

CPR



Telcordia®



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## IDC CONNECTIVITY PRODUCTS 数据中心光连接产品

*New Brochure*



Global Fiber Optic Cabling and Components Supplier





“HIGH STABILITY  
HIGH RELIABILITY  
HIGH COST-COMPECTITIVE”  
高稳定性 高可靠性 高性价比



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## KOC Branches



# About Our Company



KOC Shenzhen is the center of KOC R&D, sales, training, finance and purchasing. Total plant area is 4500 square meters. Total stuff 256. It also has patch cord , MPO assembly, IDC mini connectivity production line for urgent delivery for customer. Total operational space: 15000 m2. Total Staff: 636 pax, overseas 49 pax.

深圳市嘉万光通信有限公司（简称KOC）成立于2001年，属深圳市高新技术企业、国家级高新技术企业，公司位于深圳市龙华大浪联建科技工业园。KOC是国内较早从事光纤连接器生产和销售的公司之一，经过20多年的发展，目前在光通信领域已经发展成为ODN光网络全系连接产品、光无源器件、IDC数据中心布线与微连接、室内外光缆等产品的专业生产和销售企业。

至今在欧洲、南美、中东及亚太等地区，KOC产品已广泛应用于电信运营商、光纤工程施工、有线及广电系统、宽带网络、光纤到户FTTH、数据中心工程等的建设中。我们以KOC高品质的理念，为全球客户提供可信赖的产品与服务。

KOC在全球各地设有分公司或办事处，我们全球布局，雇佣当地职员开展业务与合作，我们追求与客户建立和维持长久稳定的互利合作关系。

总经营面积约15000平方。

KOC Group was one of the pioneer companies engaged in fiber optical connectivity in China. With about 25 years’ development, it is now a specialized service provider and manufacturer in ODN fiber connectivities , passive devices, IDC cabling and miro-connection, indoors cables, FTTH boxes, etc. It provides ODM design and OEM manufacturing service for customer.

Nowadays, KOC products are extensively applied for telecom operators, fiber engineering projects, CATV, broadband networks, FTTH and data center constructions in Europe, South America, Mid-east, Asia Pacific regions. Under the concept of high quality principal, KOC provides reliable products and services to customers over the world.



As the production base of KOC Group, located in Sichuan Province, KOC Sichuan was established in 2019 and is a national high-tech enterprise. The company is located in Hongya County Economic Development Zone, Meishan City. KOC Sichuan has a production plant area of 18000 square meters. After complete completion in 2025, the production scale is expected to reach an annual output of 60 million fiber optic connector terminations and 100K core kilometers of optical cables. At the same time, it has the production capacity of IDC high-end passive components such as FA, MT, Jumper, and other supporting products for fiber optic cabling.

作为KOC集团的生产基地，四川KOC成立于2019年，位于四川省，是一家国家高新技术企业。公司位于眉山市洪雅县经济开发区。KOC四川拥有18000平方米的生产厂房。2025年建成后，生产规模预计将达到年产6000万个光纤连接器终端和10万芯公里光缆。同时具备IDC高端无源元件FA、MT、Jumper等光纤布线配套产品的生产能力。

# Development History



# Certificates



# Mini Internal Connectivity for QSFP 光模块内部的微连接产品

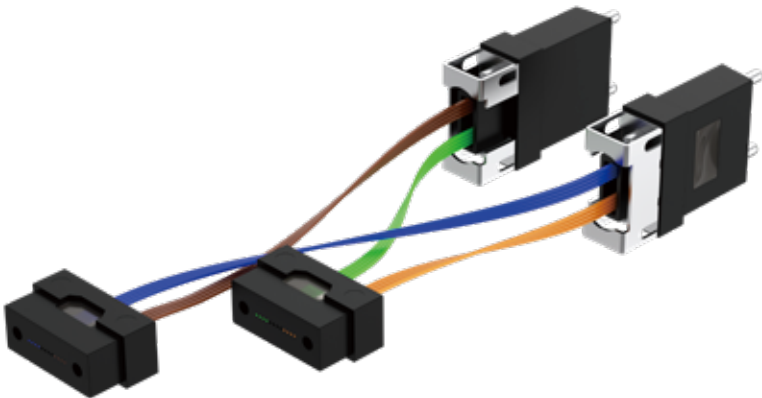
Internal Connection focuses on optical passive connections in three applications: QSFP, AOCs and COBO applications. The business model includes OEM, ODM and JDM, to provide customers with quality products, professional technical support and professional service.

我们专注于光无源内部连接的三种应用：QSFP、AOCs、COBO。业务模式包括OEM、ODM及JDM、为客户提供优质的产品、专业的技术支持和服务。

## MT - MT Assembly (MT 组件)

Passive optical interconnect jumpers can be deployed in QSFP, QSFP+, QSFP28,100G PSM4, QSFP-DD, Micro QSFP, OSFP, CXP, CFP, CDFP and any parallel optical transceiver modules, supporting various network types, including Ethernet optical network, Infiniband optical network, and Fiber Channel network.

产品应用于QSFP、QSFP+、QSFP28、100G PSM4、QSFP-DD、Micro QSFP、OSFP、CXP、CFP、CDFP 以及其他并行传输光收发模块中，支持200G以上各类型光模块内部微连接应用的OEM/ODM配套。



### Features

GR-1435, GR-1221 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G), 100G(10X10G), 12x10G, 4x32G, 8X10G, 200G(8X25G), 400G(8X50G), 800G(8X100G)

### Coupling Mode

Passive coupling with guide pins and 0, 8 degrees

### IL/RL Specifications

MT IL ≤0.60 dB typical 0.20 dB MT RL ≥20 dB

### Environment Conditions

-40°C~+85°C

### 特点

兼容GR-1435、GR-1221  
传输方式：多通道并行光传输  
支持：40G (4x10G) 、100G (4x25G) 、100G (10X10G) 、12x10G、4x32G、8X10G、200G (8X25G) 、400G ( 8X50G) 、800G (8X100G)

### 耦合模式

无源接口侧MT导针对准可实现0°、8°及按客户定制角度

### 插损、回损参数

MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

### 适用环境

-40°C~+85°C

| Item                    | Specification                                      |
|-------------------------|----------------------------------------------------|
| Connector A (连接头A)      | MT Ferrule with guide pin (带引针的MT插芯)               |
| Connector B (连接头B)      | MT Ferrule (MT插芯)                                  |
| Fiber Shape (光纤形状)      | Ribbon/Single fibers (带状/单纤)                       |
| Fiber Counts (纤芯数)      | 8F/12F/16F/24F                                     |
| Fiber Type (光纤型号)       | OM2, OM3, OM4, OM5; OS1, OS2;                      |
| Length (长度)             | 20~100mm, Customized length available (20-100mm可选) |
| Length Tolerance (长度公差) | +0.3/-0mm ~ +0.5/-0mm                              |



MT - FA 42.5°

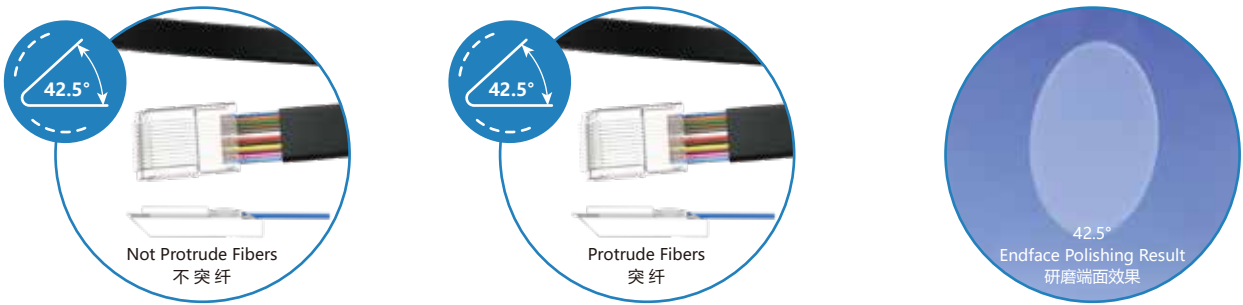
MT-42.5°FA uses 42.5° total reflection FA as the RX receiving end to directly couple with the PD Array to complete the optical to optical conversion of the optica path; use the small size and multiple channels of the MT ferrule to realize the parallel transmission of multiple optical channels. At present, it is widely used in high-speed optical module connection.  
MT-42.5°FA 以 42.5°全反射FA作为RX接收端与PDArray直接耦合，完成光路的光电转换，利用 MT插芯体积小、通道多的特点实现多路光的并行传输，目前大量应用于高速光模块内连接。

- Features**
- Low insertion loss
  - High repeatability and high stability
  - High precision and customizable
  - Meets GR1221 /1209 and RoHS standards

**Application**  
100G PSM high-speed optical module

- 特点**
- 低插入损耗
  - 高重复性和高稳定性
  - 精度高、定制化
  - 符合 GR1221、GR1209 和 RoHS 标准

**应用**  
应用于 100G PSM 高速光模块



| Item                         | Specification                                                                     |
|------------------------------|-----------------------------------------------------------------------------------|
| Operating Wavelength (工作波段)  | 850~1650nm                                                                        |
| Insertion loss (插入损耗)        | <0.5dB                                                                            |
| Return Loss (回波损耗)           | ≥50dB                                                                             |
| Operating Temperature (工作温度) | -40℃~85℃                                                                          |
| Pitch Error (位置偏差)           | <1.0μm (0.3,0.5,0.7,1.0μm can be customized according to channel number accuracy) |



Polarization Maintaining Fiber Array / MT Pigtail (保偏组件)

PM FA is a Polarization-Maintaining fiber placed in the V-Groove on the array substrate to achieve high-density parallel transmission by maintaining the same polarization direction. PM fiber array has excellent performance such as precision alignment angle, high extinction ratio, precisefiber spacing and polishing angle, etc.  
保偏光纤阵列系列产品，运用高精度特制的V型槽结构、专用的胶水以及特殊组装技术按照快轴或慢轴对准的方式把保偏光纤固定在V型槽中。产品具有快慢轴对准角度精准、高消光比参数、光纤间距和研磨角度精准、研端面平滑等众多优良特性。

- Features**
- High extinction ratio (≥18dB)
  - High precision pitch core (pitch error≤0.5μm)
  - Customized available
  - GR1221, GR1209 and RoHS compliant

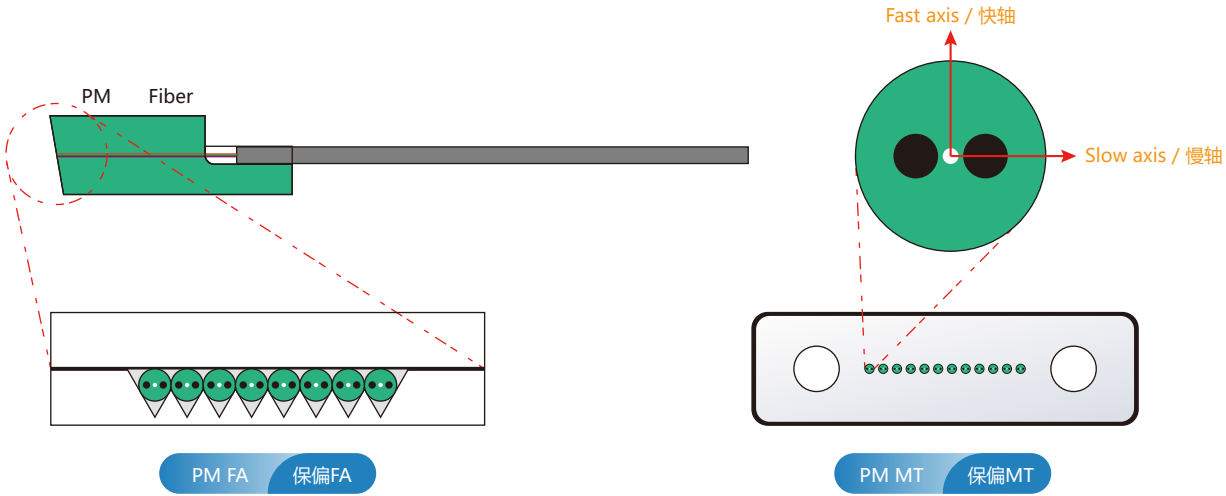
**Application**  
Coherent transmission, PM optical waveguide devices, fiber sensing

- 特点**
- 高消光比（PER>18dB）
  - 高重复性和高稳定性
  - 高精度纤芯间距(pitch error<0.5um)高精度抛光角度，并可定制化角度
  - 符合 GR1221、GR1209 和 RoHS 标准

**应用**  
多通道光学集成器件、相干通信、保偏光学系统



| Item                                 | Specification                  |
|--------------------------------------|--------------------------------|
| Fiber Spacing (光纤间距)                 | 127μm or 250μm or customized   |
| Fiber Core Position Tolerance (间距公差) | ≤0.5μm or customized           |
| Fiber Type (光纤类型)                    | PM 1310nm 1550nm or customized |
| Polishing Angle (端面角度)               | 0°~45°                         |
| Fiber Counts (光纤芯数)                  | Customized                     |
| Extinction Ratio (消光比)               | ≥18dB                          |
| Standards (符合标准)                     | Comply with GR1209/1221,ROHS   |
| Operating Temperature (工作温度)         | -5℃~70℃                        |



SUS - MT Assembly (SUS 组件)

Passive optical interconnect jumpers can be deployed in QSFP, QSFP+, QSFP28, 100G PSMA, QSFP-DD, OSFP, CXP, CFP, CDFP and any parallel optical transceiver modules, supporting various network types, including Ethernet optical network, Infiniband optical network, and Fiber Channel network.  
产品应用于QSFP、QSFP+、QSFP28、100G PSMA、QSFP-DD、OSFP、CXP、CFP、CDFP 以及其他并行传输光收发模块中，支持200G以上各类型光模块内部微连接应用的OEM/ODM配套。

**Features**  
GR-1435, GR-1221, GR-1209 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G)

**Coupling Mode**  
Passive coupling with guide pins and 0, 8 degrees  
Active coupling with light source and 0, 8, 42.5 degrees as customer designed

**IL/RL Specifications**  
MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

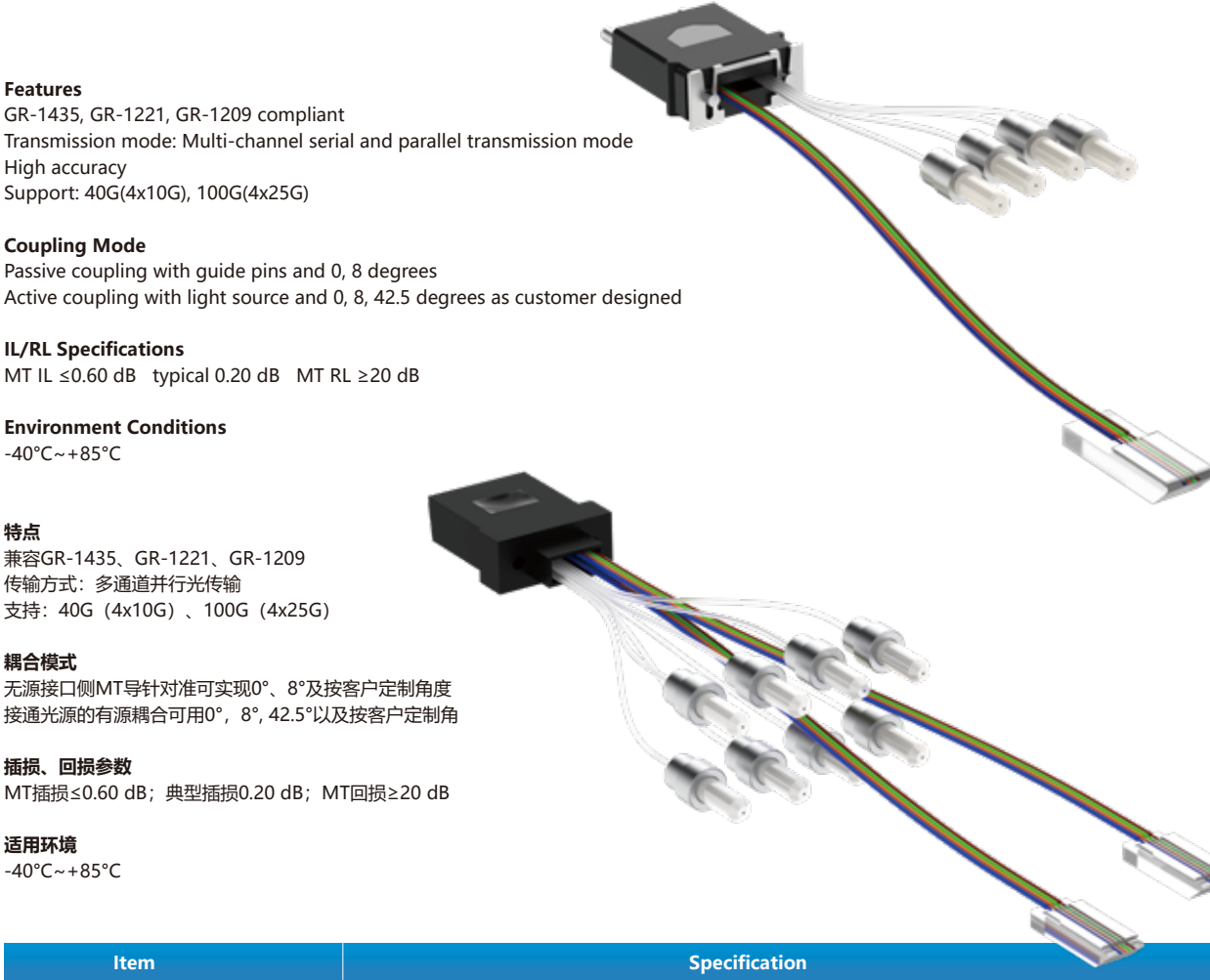
**Environment Conditions**  
-40°C~+85°C

**特点**  
兼容GR-1435、GR-1221、GR-1209  
传输方式：多通道并行光传输  
支持：40G（4x10G）、100G（4x25G）

**耦合模式**  
无源接口侧MT导针对准可实现0°、8°及按客户定制角度  
接通光源的有源耦合可用0°，8°，42.5°以及按客户定制角

**插损、回损参数**  
MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

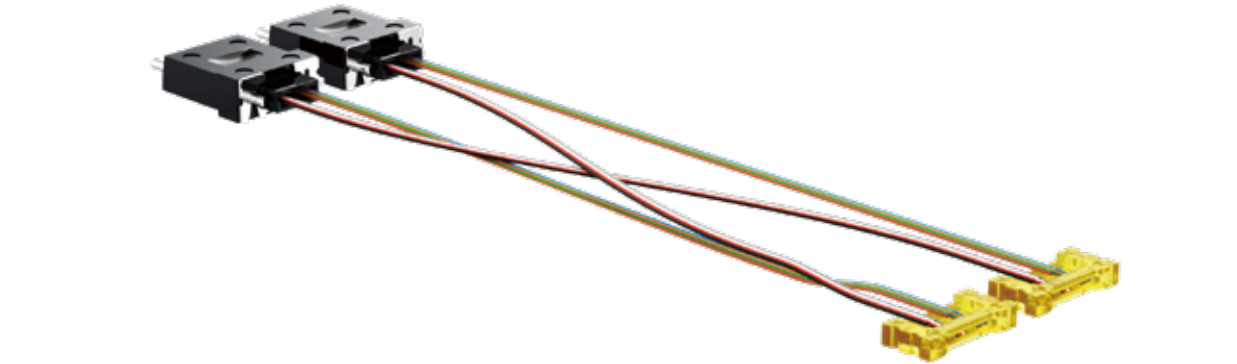
**适用环境**  
-40°C~+85°C



| Item                    | Specification                                                         |
|-------------------------|-----------------------------------------------------------------------|
| Connector A (连接头A)      | MT Ferrule with guide pin (带引针的MT插芯)                                  |
| Connector B (连接头B)      | MT&SUS or FA&SUS, Customized size/angle available for FA (FA可定制尺寸/角度) |
| Fiber Shape (光纤形状)      | Ribbon (带状)                                                           |
| Fiber Counts (纤芯数)      | 4F/8F/12F/16F/24F                                                     |
| Fiber Type (光纤型号)       | G657B3                                                                |
| Length (长度)             | 20~100mm, Customized length available (20-100mm可选)                    |
| Length Tolerance (长度公差) | +0.3/-0mm ~ +0.5/-0mm                                                 |

Jumper - MT Assembly (Jumper 组件)

Passive optical interconnect jumpers can be deployed in QSFP, QSFP+, QSFP28, QSFP-DD, OSFP, CXP, CFP, CDFP and any parallel optical transceiver modules, supporting various network types, including Ethernet optical network, Infiniband optical network, and Fiber Channel network.  
产品应用于QSFP、QSFP+、QSFP28、QSFP-DD、OSFP、CXP、CFP、CDFP 以及其他并行传输光收发模块中，支持200G以上各类型光模块内部微连接应用的OEM/ODM配套。



**Features**  
GR-1435, GR-1221 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 200G(8x25G), 400G(8X50G)

**Coupling Mode**  
Passive coupling with guide pins and 0, 8, 10 degrees as customer designed  
Active coupling with light source and 0, 8 degrees as customer designed  
Active polish coupling with 0, 8 degrees as customer designed

**IL/RL Specifications**  
MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

**Environment Conditions**  
-40°C~+85°C

**特点**  
符合GR-1435、GR-1221  
传输方式：多通道并行光传输  
支持：200G（8x25G）、400G（8x50G）

**耦合模式**  
无源接口侧MT导针对准可实现0°、8°、10°及按客户定制角度  
有源侧jumper激光切割耦合可用0°、8°及按客户定制角度  
有源侧Jumper研磨耦合，角度0°、8°及按客户定制角度

**插损、回损参数**  
MT插损≤0.60 dB；典型插损 0.20 dB；MT回损≥20 dB

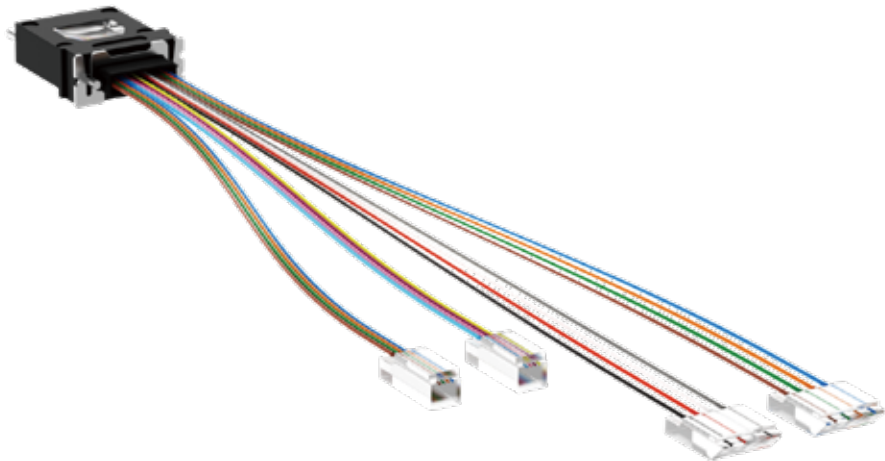
**适用环境**  
-40°C~+85°C

| Item                    | Specification                                                                         |
|-------------------------|---------------------------------------------------------------------------------------|
| Connector A (连接头A)      | MT ferrule with guide pin (带引针的MT插芯)                                                  |
| Connector B (连接头B)      | Customized Jumper/Lens, Usconnect Prism/Lensed MT (客户订制跳线/滤镜, Usconnect Prism/带滤镜的MT) |
| Fiber Shape (光纤形状)      | Ribbon (带状)                                                                           |
| Fiber Counts (纤芯数)      | 2F/4F/8F/12F/16F/24F                                                                  |
| Fiber Type (光纤型号)       | OM3, OM4, OM5;                                                                        |
| Length (长度)             | 20~100mm, Customized length available (20-100mm可选)                                    |
| Length Tolerance (长度公差) | ±0.30 ~ ±0.50mm                                                                       |

FA - MT Assembly (FA - MT 组件)

Passive optical interconnect jumpers can be deployed in QSFP, QSFP+, QSFP28, QSFP-DD, OSFP, CXP, CFP, CDFP and any parallel optical transceiver modules, supporting various network types, including Ethernet optical network, Infiniband optical network, and Fiber Channel network.

产品应用于QSFP、QSFP+、QSFP28、QSFP-DD、OSFP、CXP、CFP、CDFP 以及其他并行传输光收发模块中，支持200G以上各类型光模块内部微连接应用的OEM/ODM配套。



**Features**  
GR-1435, GR-1221 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G)

**Coupling Mode**  
Active coupling with light source and 0~ 45 degrees  
Active coupling with light source and 0, 8, 42.5 degrees as customer designed

**IL/RL Specifications**  
MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

**Environment Conditions**  
-40°C~+85°C

**特点**  
兼容GR-1435、GR-1221  
传输方式：多通道并行光传输  
支持：40G（4x10G）、100G（4x25G）

**耦合模式**  
  
有源侧Jumper激光切割耦合，角度0~45°可定制  
接通光源的有源耦合可用0°，8°，42.5°以及按客户定制角度

**插损、回损参数**  
MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

**适用环境**  
-40°C~+85°C

| Item                    | Specification                                      |
|-------------------------|----------------------------------------------------|
| Connector A (连接头A)      | MT Ferrule with guide pin (带引针的MT插芯)               |
| Connector B (连接头B)      | FA, Customized size/angle available (FA可定制尺寸/角度)   |
| Fiber Shape (光纤形状)      | Ribbon/single fibers (带状/单纤)                       |
| Fiber Counts (纤芯数)      | 12F                                                |
| Fiber Type (光纤型号)       | OM3, OM4, G657B3                                   |
| Length (长度)             | 20~100mm, Customized length available (20-100mm可选) |
| Length Tolerance (长度公差) | +0.3/-0mm ~ +0.5/-0mm                              |

Mode-Field-Converting Fiber Array (模场转换连接组件)

Mode Field Diameters (MFD) Fiber Array (FA) provides a means of low-loss coupling to waveguides with smaller mode-fields. The process of splicing ultra-high-NA(UHNA) fiber to a standard NA fiber, such as 3.2μm/3.3μm/4μm/5.5μm to 9μm, is used to realize the conversion of the mode field.

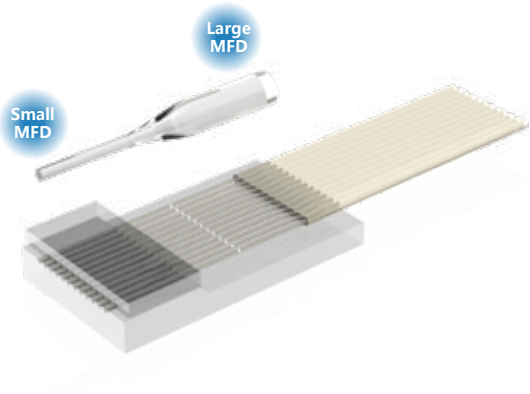
模场直径转换FA是提供一种低损耗耦合到具有较小模场的波导的方法，采用一小段超高数值孔径单模光纤（UHNA）拼接到标准的SM或PM光纤的尾纤上，来实现模场转换。该产品是高速硅光子收发器模块上连接的理想方案，我们可提供定制化光纤直径，如3.0μm/4.0μm/5.0μm/5.5μm转换到9μm，采用特殊组装抛光工艺以及高精度V型槽基板，实现低插损、高Pitch-Core，采用全石英材质，耐宽温。

**Features**  
Low insertion loss  
High precision pitch core (pitch error < 0.5μm)  
High precision polishing angle  
Customized available  
GR1221, GR1209 and RoHS compliant

**Application**  
Integrated photonic transceiver module, Optical waveguide coupling

**特点**  
低损耗  
可定制化  
高精度纤芯间距（pitch error < 0.5μm）  
高精度抛光角度，并可定制化角度  
符合GR1221、GR1209和RoHS标准

**应用**  
集成光子收发模块、光波导耦合



| Item                                 | Specification                |
|--------------------------------------|------------------------------|
| Insertion Loss (插入损耗)                | ≤0.30 dB                     |
| Substrate Material (基板材质)            | Quartz, BF33 and others      |
| Fiber Spacing (光纤间距)                 | 127μm or 250μm or customized |
| Fiber Core Position Tolerance (间距公差) | <0.5μm, or customized        |
| Mode Field Diameter (模场直径)           | 3.2μm, 3.3μm or customized   |
| Polishing Angle (端面角度)               | 0°~45°, or customized        |
| Fiber Type (光纤类型)                    | SM                           |
| Number of Channels (通道数)             | Customized                   |
| Operating Temperature (工作温度)         | -5°C~70°C                    |

MPO - Jumper Assembly (MPO - Jumper 组件)

Passive optical interconnect jumper could connect to optical modules, optical FPGA and Silicon photonic chip installed on PCB, and also it could connect to any parallel optical transceiver modules, supporting various network types, including Ethernet network, Infiniband network and Fiber Channel network, the application equipment includes Switches, Servers, Storages, HPC, and, etc.  
无源光学互连跳线可以连接到光学模块，光学FPGA和硅光子芯片安装在PCB上，也可以连接到任何平行光收发模块，支持各种网络类型,包括以太网网络、无线宽带网络和光纤通道网络，应用设备包括交换机、服务器、存储、HPC等等。

Features

GR-1435, GR-1221 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G)

Coupling Mode

Passive coupling with guide pins and 0, 8 degrees  
Active coupling with light source and 0, 8 degrees as customer designed  
Active polish coupling with 0, 8degrees as customer designed

IL/RL Specifications

MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

Environment Conditions

-40°C~+85°C

特点

兼容GR-1435、GR- 1221  
传输方式：精度高多路串并联传输方式  
支持：40G（4x10G）、100G（4x25G)

耦合模式

以导针对准的无源耦合可实现0°、8°及按客户定制角度  
有源侧jumper激光切割耦合可用0°、8°及按客户定制角度  
有源侧Jumper研磨耦合，角度0°、8°及按客户定制角度

插损、回损参数

MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

环境状况

-40°C~+85°C



| Item                    | Specification                                      |
|-------------------------|----------------------------------------------------|
| Connector A (连接头A)      | MPO                                                |
| Connector B (连接头B)      | Customized Jumper/Lens (可定制Jumper/Lens)            |
| Fiber shape (光纤形状)      | Ribbon (带状)                                        |
| Fiber count (纤芯数)       | 12F                                                |
| Fiber type (光纤型号)       | OM2,OM3,OM4;                                       |
| Length (长度)             | 50~100mm, Customized length available (50-100mm可选) |
| Length tolerance (长度公差) | ±0.5mm                                             |

MPO - MT Assembly (MPO - MT 组件)

Passive optical interconnect jumper could connect to optical modules, optical FPGA and Silicon photonic chip installed on PCB, and also it could connect to any parallel optical transceiver modules, supporting various network types, including Ethernet network, Infiniband network and Fiber Channel network, the application equipment includes Switches, Servers, Storages, HPC, and, etc.  
无源光学互连跳线可以连接到光学模块，光学FPGA和硅光子芯片安装在PCB上，也可以连接到任何平行光收发模块，支持各种网络类型,包括以太网网络、无线宽带网络和光纤通道网络，应用设备包括交换机、服务器、存储、HPC等等。

Features

GR-1435, GR-1221 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G), 100G(10X10G)

Coupling Mode

Passive coupling with guide pins and 0, 8 degrees

IL/RL Specifications

MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

Environment Conditions

-40°C~+85°C

特点

兼容GR-1435、GR-1221  
传输方式：精度高多路串并联传输方式  
支持：40G（4x10G）、100G（4x25G）、100G（10X10G)

耦合模式

以导针对准的无源耦合可实现0°、8°及按客户定制角度

插损、回损参数

MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

环境状况

-40°C~+85°C



| Item                    | Specification                                      |
|-------------------------|----------------------------------------------------|
| Connector A (连接头A)      | MPO                                                |
| Connector B (连接头B)      | MT Ferrule                                         |
| Fiber shape (光纤形状)      | Ribbon (带状)                                        |
| Fiber count (纤芯数)       | 12F/24F                                            |
| Fiber type (光纤型号)       | OM2,OM3,OM4;                                       |
| Length (长度)             | 50~100mm, Customized length available (50-100mm可选) |
| Length tolerance (长度公差) | ±0.5mm                                             |



MPO - FA Assembly (MPO - FA 组件)

Passive optical interconnect jumper could connect to optical modules, optical FPGA and Silicon photonic chip installed on PCB, and also it could connect to any parallel optical transceiver modules, supporting various network types, including Ethernet network, Infiniband network and Fiber Channel network, the application equipment includes Switches, Servers, Storages, HPC, and, etc.

无源光学互连跳线可以连接到光学模块，光学FPGA和硅光子芯片安装在PCB上，也可以连接到任何平行光收发模块，支持各种网络类型,包括以太网网络、无线宽带网络和光纤通道网络，应用设备包括交换机、服务器、存储、HPC等等。

**Features**  
GR-1435, GR-1221, GR-1209 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G)

**Coupling Mode**  
Passive coupling with guide pins and 0, 8 degrees  
Active coupling with light source and 0, 8, 42.5 degrees as customer designed  
Passive coupling with guide pins and 90 degrees

**IL/RL Specifications**  
MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

**Environment Conditions**  
-40°C~+85°C

**特点**  
兼容GR-1435、GR-1221、GR-1209  
传输方式：精度高多路串并联传输方式  
支持： 40G（4x10G）、100G（4x25G）

**耦合模式**  
以导针对准的无源耦合可实现0°、8°及按客户定制角度  
接通光源的有源耦合可用0°、8°、42.5°以及按客户定制角度  
以导针对准的无源耦合也可用90°转角

**插损、回损参数**  
MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

**环境状况**  
-40°C~+85°C



| Item                    | Specification                                    |
|-------------------------|--------------------------------------------------|
| Connector A (连接头A)      | MPO                                              |
| Connector B (连接头B)      | Customized Fiber Array (可定制FA)                   |
| Fiber shape (光纤形状)      | Ribbon (带状)                                      |
| Fiber count (纤芯数)       | 12F                                              |
| Fiber type (光纤型号)       | OM2,OM3,OM4,SM;                                  |
| Length (长度)             | 50~80mm, Customized length available (50-80mm可选) |
| Length tolerance (长度公差) | ±0.5mm                                           |

MPO - mini MT AOC Assembly (MPO - mini MT AOC 尾缆)

Passive optical interconnect jumper could connect to optical modules, optical FPGA and Silicon photonic chip installed on PCB, and also it could connect to any parallel optical transceiver modules, supporting various network types, including Ethernet network, Infiniband network and Fiber Channel network, the application equipment includes Switches, Servers, Storages, HPC, and, etc.

无源光学互连跳线可以连接到光学模块，光学FPGA和硅光子芯片安装在PCB上，也可以连接到任何平行光收发模块，支持各种网络类型,包括以太网网络、无线宽带网络和光纤通道网络，应用设备包括交换机、服务器、存储、HPC等等。

**Features**  
GR-1435, GR-1221 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G)

**Coupling Mode**  
Passive coupling with guide pins and 0, 8 degrees  
Active coupling with light source and 0, 8 degrees  
Passive coupling with guide pins and 90 degrees

**IL/RL Specifications**  
MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

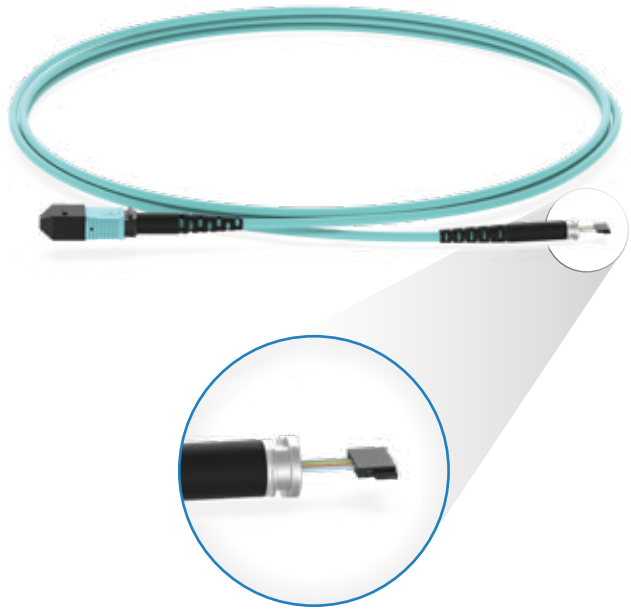
**Environment Conditions**  
-40°C~+85°C

**特点**  
兼容GR-1435、GR-1221  
传输方式：精度高多路串并联传输方式  
支持： 40G（4x10G）、100G（4x25G）

**耦合模式**  
以导针对准的无源耦合可实现0°、8°及按客户定制角度  
接通光源的有源耦合可用0°、8°及按客户定制角度  
以导针对准的无源耦合也可用90°转角

**插损、回损参数**  
MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

**环境状况**  
-40°C~+85°C



| Item                    | Specification                                    |
|-------------------------|--------------------------------------------------|
| Connector A (连接头A)      | MPO                                              |
| Connector B (连接头B)      | Customized Fiber Array (可定制FA)                   |
| Fiber shape (光纤形状)      | Ribbon (带状)                                      |
| Fiber count (纤芯数)       | 12F                                              |
| Fiber type (光纤型号)       | OM2,OM3,OM4;                                     |
| Length (长度)             | 50~80mm, Customized length available (50-80mm可选) |
| Length tolerance (长度公差) | ±0.5mm                                           |

MT - MT AOC Assembly (MT - MT AOC 尾缆)

Passive optical interconnect jumpers could be deployed in QSFP AOC, QSFP28 AOC, QSFP-DD AOC, Micro QSFP AOC, CXP AOC, CFP AOC, CDFP AOC, and any parallel optical transceiver module AOC, supporting network types include Ethernet with optical fiber transmission, Infiniband with optical fiber transmission, and Fiber Channel.

无源光互连跳线可用于QSFP AOC、QSFP28 AOC、QSFP-DD AOC、Micro QSFP AOC、CXP AOC、CFP AOC、CDFP AOC以及任何并行光收发模块AOC中，支持以太网网络、无线宽带网络、光纤通道网络等多种网络类型。

**Features**  
GR-1435, GR-1221 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G), 100G(10X10G), 12x10G, 4x32G, 8X10G, 200G(8X25G), 400G(8X50G), 800G(8X100G)

**Coupling Mode**  
Passive coupling with guide pins and 0, 8 degrees

**IL/RL Specifications**  
MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

**Environment Conditions**  
-40°C~+85°C

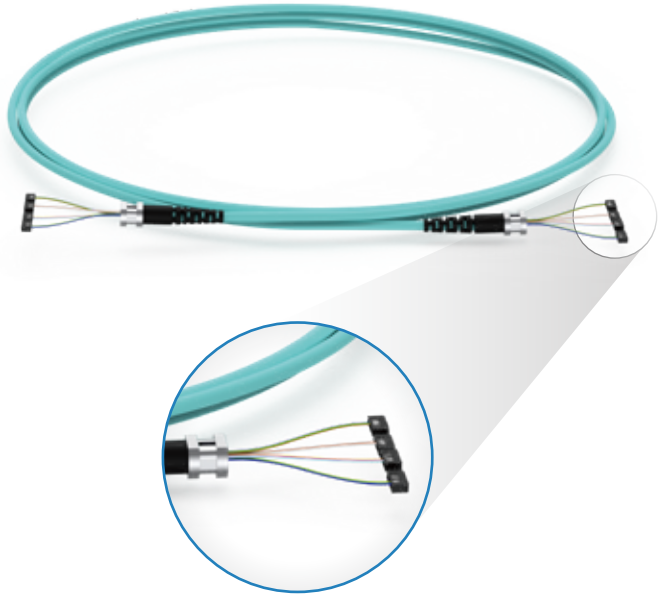
**特点**  
兼容GR-1435、GR-1221  
传输方式：精度高多路串并联传输方式  
支持： 40G（4x10G）、100G（4x25G）、100G（10X10G）、12x10G、4x32G、8X10G、200G（8X25G）、400G（8X50G）、800G（8X100G）

**耦合模式**  
以导针对准的无源耦合可实现0°、8°及按客户定制角度

**插损、回损参数**  
MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

**环境状况**  
-40°C~+85°C

| Item                    | Specification                                    |
|-------------------------|--------------------------------------------------|
| Connector A (连接头A)      | MT ferrule                                       |
| Connector B (连接头B)      | MT ferrule                                       |
| Fiber shape (光纤形状)      | Round Cable (圆形光缆)                               |
| Fiber count (纤芯数)       | 8F/12F/16F/24F                                   |
| Fiber type (光纤型号)       | OM2,OM3,OM4,OM5;                                 |
| Length (长度)             | 20~50mm, Customized length available (20-50mm可选) |
| Length tolerance (长度公差) | +0.3/-0mm ~ +0.5/-0mm                            |
| Cable diameter (光缆直径)   | Φ3.0mm/Φ3.8mm                                    |
| Cable jacket (光缆护套)     | LSZH/OFNR/OFNP/LSZH+OFNR                         |
| Cable length (光缆长度)     | 1M/3M/5M/7M ..... 50M/100M                       |



Jumper - Jumper AOC Assembly (Jumper AOC 尾缆)

Passive optical interconnect jumpers could be deployed in QSFP AOC, QSFP28 AOC, QSFP-DD AOC, Micro QSFP AOC, CXP AOC, CFP AOC, CDFP AOC, and any parallel optical transceiver module AOC, supporting network types include Ethernet with optical fiber transmission, Infiniband with optical fiber transmission, and Fiber Channel.

无源光互连跳线可用于QSFP AOC、QSFP28 AOC、QSFP-DD AOC、Micro QSFP AOC、CXP AOC、CFP AOC、CDFP AOC以及任何并行光收发模块AOC中，支持以太网网络、无线宽带网络、光纤通道网络等多种网络类型。

**Features**  
GR-1435, GR-1221 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G), 100G(10X10G), 12x10G, 4x32G, 8X10G, 200G(8X25G), 400G(8X50G), 800G(8X100G)

**Coupling Mode**  
Passive coupling with guide pins and 0, 8 degrees  
Active coupling with light source and 0, 8degrees  
Passive coupling with guide pins and 90 degrees

**IL/RL Specifications**  
MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

**Environment Conditions**  
-40°C~+85°C

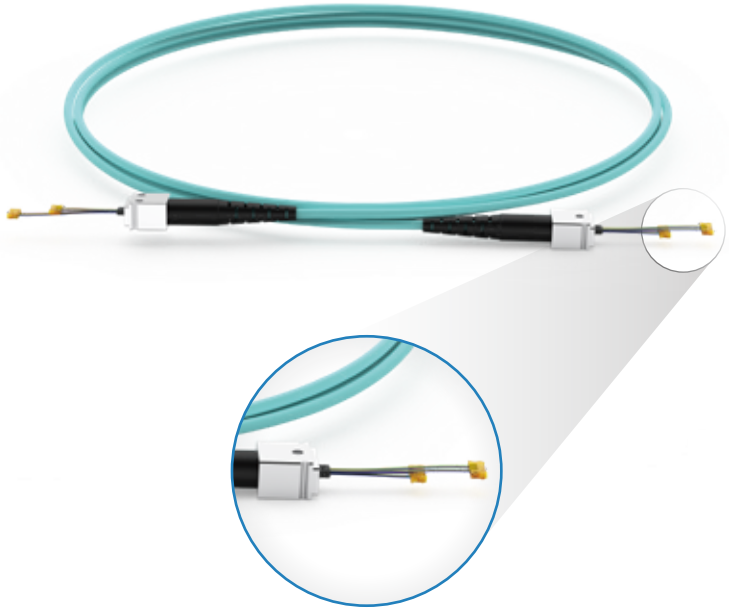
**特点**  
兼容GR-1435、GR-1221  
传输方式：精度高多路串并联传输方式  
支持： 40G（4x10G）、100G（4x25G）、100G（10X10G）、12x10G、4x32G、8X10G、200G（8X25G）、400G（8X50G）、800G（8X100G）

**耦合模式**  
以导针对准的无源耦合可实现0°、8°及按客户定制角度  
接通光源的有源耦合可用0°、8°及按客户定制角度  
以导针对准的无源耦合也可用90°转角

**插损、回损参数**  
MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

**环境状况**  
-40°C~+85°C

| Item                    | Specification                                    |
|-------------------------|--------------------------------------------------|
| Connector A (连接头A)      | Customized Jumper/Lens (可定制Jumper/Lens)          |
| Connector B (连接头B)      | Customized Jumper/Lens (可定制Jumper/Lens)          |
| Fiber shape (光纤形状)      | Round Cable (圆形光缆)                               |
| Fiber count (纤芯数)       | 8F/12F/16F/24F                                   |
| Fiber type (光纤型号)       | OM2,OM3,OM4,OM5;                                 |
| Length (长度)             | 20~60mm, Customized length available (20-60mm可选) |
| Length tolerance (长度公差) | +0.3/-0mm ~ +0.5/-0mm                            |
| Cable diameter (光缆直径)   | Φ3.0mm/Φ3.8mm                                    |
| Cable jacket (光缆护套)     | LSZH/OFNR/OFNP/LSZH+OFNR                         |
| Cable length (光缆长度)     | 1M/3M/5M/7M.....50M/100M                         |





FA - FA AOC Assembly (FA - FA AOC 尾缆)

Passive optical interconnect jumpers could be deployed in QSFP AOC, QSFP28 AOC, QSFP-DD AOC, Micro QSFP AOC, CXP AOC, CFP AOC, CDFP AOC, and any parallel optical transceiver module AOC, supporting network types include Ethernet with optical fiber transmission, Infiniband with optical fiber transmission, and Fiber Channel.

无源光互连跳线可用于QSFP AOC、QSFP28 AOC、QSFP-DD AOC、Micro QSFP AOC、CXP AOC、CFP AOC、CDFP AOC以及任何并行光收发模块AOC中，支持以太网网络、无线宽带网络、光纤通道网络等多种网络类型。

**Features**  
GR-1435, GR-1221, GR-1209 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G), 100G(10X10G), 12x10G, 4x32G, 8X10G, 200G(8X25G), 400G(8X50G), 800G(8X100G)

**Coupling Mode**  
Active coupling with light source and 0, 8, 42.5 degrees as customer designed

**IL/RL Specifications**  
MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

**Environment Conditions**  
-40°C~+85°C

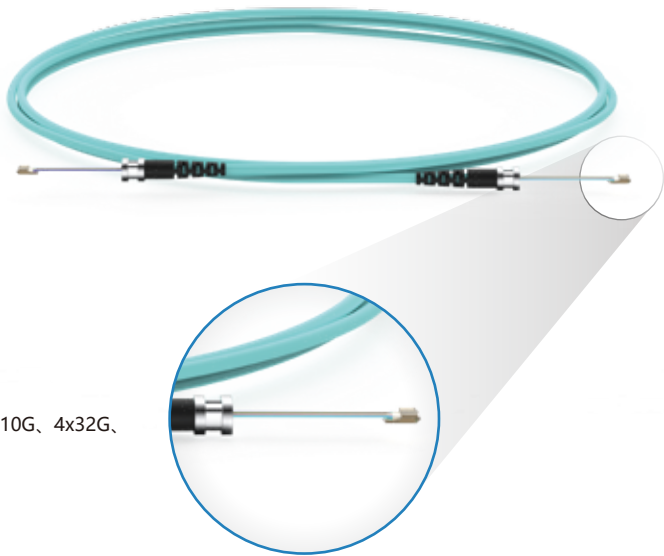
**特点**  
兼容GR-1435、GR-1221、GR-1209  
传输方式：精度高多路串并联传输方式  
支持：40G（4x10G）、100G（4x25G）、100G（10X10G）、12x10G、4x32G、8X10G、200G（8X25G）、400G（8X50G）、800G（8X100G）

**耦合模式**  
接通光源的有源耦合可用0°，8°，42.5°以及按客户定制角度

**插损、回损参数**  
MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

**环境状况**  
-40°C~+85°C

| Item                    | Specification                                    |
|-------------------------|--------------------------------------------------|
| Connector A (连接头A)      | Customized Fiber Array (可定制FA)                   |
| Connector B (连接头B)      | Customized Fiber Array (可定制FA)                   |
| Fiber shape (光纤形状)      | Round Cable (圆形光缆)                               |
| Fiber count (纤芯数)       | 8F/12F/16F/24F                                   |
| Fiber type (光纤型号)       | OM2,OM3,OM4,OM5,SM                               |
| Length (长度)             | 20~50mm, Customized length available (20-50mm可选) |
| Length tolerance (长度公差) | +0.3/-0mm ~ +0.5/-0mm                            |
| Cable diameter (光缆直径)   | Φ3.0mm/Φ3.8mm                                    |
| Cable jacket (光缆护套)     | LSZH/OFNR/OFNP/LSZH+OFNR                         |
| Cable length (光缆长度)     | 1M/3M/5M/7M……50M/100M                            |



LC - LC AOC Assembly (LC - LC AOC 尾缆)

Passive optical interconnect jumpers can be deployed in QSFP, QSFP+, QSFP28, 100G PSMA, QSFP-DD, OSFP, CXP, CFP, CDFP and any parallel optical transceiver modules, supporting various network types, including Ethernet optical network, Infiniband optical network, and Fiber Channel network.

无源光互连跳线可用于QSFP、QSFP+、QSFP28、100G PSMA、QSFP-DD、OSFP、CXP、CFP、CDFP以及任何并行光收发模块AOC中，支持以太网网络、无线宽带网络、光纤通道网络等多种网络类型。

**Features**  
GR-1435, GR-1221 compliant  
Transmission mode: Multi-channel serial and parallel transmission mode  
High accuracy  
Support: 40G(4x10G), 100G(4x25G)

**Coupling Mode**  
Passive coupling with guide pins and 0, 8 degrees

**IL/RL Specifications**  
MT IL ≤0.60 dB    typical 0.20 dB    MT RL ≥20 dB

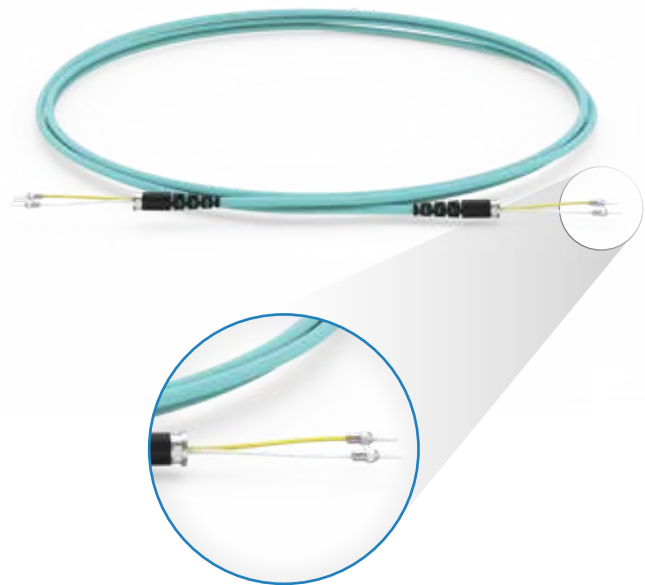
**Environment Conditions**  
-40°C~+85°C

**特点**  
兼容GR-1435、GR-1221  
传输方式：精度高多路串并联传输方式  
支持：40G（4x10G）、100G（4x25G）

**耦合模式**  
以导针对准的无源耦合可实现0°、8°及按客户定制角度

**插损、回损参数**  
MT插损≤0.60 dB；典型插损0.20 dB；MT回损≥20 dB

**环境状况**  
-40°C~+85°C



| Item                    | Specification                                    |
|-------------------------|--------------------------------------------------|
| Connector A (连接头A)      | 2*LC Ferrule                                     |
| Connector B (连接头B)      | 2*LC Ferrule                                     |
| Fiber shape (光纤形状)      | Ribbon (带状)                                      |
| Fiber count (纤芯数)       | 2F                                               |
| Fiber type (光纤型号)       | OM1, OM2;                                        |
| Length (长度)             | 20~50mm, Customized length available (20-50mm可选) |
| Length tolerance (长度公差) | +0.3/-0mm ~ +0.5/-0mm                            |
| Cable diameter (光缆直径)   | Φ3.0mm                                           |
| Cable jacket (光缆护套)     | LSZH/OFNR/OFNP/LSZH+OFNR                         |
| Cable length (光缆长度)     | 1M/3M/5M/7M……50M/100M                            |

## IDC Cabling Products 数据中心光纤布线产品

Cabling Products focus on optical passive connections, cabling management and high-density pre-terminated connections in the structured fiber cabling system, and we are committed to provide customers with high-precision, low-loss, high-reliability, low-cost, miniaturization and high-compatibility products, solutions and services.

我们致力于为客户提供高密度、高可靠性、低成本的光纤连接以及高可靠性、低损耗的光纤布线解决方案。



### MPO Patch Cord for Internal Cabinet 机柜内部连接MPO光跳线

MPO fiber optical patchcord which are highly demanded in fiber optical communication systems with high density optical fiber. KOC's MPO product comes in many types such as distribution and ribbon type. It can be split into 2 to 24 core 0.9mm or 2.0mm fiber branch though a splitter(round or square). The connector type and the length of fiber patchcord can be decided by customers. Our product conforms to Telcordia GR-326.IEC and RoHS standards.

#### Features

- Low insertion loss and back reflection loss
- Good exchangeability
- Good Durability
- High temperature stability
- Standard: Telcordia GR-1435-CORE compliant

#### Applications

- CATV , and Multimedia
- Telecommunication networks
- Active device interface
- Telecommunication networks
- Gigabit Ethernet
- Data processing networks
- Interconnection for O/E modules
- Premise installations
- Optical switch interframe connection
- Asynchronous Transmission Mode (ATM)

#### 应用

- 有线电视和多媒体
- 电信网络
- 有源设备接口
- 电信网络
- 千兆以太网
- 数据处理网络
- O/E模块的互连
- 房屋安装
- 光开关机架间连接
- 异步传输模式 (ATM)

MPO光纤跳线是高密度光纤通信系统中的高要求光纤跳线。KOC的MPO产品有多种类型，如分布型和带状。它可以通过分路器（圆形或方形）分成2到24芯0.9mm或2.0mm的光纤分支。光纤跳线的连接器类型和长度可由客户决定。我们的产品符合Telcordia GR-326.IEC和RoHS标准。

#### 特点

- 低插入损耗和背反射损耗
- 良好的互换性
- 良好的耐用性
- 高温稳定性
- 标准: Telcordia GR-1435-CORE兼容



| Item                         | Single mode                                                           | Multimode                                                             |
|------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|
| Insertion Loss (插入损耗)        | Standard Loss≤0.75dB, typical≤0.5dB<br>Low loss≤0.35dB, typical≤0.2dB | Standard Loss≤0.75dB, typical≤0.5dB<br>Low loss≤0.35dB, typical≤0.2dB |
| Return Loss (回波损耗)           | ≥60dB (APC)                                                           | ≥30dB (PC)                                                            |
| Repeatability                | ≤0.1dB                                                                |                                                                       |
| Durability (耐久性)             | ≤0.2 dB typical change, 500 matings                                   |                                                                       |
| Interchangeability           | ≤0.2dB                                                                |                                                                       |
| Tensile Strength             | >70N                                                                  |                                                                       |
| Operating Temperature (工作温度) | Operating Temperature -40 to +85°C                                    |                                                                       |



## MTP/MPO - LC Patch Cord for QSFP to SFP+ MTP/MPO-LC QSFP to SFP+ 连接缆

The fan-out is applied to connect 12-core MTP / MPO connector to the LC connectors on the trunk cable. KOC provides both standard and customized branch lengths. When the network equipment is close to MTP patch panel frames, the length of fan-out patch cords are minimized. For the hardware and equipment in the same cabinet, the longer patch cords can provide flexibility at any location, and the branch cables can be winded into the vertical cable organizer.

Features

- Array connectors with high precision low loss MTP / MPO connectors
- Smooth upgrading to next generation data center for 40GbE and 100GbE
- Outer jacket material option: PVC, LSZH and other selected materials
- Cable flammability rating: OFNR, OFNP, LSZH

特点

- 采用高精度低损耗MPO/MTP光纤活动连接器
- 可以直接平滑升级到下一代数据中心40GbE和100GbE的应用
- 外护套材质，有PVC、LSZH等多种材料选择
- 光缆材料，满足OFNR、OFNP、LSZH阻燃等级

| Item                         | Single mode                      |         | Multimode             |         |
|------------------------------|----------------------------------|---------|-----------------------|---------|
|                              | MTP / MPO                        | LC      | MTP / MPO             | LC      |
| Insertion Loss (插入损耗)        | Low loss ≤0.35 dB                | ≤0.3 dB | Low loss ≤0.35 dB     | ≤0.3 dB |
|                              | Standard Loss ≤ 0.7 dB           | /       | Standard Loss ≤0.5 dB | /       |
| Return Loss (回波损耗)           | ≥60 dB                           | ≥50 dB  | ≥30 dB                | ≥50 dB  |
| Durability (耐久性)             | <0.2 typical change, 500 matings |         |                       |         |
| Operating Temperature (工作温度) | -40 to +85°C                     |         |                       |         |

解决方案分支跳线用于将主干光缆上端接12芯MTP/MPO连接器分支接入到LC连接器。提供标准型和定制两种分支长度。当网络设备紧邻含有MTP连接器面板的配线架时，阶梯型分支跳线可以使光缆的余长降至最低。对于同一个机柜中安装的硬件和设备，较长分支的跳线可以提供任意位置的灵活性，分支部分可以盘入垂直光缆理线器中。



## MTP/MPO Trunk Cable MTP/MPO 预端接光跳线

Pre-terminated trunk cable can be from 4 to 144 cores with 8/12-pin MTP connector at both ends. High-quality cable and MPO kits guarantee low insertion loss and high return loss for high-speed network. Its efficient plug-and-play structure greatly reduces the initial installation and routine maintenance costs. Pre-terminated trunk cables can also be used with plug-and-play modules or MTP / MPO connector panels to achieve multi-level connection of the extension of the preterminated trunk cable can also be extended by MTP/MPO panel with plug-and-play module. The extended trunk cable is to be connected with another panel or fan-out patch cords.

Features

- Array of connectors with high precision low loss MTP / MPO connectors
- MTP/MPO connectors has been assembled at both ends of the cable. The optical performance is 100% tested
- A B C three polarity wiring options can be chosen from sufficient capacity can provide 4-144 cores fiber connections
- Cable flammability rating: OFNR, OFNP, LSZH
- The length of customized cable, trunk cable, extension cable, branch cable can be accurate
- Traction tube is the optional for easy on-site installation
- Minimize failures and reduces cabling space and installation time
- Smooth upgrading to next generation data center for 40GbE and 100GbE
- Outer jacket material option: PVC, LSZH and other selected materials

特点

- 阵列连接器，采用高精度低损耗MPO/MTP光纤活动连接器
- 预端接光缆成品两端已经安装好 MTP/MPO连接器，光学性能经工厂100%测试检验，产品两端有专业的抗压与抗拉的设计
- ABC三种极性接线方式可供选择
- 容量充足，提供4-144芯系列光纤连接
- 线缆定制，主干缆，延长缆，分支缆可精准化长度
- 牵引拉手，可选择配置，便于现场施工
- 小型化最大限度减少故障并减少布线空间以及减少现场安装时间
- 可以直接平滑升级到下一代数据中心40GbE和100GbE的应用
- 外护套材质，有PVC、LSZH等多种材料选择
- 光缆防火等级：OFNR、LSZH

预端接主干光缆，支持4到144芯主干光缆，两端采用含导向针的8/12芯MTP连接器，采用高质量的光缆及MPO组件，低插入损耗，高回波损耗，完全可以满足苛刻的高速网络；另外其高效的即插即用结构大大降低了初始安装和日常维护成本。预接端主干光缆也可采用通过即插即用模块或MTP/MPO连接器面板实现多级连接的延长的预端接主干光缆。延长的主干光缆一端与解决方案主干光缆对接，另一端连接解决方案模块或分支跳线。用于IDC和大楼光纤预端接系统，系统满足以太网传输，可用于未来40G/100G系统应用的平滑升级。MPO 预端接光缆有利于快速部署的数据中心和光纤基础设施环境。跨越于MDA，HDA与EDA区域间模块盒或扇出光缆的连接。



| Item                         | Single mode                        | Multimode             |
|------------------------------|------------------------------------|-----------------------|
| Insertion Loss (插入损耗)        | Low loss ≤0.35 dB                  | Low loss ≤0.35 dB     |
|                              | Standard Loss ≤0.7 dB              | Standard Loss ≤0.5 dB |
| Return Loss (回波损耗)           | ≥60 dB                             | ≥30 dB                |
| Durability (耐久性)             | <0.2 typical change, 500 matings   |                       |
| Operating Temperature (工作温度) | Operating Temperature -40 to +85°C |                       |
| 40G                          | 8 Fiber                            |                       |
| 100G                         | 20 Fiber                           |                       |

MPO Polarity Switchable Patch Cord MPO 可换极性光跳线

The MPO Switchable Connector is a unique design that allows the use of round style. The housing of the MPO Switchable Connector can be Polarity change in the field without any tool, and simple gender change without taking off the housing. This connector allows the fiber polarity to be switched at the time of cable assembly installation without having to reterminate the connectors. This design is commonly used in data centers.

Features

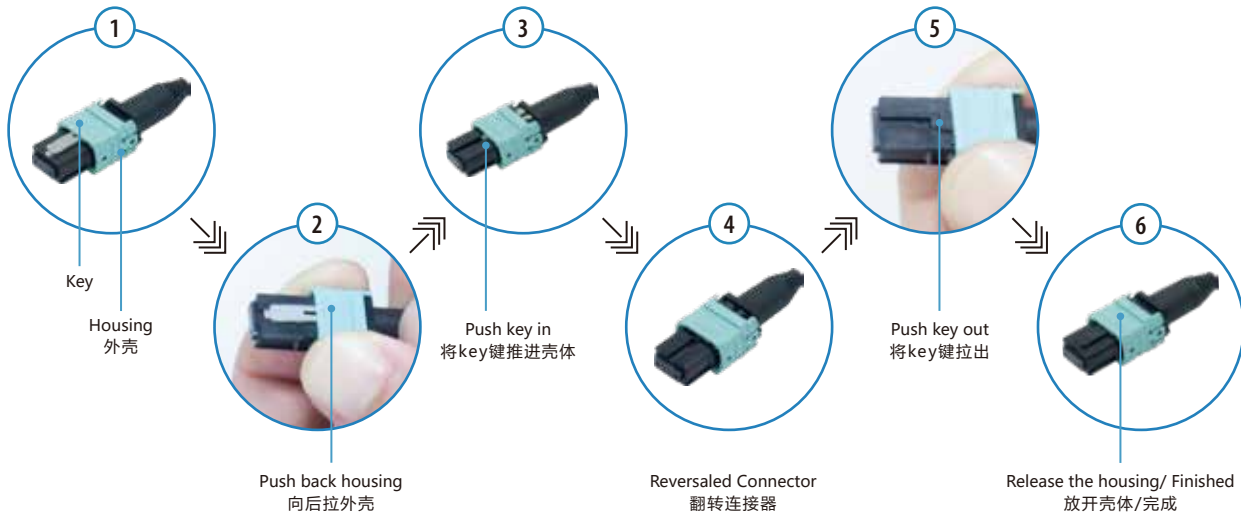
- Low insertion loss and back reflection loss
- Polarity change in the field without any tool
- Simple gender change without taking off the housing
- Good exchangeability
- Good Durability
- High temperature stability
- Various boots types available
- Standard: Telcordia GR-1435-CORE compliant

特点

- 低插损，高回损
- 无需任何工具可实现现场极性转换
- 互换性好
- 重复性好
- 良好的温度稳定性能
- 各种尾套可选择
- 符合elcordia GR-1435-CORE标准

| Item                         | Single mode                         |                | Multimode       |                |
|------------------------------|-------------------------------------|----------------|-----------------|----------------|
|                              | Standard                            | Low loss       | Standard        | Low loss       |
| Insertion Loss (插入损耗)        | ≤0.75 dB                            | ≤0.35 dB       | ≤0.5 dB         | ≤0.35 dB       |
|                              | typical≤0.5 dB                      | typical≤0.2 dB | typical≤0.35 dB | typical≤0.2 dB |
| Return Loss (回波损耗)           | ≥60 dB (APC)                        |                | ≥30 dB (PC)     |                |
| Repeatability (重复性)          | ≤0.1dB                              |                |                 |                |
| Durability (耐久性)             | ≤0.2 dB typical change, 500 matings |                |                 |                |
| Interchangeability (互换性)     | ≤0.2dB                              |                |                 |                |
| Tensile Strength (拉力)        | > 70N                               |                |                 |                |
| Operating Temperature (工作温度) | -40 to +85℃                         |                |                 |                |

Switch Polarity (Sample: Aqua housing/3.0mm short mini boot)



极性可换MPO连接器是一种独特的设计，MPO极性可换连接器的外壳可以在不使用任何工具的情况下进行极性转换，而不需要去掉外壳即可实现简单的极性改变。该连接器允许在光缆现场安装时切换光纤极性，而无需重新终止连接器。这种设计使数据中心现场施工中操作更方便。



Polarity Switchable Duplex LC Patch Cord 可换极性双芯一体式LC光跳线

Duplex Uniboot connector patch cord is designed by KOC. This highly flexible duplex cable reduces cabling congestion and improves patch cord management and installation, it improves cabling space.

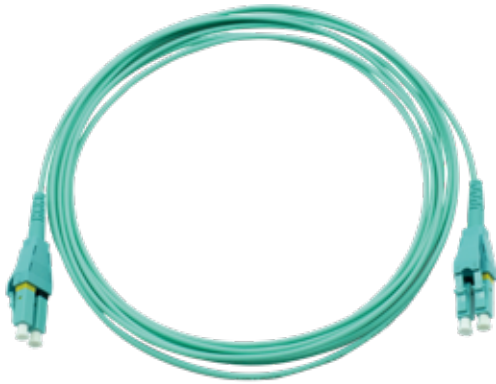
解决方案跳线提供自行设计的双芯Uniboot连接器，这种高度灵活的2芯单根光缆减少了光缆拥塞，提高跳线管理和敷设的便利性，并改善了配线空间。

Features

- Fiber polarity A -> A or A -> B can be switched by installer
- Thin round cable
- Duplex connectors with single boot which is highly integrated and easy for installation
- Standard compatible, simplex / duplex LC connectors. Other options: SC / FC
- High performance, 100% tested
- Fiber type: OFNR, OFNP
- Customized patch cord length
- Two notches on the connectors for easy for installation and uninstallation
- Mini and flexible boot is available. Boot can be turned to any angle
- Quick deployment reduces installation time
- Fast upgrading supports parallel transmission system
- Outer jacket material, PVC, LSZH and other materials selection

特点

- 极性A -> A or A -> B 可现场装换
- 线缆，采用圆形细光缆
- 双工单尾套，高度集成，方便施工
- 标准兼容，双工LC连接器
- 传输性能，100%工厂测试
- 连接器两端有两个缺口，容易拆装
- Mini 尾套和任意角度可弯曲尾套可选
- 快速部署，减少现场施工时间
- 快速升级，支持并行传输系统应用
- 外护套材质，有PVC、LSZH 等多种材料选择
- 光缆材料，满足OFNR、OFNP阻燃等级
- 跳线长度可定制



| Item                         | Single mode                           | Multimode    |
|------------------------------|---------------------------------------|--------------|
| Insertion Loss (插入损耗)        | ≤0.30 dB                              | ≤0.30 dB     |
| Return Loss (回波损耗)           | ≥50 dB (PC) , ≥60 dB (APC)            | /            |
| Durability (耐久性)             | <0.20 dB typical change, 1000 matings | /            |
| Operating Temperature (工作温度) | -40 to +85°C                          | -40 to +85°C |





## High Density LC/MPO Duplex Pull-Tap Patch Cord 高密度拉扣式双芯LC/MPO光跳线

The High Density LC/MPO Duplex Uni-boot Patch Cord is available for high-density fiber patch panels. The highly flexible duplex cable reduces cable congestion and can be plug in and out of the panel easily and quickly so that it improves management and installation convenience.

### Features

- Thin round cable
- Duplex LC/MPO with latched uniboot, easy for plug in and out among panels
- Standard compatible, duplex LC connectors/MPO;
- High transmission, 100% tested under IEC standards
- Quick deployment reduces installation time
- Fast upgrading supports parallel transmission system
- Outer jacket material, PVC, LSZH and other materials selection
- Fiber type: ODNR, OFNP
- Customized patch cord length

### 特点

- 采用圆形细光缆
- 拉扣式双芯LC连接器结构，方便在密集型光纤配线架中插拔使用
- 标准兼容，单工LC/双工LC/MPO连接器
- 传输性能一致，符合国际标准，100%工厂测试
- 快速部署，减少现场施工时间
- 快速升级，支持并行传输系统应用
- 外护套材质，有PVC、LSZH 等多种材料选择
- 光缆材料，满足OFNR、OFNP阻燃等级
- 跳线长度可定制

解决方案跳线推出拉扣式双芯LC/MPO连接器可供选择，适用于密集型高密度光纤配线架，高度灵活的2芯单根光缆减少了光缆拥塞，并且在高密度配线架中可快速、便捷的插拔连接器，进一步提高了跳线管理和敷设的便利性。



| Item                         | Single mode                           | Multimode    |
|------------------------------|---------------------------------------|--------------|
| Insertion Loss (插入损耗)        | ≤0.30 dB                              | ≤0.30 dB     |
| Return Loss (回波损耗)           | ≥50 dB (PC) , ≥60 dB (APC)            | /            |
| Durability (耐久性)             | <0.20 dB typical change, 1000 matings | /            |
| Operating Temperature (工作温度) | -40 to +85°C                          | -40 to +85°C |

## High Density LC/MPO Push-pull type Patch Cord 高密度推拉尾套LC/MPO光跳线

The High Density LC/MPO Push-pull type Patch Cord is available for high-density fiber patch panels. The highly flexible duplex cable reduces cable congestion and can be plug in and out of the panel easily and quickly so that it improves management and installation convenience.

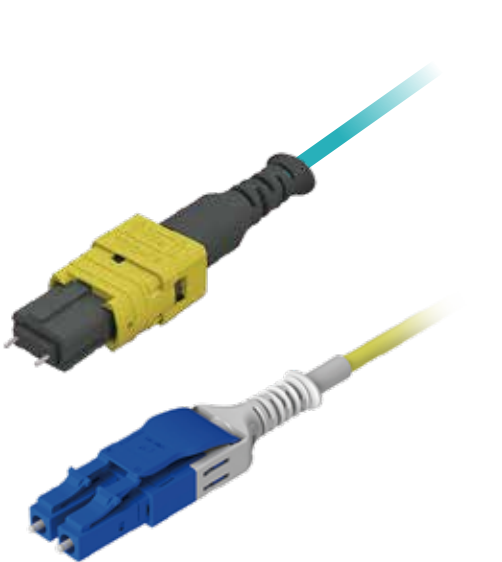
### Features

- Thin round cable
- Duplex LC/MPO with latched uniboot, easy for plug in and out among panels
- Standard compatible, duplex LC connectors/MPO;
- High transmission, 100% tested under IEC standards
- Quick deployment reduces installation time
- Fast upgrading supports parallel transmission system
- Outer jacket material, PVC, LSZH and other materials selection
- Fiber type: ODNR, OFNP
- Customized patch cord length

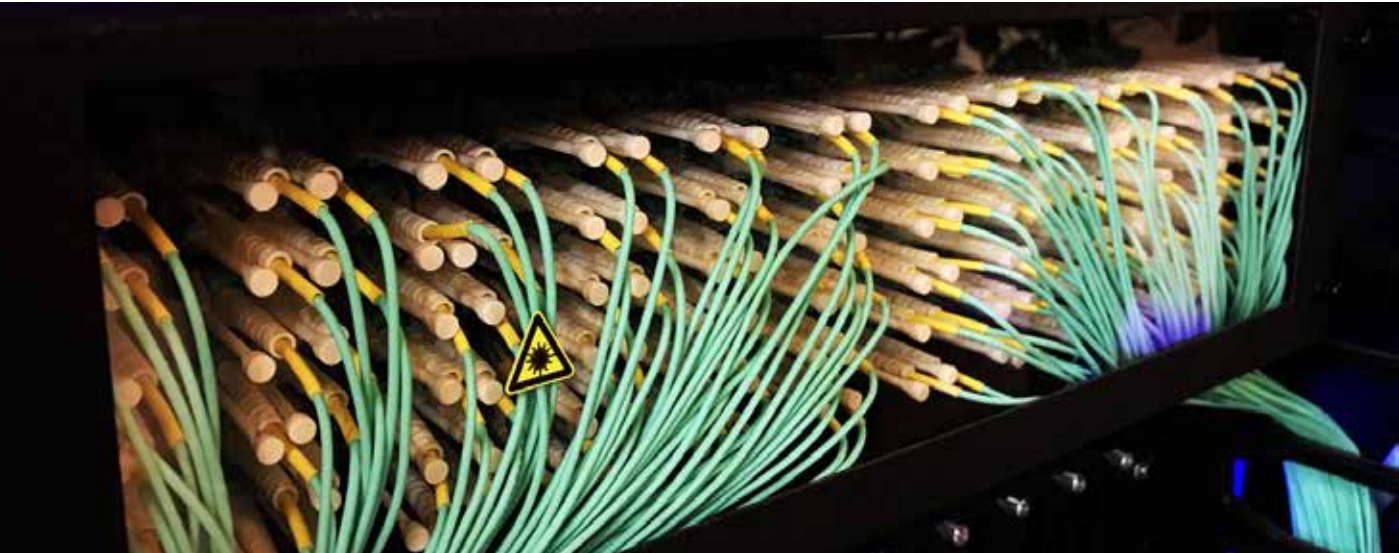
### 特点

- 采用圆形细光缆
- 推拉式双芯LC/MPO连接器结构，方便在密集型光纤配线架中插拔使用
- 标准兼容，单工LC/双工LC/MPO连接器
- 传输性能一致，符合国际标准，100%工厂测试
- 快速部署，减少现场施工时间
- 快速升级，支持并行传输系统应用
- 外护套材质，有PVC、LSZH 等多种材料选择
- 光缆材料，满足OFNR、OFNP阻燃等级
- 跳线长度可定制

解决方案跳线推出推拉式双芯LC/MPO连接器可供选择，适用于密集型高密度光纤配线架，高度灵活的2芯单根光缆减少了光缆拥塞，并且在高密度配线架中可快速、便捷的插拔连接器，进一步提高了跳线管理和敷设的便利性。



| Item                         | Single mode                           | Multimode    |
|------------------------------|---------------------------------------|--------------|
| Insertion Loss (插入损耗)        | ≤0.30 dB                              | ≤0.30 dB     |
| Return Loss (回波损耗)           | ≥50 dB (PC) , ≥60 dB (APC)            | /            |
| Durability (耐久性)             | <0.20 dB typical change, 1000 matings | /            |
| Operating Temperature (工作温度) | -40 to +85°C                          | -40 to +85°C |



## OM5 Product Series OM5 系列产品

The OM5 fiber has been approved as a new multimode optical fiber for high-speed data center applications. and is designed to support at least four low-cost wavelengths in the 850-950 nm range, enabling optimal support of emerging Shortwave Wavelength Division Multiplexing (SWDM) applications that reduce parallel fiber count by at least a factor of four to allow continued use of just two fibers (rather than eight) for transmitting 40 Gb/s and 100 Gb/s and reduced fiber counts for higher speeds. SWDM has many applications in Data Centers and other applications.OM5 cabling fully compatible and intermateable with OM3 and OM4 cabling. The related OM5 patchcord, Cassette and Panels has attracted wide attention in the industry, and the patchcord cover also all type of fiber connectors.

### Features

- Wavelength Range 850-953 nm
- Low insertion loss and back reflection loss
- High precision alignment
- Good exchangeability
- High temperature stability
- Compatible with OM3 and OM4 patchcord

### Application

- Telecommunication networks
- Data Center
- CATV , and Multimedia
- Optical switch interframe connection
- Asynchronous Transmission Mode (ATM)

### 特点

- 波长范围850-953nm
- 低插入损耗
- 高回波损耗
- 良好的互换性
- 良好的温度稳定性
- 与OM3，OM4系列产品兼容

### 应用

- 光通信网络
- 数据中心
- CATV 和多媒体
- 光交换连接器网络
- ATM

OM5光纤已被作为是高速数据中心的的应用一种新型的多模光纤。它支持850-950纳米范围内的至少四个低成本波长，从而能够优化支持新兴的短波分复用（SDWM）应用，将平行光纤数量减少至少四倍，能使用仅仅两根光纤（而不是八根）来持续传输40Gb/s 和100Gb/s，减少光纤数量，实现更高速度。SWDM在数据中心和其他应用中有很多应用。OM5光缆与OM3和OM4电缆完全兼容并可互用。而与之关联的OM5 跳线、光纤盒和光纤配线箱均引起了业界的广泛关注，而光跳线也涵盖了所有连接器类型。



| Item                         | Specification                           |
|------------------------------|-----------------------------------------|
| Fiber Type (光纤类型)            | OM5 (50μm multimode fiber)              |
| Wavelength Range (波长范围)      | 850-953 nm                              |
| Jacket Color (外护套颜色)         | Lime Green                              |
| Furcation Color (分支护套颜色)     | Lime Green                              |
| Connector Type (连接器类型)       | MPO/MTP/LC/SC/FC/Customized             |
| Connector Color (连接器颜色)      | Customized                              |
| Regulatory Compliance (规范标准) | IEC 60793-2-10/TIA-492AAAE/RoHS/ISO9001 |
| Operation Temperature (工作温度) | -40 to +85°C                            |

### Cassette and Adapter



## Armored MPO Patch Cord MPO 铠装缆

### Features

- Good mechanical and environmental characteristics.
- The flame retardant characteristics meet the requirements of relevant standards.
- The mechanical characteristics meet the requirements of relevant standards.
- It is soft, flexible, easy to lay and splice, and has a large capacity for data transmission.
- Meet various requirements of the market and customers.
- Armored protective tube.

### 特点

- 良好的机械和环境特性。
- 阻燃特性符合相关标准的要求。
- 机械特性符合相关标准的要求。
- 它柔软、灵活、易于铺设和拼接，并具有大的数据传输容量。
- 满足市场和客户的各种要求。
- 铠装保护管。



| Item                         | Single mode                          | Multimode |
|------------------------------|--------------------------------------|-----------|
| Insertion Loss (光纤类型)        | ≤0.75dB                              | ≤0.50dB   |
| Return Loss (波长范围)           | ≥50dB(PC), ≥60dB(APC)                | ≥30dB(PC) |
| Durability (外护套颜色)           | < 0.20dB typical change, 1000matings |           |
| Operation Temperature (工作温度) | -40 to +85°C                         |           |



MTP/MPO Polarity Instruction 极性说明



12 Core Patchcord (12芯跳线)

| End A |        | —>>> | Polarity A | —>>> | End B |        |
|-------|--------|------|------------|------|-------|--------|
| 1/    | Blue   |      |            |      | 1/    | Blue   |
| 2/    | Orange |      |            |      | 2/    | Orange |
| 3/    | Green  |      |            |      | 3/    | Green  |
| 4/    | Brown  |      |            |      | 4/    | Brown  |
| 5/    | Grey   |      |            |      | 5/    | Grey   |
| 6/    | White  |      |            |      | 6/    | White  |
| 7/    | Red    |      |            |      | 7/    | Red    |
| 8/    | Black  |      |            |      | 8/    | Black  |
| 9/    | Yellow |      |            |      | 9/    | Yellow |
| 10/   | Purple |      |            |      | 10/   | Purple |
| 11/   | Pink   |      |            |      | 11/   | Pink   |
| 12/   | Aqua   |      |            |      | 12/   | Aqua   |

| End A |        | —>>> | Polarity B | —>>> | End B |        |
|-------|--------|------|------------|------|-------|--------|
| 1/    | Blue   |      |            |      | 12/   | Blue   |
| 2/    | Orange |      |            |      | 11/   | Orange |
| 3/    | Green  |      |            |      | 10/   | Green  |
| 4/    | Brown  |      |            |      | 9/    | Brown  |
| 5/    | Grey   |      |            |      | 8/    | Grey   |
| 6/    | White  |      |            |      | 7/    | White  |
| 7/    | Red    |      |            |      | 6/    | Red    |
| 8/    | Black  |      |            |      | 5/    | Black  |
| 9/    | Yellow |      |            |      | 4/    | Yellow |
| 10/   | Purple |      |            |      | 3/    | Purple |
| 11/   | Pink   |      |            |      | 2/    | Pink   |
| 12/   | Aqua   |      |            |      | 1/    | Aqua   |

| End A |        | —>>> | Polarity C | —>>> | End B |        |
|-------|--------|------|------------|------|-------|--------|
| 1/    | Blue   |      |            |      | 1/    | Orange |
| 2/    | Orange |      |            |      | 2/    | Blue   |
| 3/    | Green  |      |            |      | 3/    | Brown  |
| 4/    | Brown  |      |            |      | 4/    | Green  |
| 5/    | Grey   |      |            |      | 5/    | White  |
| 6/    | White  |      |            |      | 6/    | Grey   |
| 7/    | Red    |      |            |      | 7/    | Black  |
| 8/    | Black  |      |            |      | 8/    | Red    |
| 9/    | Yellow |      |            |      | 9/    | Purple |
| 10/   | Purple |      |            |      | 10/   | Yellow |
| 11/   | Pink   |      |            |      | 11/   | Aqua   |
| 12/   | Aqua   |      |            |      | 12/   | Pink   |

Fiber Distribution Frame 光纤配线架

The manufacturer specialized in data center cabling products and high precision connecting components. Its MTP \* / MPO connector advanced capabilities provide guaranteed and reliable connection for 40G / 100G data centers. KOC high-density fiber pre-connected system deploys high-density data center easily and quickly in horizontal area and storage area of the network. The maintenance and expansion in the future is very simple. MTP / MPO pre-terminated cabling system consists of three parts: trunk cable, MTP / MPO pre-terminated module and patch panel. KOFDS series of Fiber Distribution Frames, designed for Central Data Office or the building MDF room, provides high-density fiber management and distribution. The modular design ensures the easily maintenance and efficient management for your fiber cabling systems.

- Features
- Indoor cable distribution
  - Fiber entries on top or bottom available
  - High-density and modular design
  - Max. capacity up to 792 fibers
  - No tools are needed during operation
  - Customizable
  - 19" standard cabinet
  - Accomplishing scientific arrangement for patch cords with fiber storage units
  - suitable for inserting installation of SC, FC and ST adaptors
  - Safety design in grounding and security door
  - Top, bottom and rear openings for cable entry covered with removable blank panels.

- 特点
- 室内光缆分布
  - 高密度和模块式设计
  - 最大容量可容纳792芯
  - 无需任何操作工具
  - 19" 标准机柜
  - 光缆存放区可科学管理跳线
  - 可安装SC/FC/LC/ST连接器
  - 拥有接地设施和安全门
  - 顶部，底部，后面门均可打开，以方便光缆进入
  - 可定制

专注于数据中心布线产品以及高精度光缆连接器组件的制造公司。先进的MTP\*/MPO连接器制造能力为各大数据中心40G/100G平滑升级提供可靠的连接保证。KOC 高密度数据中心布线系统可以帮助用户方便、快速的部署高密度数据中心水平区域和存储区域的网络，即便是在后期的维护扩容上也非常简单。MTP\*/MPO数据中心布线系统主要由三个部分组成，即主干光缆、MTP\*/MPO预连接模块和配线架组成。KOFDS系列光纤配线架是为办公数据中心和MDF而设计，提供了高密度光纤管理和分布。模块化设计确保了光纤布线系统易于维护和高效管理。



96FO Rack Mount Patch Panel  
96芯机架式光纤配线箱 (Fast load Modular)

According to the needs of data center setup, we recommend to use HDF high-density rack-mounted cabinet; for data center with MDA, IDA or HDA wiring area fiber trunk connection and management. It is installed in 19-inch rack or cabinet with Pre-terminated MPO adapter module or MPO adapter front panels. This economical design of Highdensity and module reduces the number of frames, saving valuable rack space.

Features

- MPO 1U optical fiber patch panel can accommodate 4 MPO pre-terminated cassettes. If MPO panels are installed, the maximum cores can reach 288
- MPO 2U optical fiber patch panel can accommodate 8 MPO pre-terminated cassettes. If MPO panels are installed, the maximum cores can reach 576
- MPO 3U optical fiber patch panel can accommodate 12 MPO pre-terminated cassettes. If MPO panels are installed, the maximum cores can reach 864
- Made of high quality cold rolled steel plate;
- Multiple cable entry and patch cord exit for easy operation and management
- More than four times the density of traditional patch panels, greatly save the space of the cabinet
- Compliant with TIA / EIA604-D-2007, IEC61754-7-2008 series standards
- Modular design, 19-inch rack mount, easy for future expansion

特点

- 模块化设计，19英寸机架安装，方便后期扩容
- MPO 1U 光纤配线箱可安装4个MPO预端接盒，端接盒安装双工 LC适配器最大可管理光纤芯数达96芯，端接盒安装单工SC适配器最大可管理光纤达 48 芯，如安装MPO 适配器板最大可管理光纤达 288 芯
- MPO 2U 光纤配线箱可安装8个MPO预端接盒，端接盒安装双工 LC适配器最大可管理光纤芯数达192芯，端接盒安装单工SC适配器最大可管理光纤达96芯，如安装MPO适配器板最大可管理光纤达576芯
- MPO 3U 光纤配线箱可安装12个MPO预端接盒，端接盒安装双工 LC适配器最大可管理光纤芯数达288芯，端接盒安装单工SC适配器最大可管理光纤达144芯，如安装MPO适配器板最大可管理光纤达864芯
- 采用优质冷轧钢板制作
- 多个光缆进线与跳线出口位置，方便操作管理
- 是传统熔纤配线架的密度的四倍多，大大节约的机柜的空间，提高机柜利用率，为数据中心建设创造价值采用模块化的结构升级维护便利
- 满足TIA/EIA604-D-2007、IEC61754-7-2008系列标准

根据数据中心建设需要，推HDF高密度机架式光纤配线架，用于数据中心MDA，IDA 或HDA配线区域光纤主干连接及配线管理，安装于19英寸机架及机柜中，可安装预连接MPO转接模块或MPO适配器前面板。高密度，模块化设计，这种经济的设计减少了需要安装的配线架数量，节约了宝贵的机架空间。



Fixed Type

固定式



Sliding Type

抽拉式

96FO MTP/MPO - LC Fix Type Fiber Optical Cassette  
96芯MTP/MPO-LC 96芯固定式光纤盒 (Snap-in Modular)

MTP / MPO-LC fiber optic cassette is a closed-type of device with a 12/24-core fiber patch cords for branching 12-core MTP / MPO trunk cable to LC Connectors so that the system appliances are easily be connected to the ports or panels. The cassette can be quickly deployed to 24 LC or 12 SC adapters and can be easily installed in HDF high-density rack-mounted ODF. The modular structure is high manageable and flexible. With the future requirements on the connectivity, the modules can be changed to meet the corresponding needs. In the meanwhile, the existing trunk cabling structure remains unchanged.

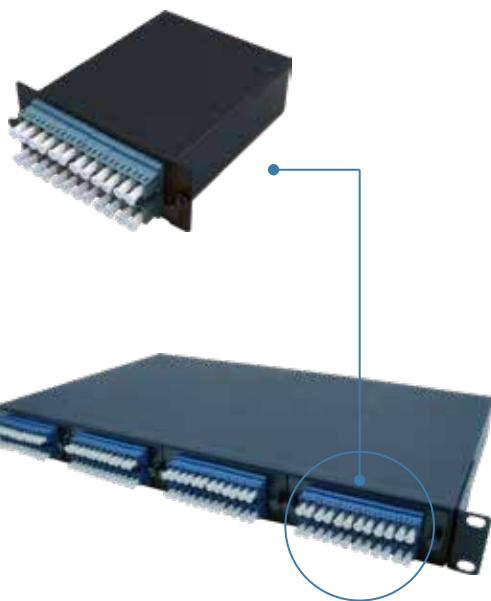
Features

- Excellent transmission performance is 100% factory pre-terminated and tested
- The adoption of universal polarity design ensures the correct fiber polarity and the variety of polarity to be chosen in the system
- Flexible expansion, modular design
- One-hand operation
- Metal shell design, good intensity, effective protection for internal fiber branch parts
- Compliant with TIA / EIA604-D-2007, IEC61754-7-2008 series standards
- Super bend-bright fiber, minimum fiber bending radius, minimized structure
- Smooth upgrade to next generation data center of 40GbE and 100GbE applications

特点

- 传输性能，100%工厂预接端并测试
- 采用通用极性设计确保了系统中正确的光纤极性，多种极性可供选择
- 灵活扩容，模块化设计
- 超强抗弯光纤，最小光纤弯曲半径，结构小型化
- 单手操作
- 可以直接平滑升级到下一代数据中心40GbE 和100GbE的应用
- 采用金属外壳设计，强度好，有效保护内部光纤分支部件
- 满足TIA/EIA604-D-2007、IEC61754-7-2008 系列标准

MPO/MTP-LC光纤转接盒是一种封闭式设备，盒内预端接有12/24芯分支光纤跳线，用于将主干光缆上端接的12芯MTP/MPO连接器分支转换到LC连接器，以方便接到系统设备端口或光纤面板中。这种光纤接头盒可以在一个盒式结构上快速部署24个LC 或12 个SC光纤接口。此模块可方便的安装与HDF高密度机架式ODF中，这种模块化的基础架构具有高度的可管理性和灵活性。随着未来连接性要求的不断变化，可以轻松的更换模块以满足相应需求，同时继续保留现有的主干光缆基础架构。



| Item                  | Single mode Module IL (Max) | Multimode Module IL (Max) |
|-----------------------|-----------------------------|---------------------------|
| Standard (标准)         | 1.0 dB                      | 1.0 dB                    |
| Low Loss (低损耗)        | 0.7 dB                      | 0.7 dB                    |
| Ultra-Low-Loss (超低损耗) | 0.5 dB                      | 0.35 dB                   |



## 72FO MTP/MPO - LC Sliding Type Fiber Optical Cassette

### 72芯MTP/MPO-LC 滑动式光纤盒

MPO fiber cassette is mainly used for data center with the security transactions between MPO pre-terminated trunk cable and LC or SC connectors. They are installed in the 19" 1U-3U fiber patch panels. LC or SC adapters are installed in the front panels. MPO adapters and pre-terminated trunk cable are installed in the rear panels. Plug-and-play modular structure enables quick deployment of data center fiber infrastructure and improve troubleshooting and reconfiguration after relocating, increasing and changing the cables. 100% of the terminals are terminated in the factory and rigorously tested to ensure minimal insertion loss. They are applicable to IDC and FTTB pre-wired systems and to Ethernet transmission. The cassettes are suitable for future 40G/100G system applications. They are able to meet the full demands of high speed networks with convenient for upgrading.

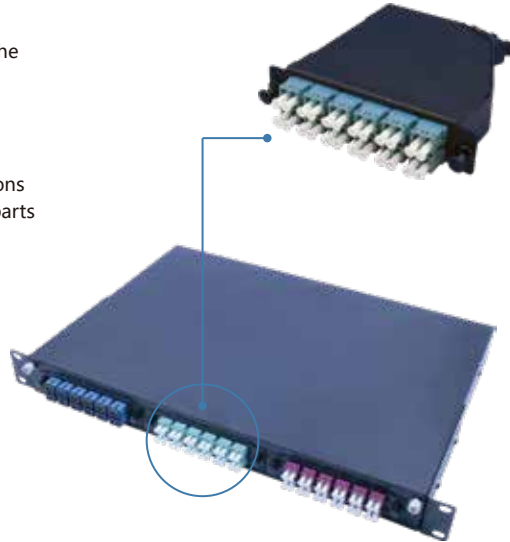
#### Features

- Excellent transmission performance is 100% factory pre-terminated and tested
- The adoption of universal polarity design ensures the correct fiber polarity and the variety of polarity to be chosen in the system
- Flexible expansion, modular design
- Super bend-bright fiber, minimum fiber bending radius, minimized structure
- One-hand operation
- Smooth upgrade to next generation data center of 40GbE and 100GbE applications
- Metal shell design, good intensity, effective protection for internal fiber branch parts
- Compliant with TIA / EIA604-D-2007, IEC61754-7-2008 series standards

#### 特点

- 传输性能，100%工厂预接端并测试
- 采用通用极性设计确保了系统中正确的光纤极性，多种极性可供选择
- 灵活扩容，模块化设计
- 超强抗弯光纤，最小光纤弯曲半径，结构小型化
- 单手操作-可以直接平滑升级到下一代数据中心40GbE和100GbE 的应用
- 采用金属外壳设计，强度好，有效保护内部光纤分支部件
- 满足TIA/EIA604-D-2007、IEC61754-7-2008系列标准

MPO光纤转接盒主要用于数据中心MPO预端接主干光缆与LC或SC连接器之间的安全过渡，安装于19" 1U-3U光纤配线架。模块盒前面板装配LC或SC适配器用于相互配线或连接设备跳线，后面板装配MPO适配器用于连接MPO预连接主干光缆。即插即用模块式结构可以快速部署数据中心光纤基础设施，以及提高光缆在移动过程中的故障排除和重新配置，添加和更改。100%在工厂内端接，并严格进行连接测试，以保证最小的插入损耗用于IDC和大楼光纤预端接系统，系统满足以太网传输，适用于未来40G/100G系统应用的平滑升级，完全可以满足要求苛刻的高速网络。



## 2U/4U High Density Fiber Distribution Frame

### 2U/4U 高密度光纤配线箱

MTP \* / MPO fiber distribution frame is a scalable solution mainly used in high-density 10 Gigabit Ethernet applications. There are Main Distribution Area (MDA) and Horizontal Distribution Area (HDA) terminal cabling products. There are usually three designs: 1U, 2U, 3U. According to data center setup needs, it simplifies the field installation, improves system performance and achieves higher system density, modular system management and pre-assembled components so that it reduces the installation time and achieves the movement and expansion in the fastest way.

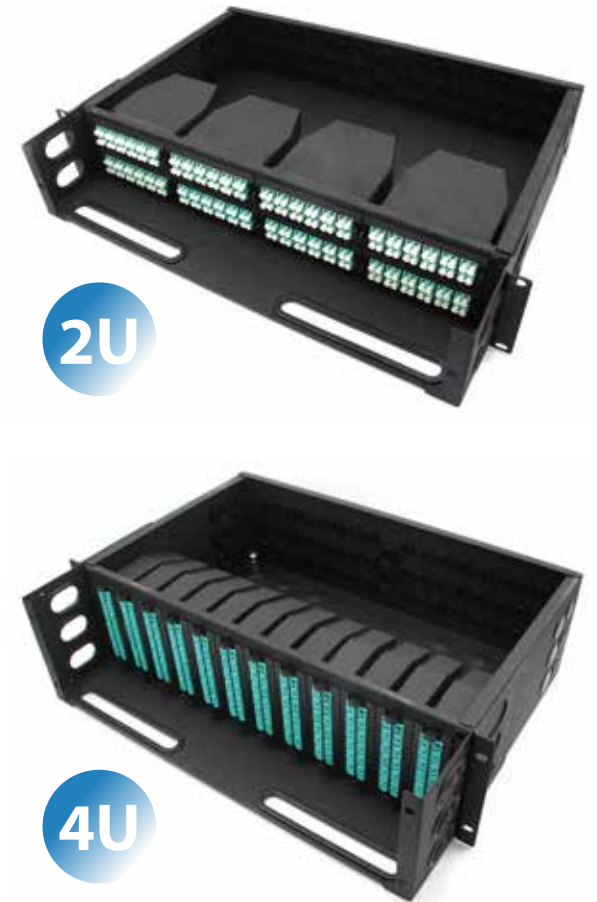
#### Features

- Sliding tray design, the new type of the expansion and adequate operational space enable the highest density
- A variety of welding wiring signs enable easy welding and cabling records
- High-density trunk cable with lesser bending radius enables easy storage and installation
- Connector module, 19-inch rack mount for easy installation and expansion
- Low insertion loss enable multi-level connections in complete fiber link when deploying TIA-942 compliant systems
- Customized branch cable assemblies for seamless integration with mainstream SAN switches
- Factory termination provides stable quality and ensures system reliability. It reduces installation time, meet series standards of TIA / EIA604-5-D-2007, IEC61754-7-2008

#### 特点

- 滑动托盘设计，新型深度拓展结构恰如其分的操作空间，实现业界最高端密度
- 多种熔接配线标示，方便做熔接和配线记录。
- 高密度主干光缆，主干光缆弯曲半径更小，存放和铺设无后顾之忧
- 低插入损耗性能，在部署符合TIA-942标准的系统时，可在完整光纤链路实现多级接续
- 定制分支光缆组件，与主流SAN交换机实现无缝集成
- 连接器模块，19 英寸机架安装，方便施工与后期扩容
- 工厂端接解决方案，提供稳定的质量，保证系统可靠性能并减少安装时间，满足TIA/EIA604-5-D-2007、IEC61754-7-2008系列标准

MTP/MPO光纤配线箱是一种可扩展的解决方案，主要用在高密度万兆以太网应用，是主配线区（MDA）和水平布线区（HDA）终端布线产品，通常有1U,2U,3U 的三种设计。嘉万根据数据中心建设需要，简化了数据中心环境下的现场安装并提高了系统性能，实现了更高的系统密度，模块化的系统管理方式和预端接组件可以减少安装时间，实现更快的移动和扩容。



High Density MPO Pre-terminated Patch Panel  
高密度MPO预端接配线架

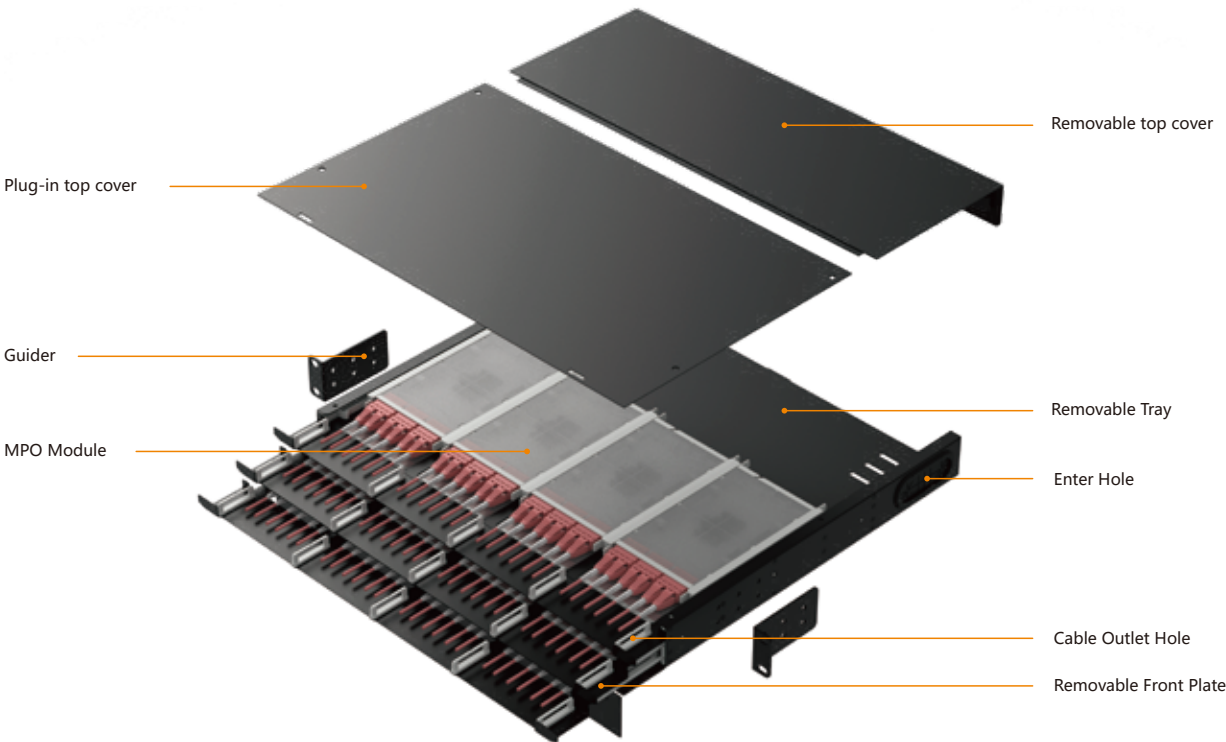
MTP \* / MPO fiber distribution frame is a scalable solution mainly used in high-density 10 Gigabit Ethernet applications. There are Main Distribution Area (MDA) and Horizontal Distribution Area (HDA) terminal cabling products. There are usually three designs: 1U, 2U, 4U. According to data center setup needs, it simplifies the field installation, improves system performance and achieves higher system density, modular system management and pre-assembled components so that it reduces the installation time and achieves the movement and expansion in the fastest way.

Features

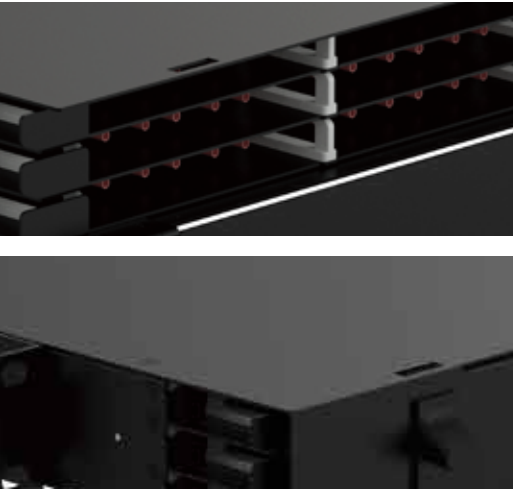
- 19-inch rack mount for easy installation and expansion.
- High-density application, Sliding tray design.
- Double rail design, easy to assemble and manage.
- Lightweight ABS material for MPO module.
- Customized color & logo.
- High quality metal sheet technology and fogging coating.
- High quality ber management and structural accessories.

特点

- 19英寸标准机架安装
- 高密度应用，滑动托盘设计
- 双轨设计，易于组装和管理
- MPO模块采用轻质ABS材料
- 定制颜色和徽标
- 高品质金属板技术和雾化涂层
- 高质量的ber管理和结构配件

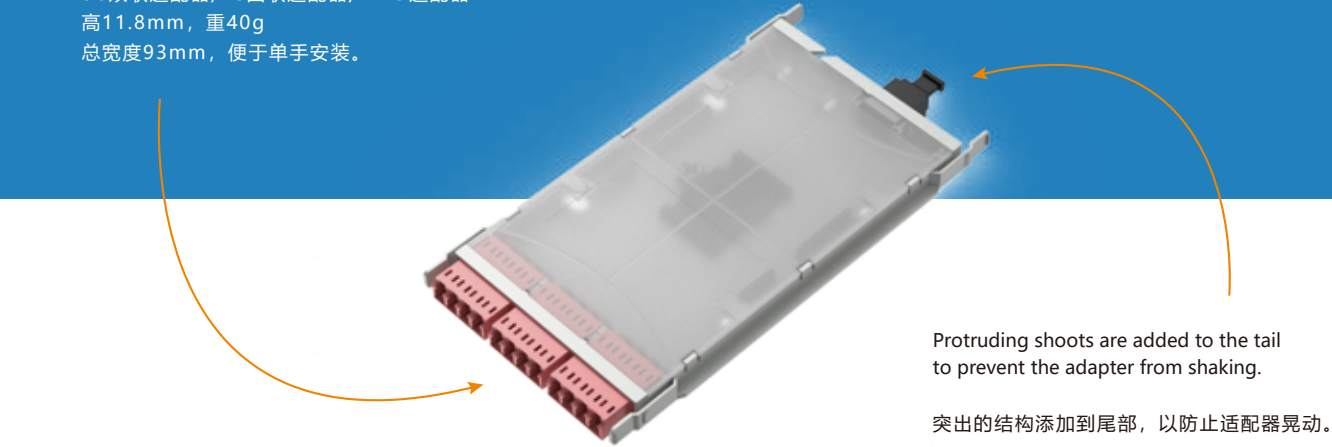


MTP\*/MPO光纤配线架是一种可扩展的解决方案，主要用于高密度万兆以太网应用。有主配电区（MDA）和水平配电区（HDA）终端布线产品。通常有三种设计：1U、2U、4U。根据数据中心的设置需求，简化了现场安装，提高了系统性能，实现了更高的系统密度、模块化的系统管理和预装组件，从而减少了安装时间，以最快的方式实现了移动和扩展。

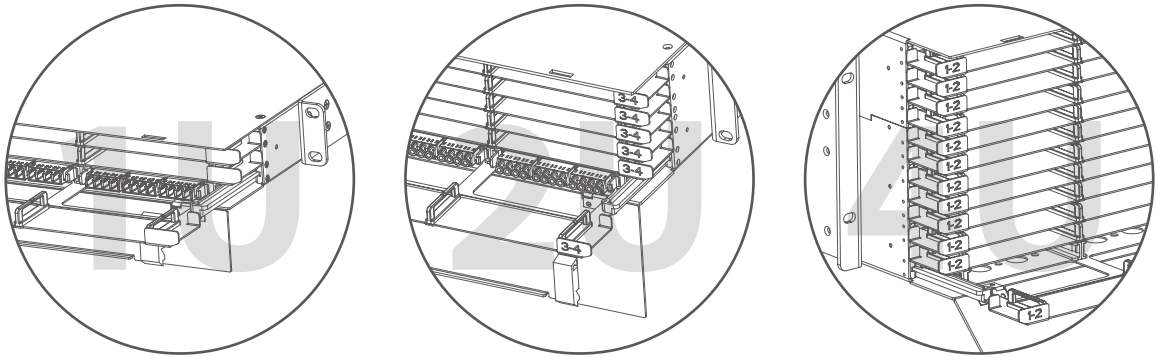


Light weight module for special up and down  
SC Duplex Adapter / LC Quad Adapter / MPO Adapter  
Height 11.8mm, Weight 40g  
Total width 93mm, easy for one-hand installation.

用于特殊上下的轻质模块  
SC双联适配器/LC四联适配器/MPO适配器  
高11.8mm，重40g  
总宽度93mm，便于单手安装。



| Item                        | HDFDF-1U                                                                 | HDFDF-2U                     | HDFDF-4U                      |
|-----------------------------|--------------------------------------------------------------------------|------------------------------|-------------------------------|
| Size (尺寸) W*D*H             | 482.6(19")x464.9(18.3")x44.2                                             | 482.6(19")x464.9(18.3")x87.3 | 482.6(19")x464.9(18.3")x174.6 |
| Cores (芯数)                  | 144 Cores                                                                | 288 Cores                    | 576 Cores                     |
| Net Weight (重量)             | 6.8kg                                                                    | 12.0kg                       | 18.5kg                        |
| Material (材料)               | Stainless Steel & Aluminum Alloy 不锈钢和铝合金                                 |                              |                               |
| Accessories (配件)            | Cable tie / Magic stick strip / Winding pipe 扎带/魔术棒条/缠绕管                 |                              |                               |
| Support Installation (支持安装) | SC Duplex Adapter / LC Quad Adapter / MPO Adapter SC双联适配器/LC四联适配器/MPO适配器 |                              |                               |





Modular Simple Distribution Frame 模块式简易型机架

This Subrack design to accommodate MPO terminals. Suitable for different kinds of equipment which is designed according to 19” cabinet. 3U 4U Subrack Can loaded with Max.12pcs16pcs MPO cassettes. Comply to ETSI standard.

模块式简易型机架设计可容纳MPO适配器。适用于19寸机柜设计的各种设备。3U/4U机架最多可装载12/16个MPO盒。符合ETSI标准。



- Features**
- Standard 19”
  - 1U, up to 576F
  - Compact design for space saving
  - Manual Screws fixation,Easy for management and operation
  - Customized color & logo
  - High quality metal sheet technology and fogging coating
  - High quality fiber management and structural accessory

- 特点**
- 标准19”
  - 1U，最高576F
  - 紧凑设计，节省空间
  - 手动螺钉固定，易于管理和操作
  - 定制颜色和徽标
  - 高品质金属板技术和雾化涂层
  - 高品质纤维管理和结构配件

| Item                         | Specification                                                                    |
|------------------------------|----------------------------------------------------------------------------------|
| Dimensions (尺寸)              | 482mm(Width) x 416.6mm(Depth) x 44mm(Height)                                     |
| Materials (材料)               | Black Powder coated rolled steel, Code color RAL 9005                            |
| Plastic (塑料)                 | Random                                                                           |
| Maximum capacity (最大容量)      | SC Duplex Adapter 48F / LC Quad Adapter 96F / MPO Adapter 576F / RJ45 Adapter 24 |
| Number of cassettes (模块盒数量)  | 4                                                                                |
| Operating Temperature (工作温度) | -25℃ ~ +55℃ (5% to 95% relative humidity)                                        |
| Weight (重量)                  | 2.8Kg                                                                            |

Adapter Panel

The adapter panel provides fast and efficient port management for MTP/MPO or LC/SC connectors. It is applicable for next-generation high-density data center solutions. The panel reaches the connection and deployment of the patch cords and pigtails between the devices and patch panels. The panel is used with the field mounting connectors, or with the pre-terminated cables device to the interconnect hardware.

适配器面板为MTP/MPO或LC/SC连接器提供快速有效的端口管理，用于高密度新一代数据中心解决方案，实现跳线和尾纤在设备之间和配线架内的连接和部署。与解决方案硬件产品配套使用，该面板与现场安装接头协同使用，或用于预接端接头的光缆直接从设备向互连硬件布线的应用。



- Features**
- High-density ports, single adapter panel Configurable with 24 IP adapter ports or 6 SC adapter ports or 6 MPO / MTP adapter ports;
  - High-quality cold-rolled steel, compliant with European ROHS standards
  - Clear connector coding mark
  - Flexible structure, adapter port configuration can be flexibly selected
  - Applicable to all types of industrial standard adapters
  - Cartridge installation for easy installation
  - Easy to upgrade to 40G / 100G network without changing the fiber management structures
  - Compliant with TIA / EIA604-D-2007, IEC61754-7-2008 series

- 特点**
- 高密度端口，单个适配器面板可配置可配置24个LC适配器端口，6个SC适配器端口，6个MPO/MTP适配器端口
  - 采用优质冷轧钢板制作，材料符合欧洲 ROHS 环保标准
  - 清晰的连接器编码标记
  - 结构灵活，适配器端口配置可灵活选择
  - 适用各种型号工业标准适配器的设计
  - 卡扣式安装，方便施工
  - 易于升级到40G/100G 网络而不改变光纤管理架构
  - 满足TIA/EIA604-D-2007、IEC61754-7-2008系列标准

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