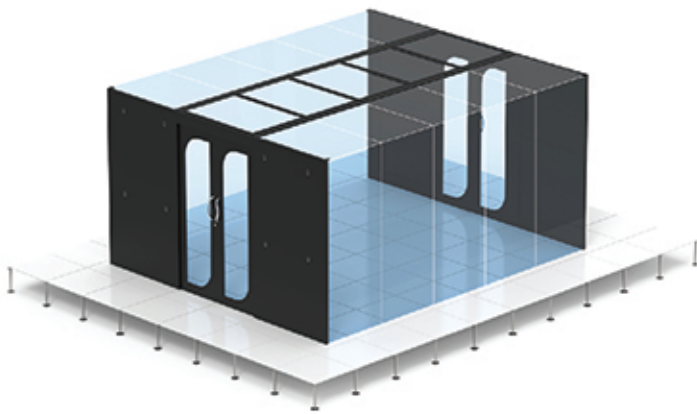
Door set with sliding rails and clear polycarbonate sheets, lowing light to pass through
(Cold Containment)

- Door can be closed automatically with the shock absorber

- Door can be opened on both the left hand side and right hand side or open at the same time.

- Shock absorbers can be unlocked to keep the door open.

- In an emergency, both doors can be opened from inside the containment chamber using a keyless door locking system.

- Door set with Panel Cover.

- Roof panel is made of a steel frame with clear polycarbonate sheets, allowing light to pass through and re-resistant.

- Roof set has foam insulation to prevent air leaks and to stop cold and hot air from mixing, covering all around the top, bottom, and sides.

- Bottom edge of the door is fitted with a metal plate to prevent air leaks and stop cold and hot air from mixing.
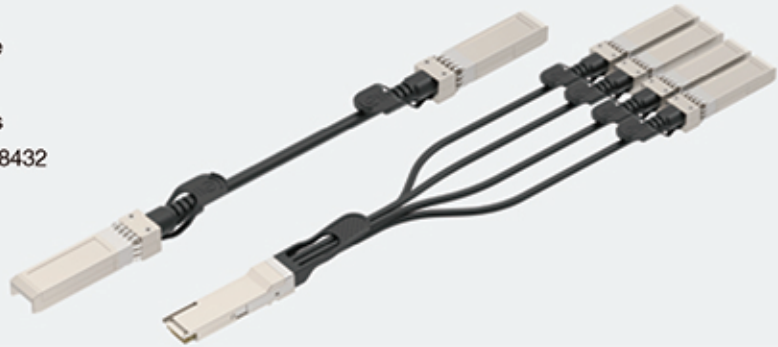
Direct Attach Copper Cable (DAC)

DAC 10~100G

Features

- Single-channel full-duplex twinax copper cable
- 24, 26, or 30 AWG optional
- Hot-pluggable SFP MSA-compliant connectors
- Compliant with SFF-8402, SFF-8431 and SFF-8432
- Case operating temperature range: 0 to 70°C
- EEPROM customized with IC interface
- Enhanced EMI/EMC performance
- RoHS compatible (lead free)

P/N	DESCRIPTION	PORT 1	PORT 2
UT-D10G-XXYY	10G SFP+ DAC	10G SFP+	10G SFP+
UT-D25G-XXYY	25G SFP28 DAC	25G SFP28	25G SFP28
UT-D40G-XXYY	40G QSFP+ DAC	40G QSFP+	40G QSFP+
UT-D40G-4S-XXYY	40G QSFP+ to 4x10G SFP+ Breakout DAC	40G QSFP+	10G SFP+
UT-D50G-XXYY	50G SFP56 DAC	50G SFP56	50G SFP56
UT-D56G-XXYY	56G QSFP+ DAC	56G QSFP+	56G QSFP+
UT-D01CQS-XXYY	100G QSFP28 DAC	100G QSFP28	100G QSFP28
UT-D01CQS-4S-XXYY	100G QSFP28 to 4x25G SFP28 Breakout DAC	100G QSFP28	25 SFP28
UT-D01CS-XXYY	100G SFP112 DAC	100G SFP112	100G SFP112

Note :

XX is code of transceiver as requested

LC	= LINK-CISCO	FN	= Fortinet
HP	= Hewlett Packard	HC	= H3C
AB	= Aruba	HM	= Hirschmann
AL	= Alcatel-Lucent	HW	= Huawei
AT	= Arista	IB	= IBM
AY	= Avaya	JP	= Juniper
BC	= Brocade	MN	= Mellanox
DL	= Dell	NK	= Nokia
ES	= Ericsson	ZT	= ZTE
ET	= Extreme	GN	= Generic Code

YY is code of transceiver as requested

10G SFP+	Up to 7 m.
25G SFP28	Up to 5 m.
40G QSFP+	Up to 5 m.
50G SFP56	Up to 3 m.
56G QSFP+	Up to 5 m.
100G QSFP28	Up to 5 m.
100G SFP112	Up to 1.8 m.

DAC 200G/400G

Features

- 4/8-channel full-duplex twinax copper cable
- 26 or 30 AWG optional
- Hot-pluggable QSFP56/QSFP-DD MSA-compliant connectors
- Compliant with CMIS, SFF-8636 and SFF-8665
- Case operating temperature range: 0 to 70°C
- EEPROM customized with IC interface
- Enhanced EMI/EMC performance
- RoHS compatible (lead free)

DAC 200G

DAC 400G

P/N	DESCRIPTION	PORT 1	PORT 2
UT-D02CQD-XXYY	200G QSFP-DD DAC	200G QSFP-DD	200G QSFP-DD
UT-D02CQS-XXYY	200G QSFP56 DAC	200G QSFP56	200G QSFP56
UT-D02CQS-2Q-XXYY	200G QSFP56 to 2x100G SFP56 Breakout DAC	200G QSFP56	100G QSFP56
UT-D02CQS-4S-XXYY	200G QSFP56 to 4x50G SFP56 Breakout DAC	200G QSFP56	50G SFP56
UT-D04CQD-XXYY	400G QSFP-DD DAC	400G QSFP-DD	400G QSFP-DD
UT-D04CQD-2Q-XXYY	400G QSFP-DD to 2x200G QSFP56 Breakout DAC	400G QSFP-DD	200G QSFP56
UT-D04CQD-4Q-XXYY	400G QSFP-DD to 4x100G QSFP56 Breakout DAC	400G QSFP-DD	100G QSFP56
UT-D04CQD-8S-XXYY	400G QSFP-DD to 8x50G SFP56 Breakout DAC	400G QSFP-DD	50G SFP56
UT-D04CQS-XXYY	400G QSFP112 DAC	400G QSFP112	400G QSFP112
UT-D04COS-XXYY	400G OSFP-RHS DAC	400G OSFP-RHS	400G OSFP-RHS
UT-D04COS-2Q5-XXYY	400G OSFP-RHS to 2x200G QSFP56 Breakout DAC	400G OSFP-RHS	200G QSFP56
UT-D04COS-2Q2-XXYY	400G OSFP-RHS to 2x200G QSFP28 Breakout DAC	400G OSFP-RHS	200G QSFP28
UT-D04COS-4Q2-XXYY	400G OSFP-RHS to 4x100G QSFP28 Breakout DAC	400G OSFP-RHS	100G QSFP28

DAC 800G

Features

- 8-channel full-duplex twinax copper cable
- 26 or 30 AWG optional
- Hot-pluggable QSFP-DD/OSFP MSA-compliant connectors
- Compliant with CMIS, SFF-8636 and SFF-8665
- Case operating temperature range: 0 to 70°C
- EEPROM customized with IC interface
- Enhanced EMI/EMC performance
- RoHS compatible (lead free)

P/N	DESCRIPTION	PORT 1	PORT 2
UT-D08CQD-XXYY	800G QSFP-DD DAC	800G QSFP-DD	800G QSFP-DD
UT-D08CQD-2Q-XXYY	800G QSFP-DD to 2x400G QSFP112 Breakout DAC	800G QSFP-DD	400G QSFP112
UT-D08COS-XXYY	800G OSFP DAC	800G OSFP	800G OSFP
UT-D08COS-2O-XXYY	800G OSFP to 2×400G OSFP-RHS Breakout DAC	800G OSFP	400G OSFP-RHS
UT-D08COS-2Q-XXYY	800G OSFP to 2×400G QSFP112 Breakout DAC	800G OSFP	400G QSFP112
UT-D08COS-4Q-XXYY	800G OSFP to 4×200G QSFP112 Breakout DAC	800G OSFP	200G QSFP112

Active Optical Cable (AOC)

AOC 10G/25G/40G/50G/56G

Features

- Single-channel full-duplex active optical cable
- 850nm VCSEL transmitter and PIN receiver
- Hot-pluggable SFP MSA-compliant connectors
- Compliant with SFF-8402, SFF-8431 and SFF-8432
- OM2, OM3 or OM4 MMF optional
- EEPROM customized with IC interface
- RoHS compatible (lead free)
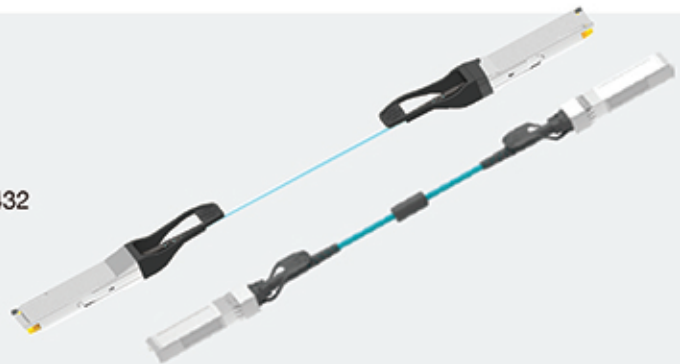
P/N	DESCRIPTION	PORT 1	PORT 2
UT-A10G-XXYYY	10G SFP+ AOC	10G SFP+	
UT-A25G-XXYYY	25G SFP28 AOC	25G SFP28	
UT-A32G-XXYYY	32GFC SFP28 AOC	32G SFP28	
UT-A40G-XXYYY	40G QSFP+ AOC	40G QSFP+	
UT-A40G-4S-XXYYY	40G QSFP+ to 4x10G SFP+ Breakout AOC	40G QSFP+	
UT-A50G-XXYYY	50G SFP56 AOC	50G SFP56	
UT-A56G-XXYYY	56G QSFP+ AOC	56G QSFP+	

Note :

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HP	= Hewlett Packard	HC	= H3C
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AL	= Alcatel-Lucent	HW	= Huawei
AT	= Arista	IB	= IBM
AY	= Avaya	JP	= Juniper
BC	= Brocade	MN	= Mellanox
DL	= Dell	NK	= Nokia
ES	= Ericsson	ZT	= ZTE
ET	= Extreme	GN	= Generic Code

YYY is code of transceiver as requested

10G SFP+	Up to 300 m.
25G SFP28	Up to 100 m.
32G SFP28	Up to 100 m.
40G QSFP+	Up to 100 m.
50G SFP56	Up to 100 m.
56G QSFP+	Up to 150 m.

AOC 100G/200G

Features

- 1/4/8/12-channel full-duplex active optical cable
- 850nm VCSEL transmitter and PIN receiver
- Hot-pluggable QSFP28/QSFP56/QSFP-DD MSA-compliant connectors
- Compliant with CMIS, SFF-8636 and SFF-8665
- OM3, OM4 or OM5 MMF optional
- EEPROM customized with IC interface
- RoHS compatible (lead free)
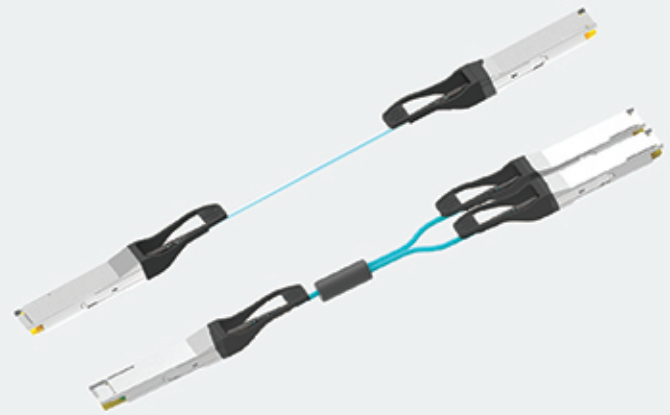
P/N	DESCRIPTION	PORT 1	PORT 2
UT-A01CQS-XXYYY	100G QSFP28 AOC	100G QSFP28	100G QSFP28
UT-A01CQS-2Q-XXYYY	100G QSFP28 to 2x50G QSFP28 Breakout AOC	100G QSFP28	50G QSFP28
UT-A01CQS-4S-XXYYY	100G QSFP28 to 4x25G SFP28 Breakout AOC	100G QSFP28	25 SFP28
UT-A02CQD-XXYYY	200G QSFP28-DD AOC	200G QSFP28-DD	200G QSFP28-DD
UT-A02CQD-2Q-XXYYY	200G QSFP28-DD to 2x100G QSFP28 Breakout AOC	200G QSFP28-DD	100G QSFP28
UT-A02CQD-4Q-XXYYY	200G QSFP28-DD to 4x50G QSFP28 Breakout AOC	200G QSFP28-DD	50G QSFP28
UT-A02CQS-XXYYY	200G QSFP56 AOC	200G QSFP56	200G QSFP56
UT-A02CQS-2Q-XXYYY	200G QSFP56 to 2x100G QSFP56 Breakout AOC	200G QSFP56	100G QSFP56
UT-A02CQS-4Q-XXYYY	200G QSFP56 to 4x50G QSFP56 Breakout AOC	200G QSFP56	50G QSFP56
UT-A02CQS-4S-XXYYY	200G QSFP56 to 4x50G SFP56 Breakout AOC	200G QSFP56	50G SFP56

Note :

XX is code of transceiver as requested

LC	= LINK-CISCO	FN	= Fortinet
HP	= Hewlett Packard	HC	= H3C
AB	= Aruba	HM	= Hirschmann
AL	= Alcatel-Lucent	HW	= Huawei
AT	= Arista	IB	= IBM
AY	= Avaya	JP	= Juniper
BC	= Brocade	MN	= Mellanox
DL	= Dell	NK	= Nokia
ES	= Ericsson	ZT	= ZTE
ET	= Extreme	GN	= Generic Code

YYY is code of transceiver as requested

100G QSFP28	Up to 100 m.
200G QSFP28-DD	Up to 100 m.
200G QSFP56	Up to 100 m.

AOC 400G/800G

Features

- 4/8-channel full-duplex active optical cable
- 850nm VCSEL transmitter and PIN receiver
- Hot-pluggable QSFP112/ QSFP-DD/OSFP MSA-compliant connectors
- Compliant with CMIS, SFF-8636 and SFF-8665
- OM3, OM4 or OM5 MMF optional
- EEPROM customized with IC interface
- RoHS compatible (lead free)
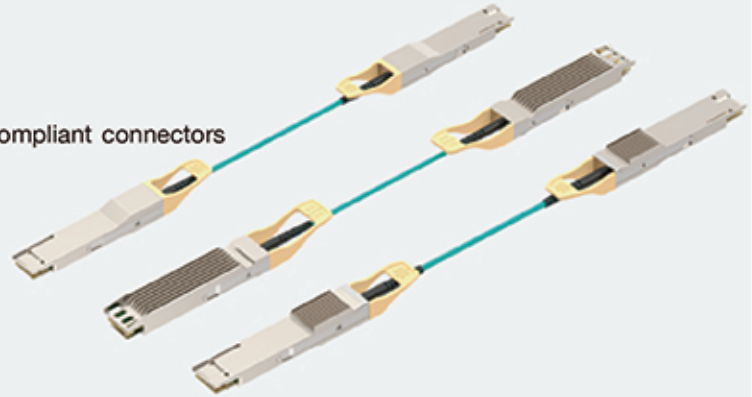
P/N	DESCRIPTION	PORT 1	PORT 2
UT-A04CQD-XXYYY	400G QSFP56-DD AOC	400G QSFP56-DD	400G QSFP56-DD
UT-A04CQD-2Q-XXYYY	400G QSFP56-DD to 2x200G QSFP56 Breakout AOC	400G QSFP56-DD	200G QSFP56
UT-A04CQD-4Q-XXYYY	400G QSFP56-DD to 4x100G QSFP56 Breakout AOC	400G QSFP56-DD	100G QSFP56
UT-A04CQD-8S-XXYYY	400G QSFP56-DD to 8x50G SFP56 Breakout AOC	400G QSFP56-DD	50G SFP56
UT-A04CQS-XXYYY	400G QSFP112 AOC	400G QSFP112	400G QSFP112
UT-A04COS-XXYYY	400G OSFP-RHS AOC	400G OSFP-RHS	400G OSFP-RHS
UT-A04COS-2Q-XXYYY	400G OSFP-RHS to 2x200G QSFP56 AOC	400G OSFP-RHS	200G QSFP56
UT-A08CQD-XXYYY	800G QSFP-DD AOC	800G QSFP-DD	800G QSFP-DD
UT-A08COS-XXYYY	800G OSFP AOC	800G OSFP	800G OSFP
UT-A08CQD-2Q-XXYYY	800G QSFP-DD to 2x400G QSFP112 Breakout AOC	800G QSFP-DD	400G QSFP112
UT-A08COS-2O-XXYYY	800G OSFP to 2x400G OSFP112 Breakout AOC	800G OSFP	400G OSFP112

Note :

XX is code of transceiver as requested

LC	= LINK-CISCO	FN	= Fortinet
HP	= Hewlett Packard	HC	= H3C
AB	= Aruba	HM	= Hirschmann
AL	= Alcatel-Lucent	HW	= Huawei
AT	= Arista	IB	= IBM
AY	= Avaya	JP	= Juniper
BC	= Brocade	MN	= Mellanox
DL	= Dell	NK	= Nokia
ES	= Ericsson	ZT	= ZTE
ET	= Extreme	GN	= Generic Code

YYY is code of transceiver as requested

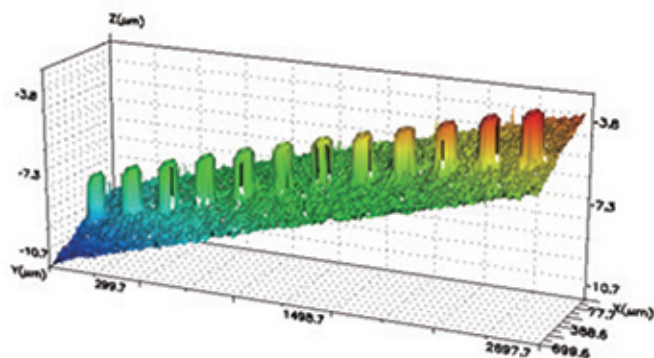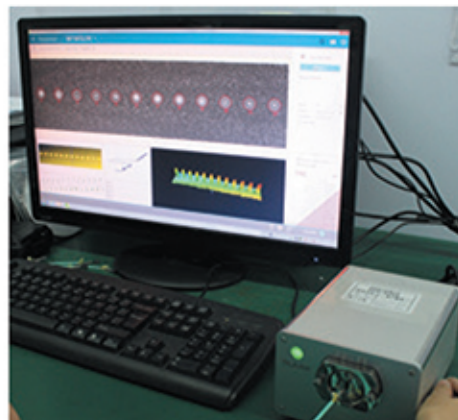|	
400G QSFP56-DD	Up to 100 m.
400G QSFP112	Up to 100 m.
400G OSFP-RHS	Up to 100 m.
800G QSFP-DD	Up to 50 m.
800G OSFP	Up to 50 m.

Quality Assurance

- EXFO Fiber Inspection Scopes.
- 100% Interferometer Inspection.
- Premium Insertion Loss.

100% GUARANTEED

Measure Report

SANA 2 Interferometer
Dimension Technology Co., Ltd

Pass

LINK
American Cabling