

8 Cables

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8.1 AC Power Cable

Types of AC Power Cables

 NOTE

The AC power cables delivered must comply with the standards used in the delivery destination. This section uses the AC power cables complying with China's national standards as an example.

AC power cables are classified into two types: C13 straight female to PI straight male AC power cable and C13 straight female to C14 straight male AC power cable.

Appearance and Structure

Figure 8-1 shows the appearance of a C13 straight female to PI straight male AC power cable.

Figure 8-1 C13 straight female to PI straight male AC power cable



Figure 8-2 shows the appearance of a C13 straight female to C14 straight male AC power cable.

Figure 8-2 C13 straight female to C14 straight male AC power cable



Connection

An AC power cable is connected to the AC power module of the device:

- The C13 straight female connector is connected to the power socket of a power module.
- The PI straight male or C14 straight male connector is connected to a power source.

When a 600 W AC&240 V DC power module or 1200 W AC&240 V DC power module uses 240 V high-voltage power input, it must be connected to the power supply device using a C13 straight female to C14 straight male AC power cable. This power cable is connected as follows:

- The C13 straight female connector is connected to the power socket of the 600 W AC&240 V DC power module or 1200 W AC&240 V DC power module.
- The C14 straight male connector is connected to a high-voltage DC PDU. If a high-voltage DC power distribution box is used, make OT or cord end terminals for the cable. Cut the C14 straight male connector off and crimp OT or cord end terminals on the bare wires. Connect the blue wire to a positive terminal on the DC power distribution box, the brown wire to a negative terminal, and the yellow-green wire to a protection ground. If the switch fails to be powered on after you connect the power cable, swap the wires on the positive and negative terminals.

8.2 DC Power Cable

Appearance and Structure

DC power cables consist of the power cable for a 350 W/600 W DC power module, the power cable for a 1000 W DC power module, and the power cable for a 1200 W DC power module.

Figure 8-3 shows the appearance of the power cable for a 350 W/600 W DC power module.

Figure 8-3 Appearance of the power cable for a 350 W/600 W DC power module



Figure 8-4 shows the structure of the power cable for a 350 W/600 W DC power module.

Figure 8-4 Structure of the power cable for a 350 W/600 W DC power module

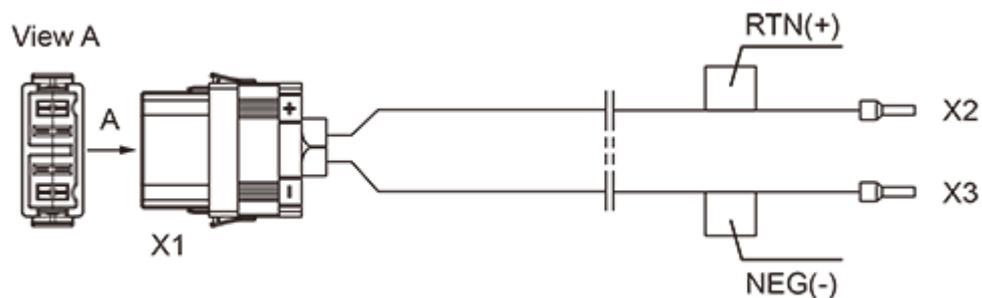


Figure 8-5 shows the appearance of the power cable for a 1000 W/1200 W DC power module.

Figure 8-5 Appearance of the power cable for a 1000 W/1200 W DC power module



Figure 8-6 shows the structure of the power cable for a 1000 W/1200 W DC power module.

Figure 8-6 Structure of the power cable for a 1000 W/1200 W DC power module

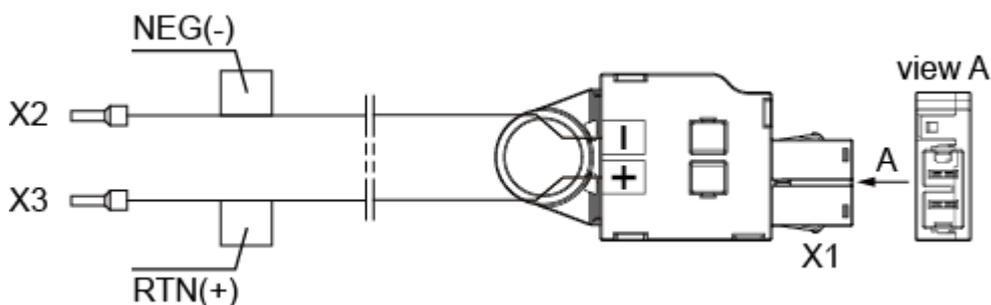


Figure 8-7 and **Figure 8-8** shows the appearance of the power cable for a 1200 W DC power module.

Figure 8-7 Appearance of the power cable for a 1200 W DC power module (cord end terminal)



Figure 8-8 Appearance of the power cable for a 1200 W DC power module (nylon insulation terminal)



Figure 8-9 and **Figure 8-10** shows the structure of the power cable for a 1200 W DC power module.

Figure 8-9 Structure of the power cable for a 1200 W DC power module (cord end terminal)

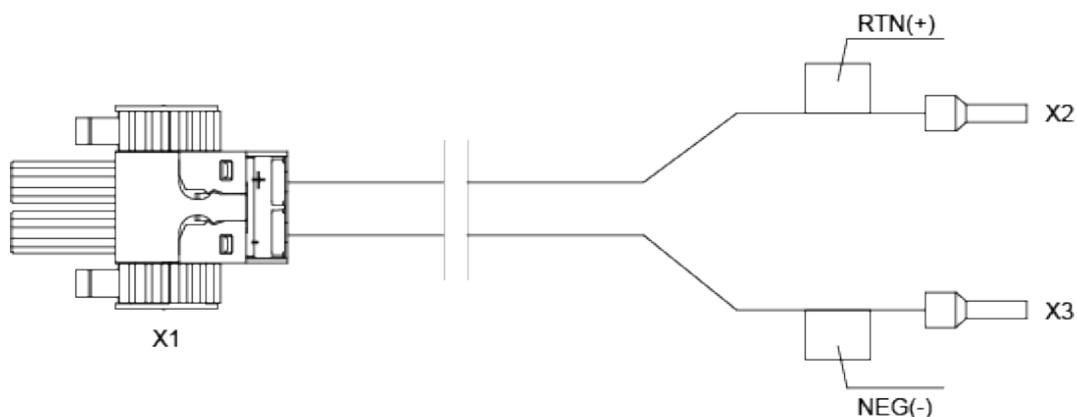
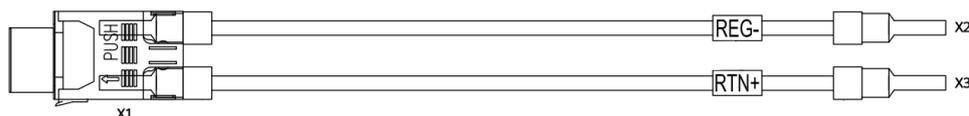


Figure 8-10 Structure of the power cable for a 1200 W DC power module (nylon insulation terminal)



Pin Assignments

Table 8-1 lists the pin assignments of the power cable for a 350 W/600 W DC power module.

Table 8-1 Pin assignments of the power cable for a 350 W/600 W DC power module

X1	X2	X3	Length	Conductor Cross-Sectional Area
2 female	Cord end terminal 4 ² grey	Cord end terminal 4 ² grey	3 m	3.332 mm ² (12AWG)

Table 8-2 lists the pin assignments of the power cable for a 1000 W DC power module.

Table 8-2 Pin assignments of the power cable for a 1000 W DC power module

X1	X2	X3	Length	Conductor Cross-Sectional Area
2 female	Cord end terminal 4 ² grey	Cord end terminal 4 ² grey	3 m	4 mm ² (14AWG)

Table 8-3 and **Table 8-4** lists the pin assignments of the power cable for a 1200 W DC power module.

Table 8-3 Pin assignments of the power cable for a 1200 W DC power module (cord end terminal)

X1	X2	X3	Length	Conductor Cross-Sectional Area
2 female	Cord end terminal 6 ² black	Cord end terminal 6 ² black	3 m	6 mm ² (10AWG)

Table 8-4 Pin assignments of the power cable for a 1200 W DC power module (nylon insulation terminal)

X1	X2	X3	Length	Conductor Cross-Sectional Area
2 female	nylon insulation terminal	nylon insulation terminal	3 m	5.26 mm ² (10AWG)

Connection

A DC power cable connects to the DC power module of the device:

- X1 connector connects to the input port on the DC power module.
- X2/X3 terminal connects to an external power module.

8.3 380 V High-Voltage DC Power Cable

Appearance and Structure

Figure 8-11 shows the appearance of a 380 V high-voltage DC power cable.

Figure 8-11 380 V high-voltage DC power cable (high-voltage DC straight female connector to bare wires)



Connection

A 380 V high-voltage DC power cable has a high-voltage DC straight female connector at one end and bare wires at the other end, and is used to connect a

600 W high-voltage DC power module or 1200 W high-voltage DC power module to a power supply device:

- The high-voltage DC straight female connector is connected to the power socket of the 600 W high-voltage DC power module or 1200 W high-voltage DC power module.
- The bare wires are connected to a 380 V high-voltage DC power distribution frame or power distribution box. Crimp OT or cord end terminals on the bare wires, and then connect the blue wire to a negative terminal, the brown wire to a positive terminal, and the yellow-green wire to a protection ground. If the switch fails to be powered on after you connect the power cable, swap the wires on the positive and negative terminals.

8.4 Ground Cable

Appearance and Structure

NOTE

Different types of ground cables have similar appearance, except for the cross-sectional area, size of the cable lugs, and cable length. The following figure is for reference.

Figure 8-12 shows the appearance of a ground cable.

Figure 8-12 Ground cable appearance

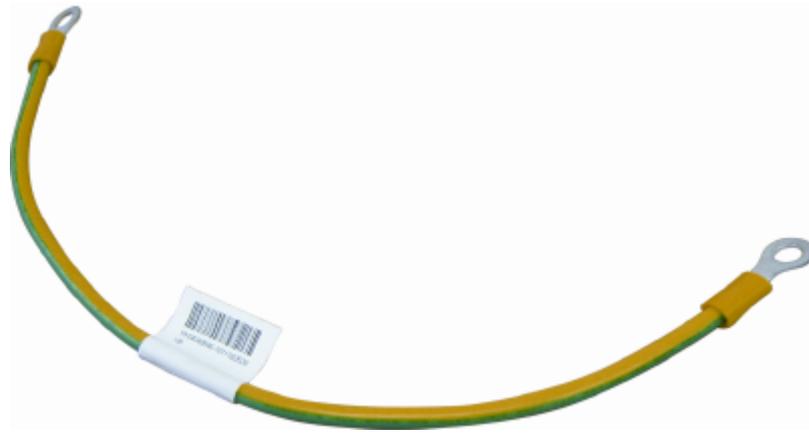
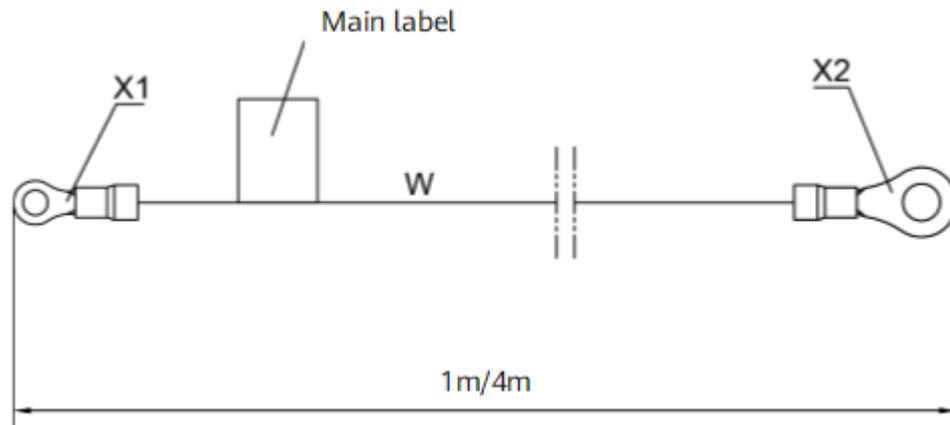


Figure 8-13 shows the structure of a ground cable.

Figure 8-13 Ground cable structure



Pin Assignments

Table 8-5 lists the pin assignments of a ground cable.

Table 8-5 Pin assignments

X1	X2	Wire Color	Conductor Cross-Sectional Area	Length
OT6-4	OT6-6	Green-yellow	4 mm ²	1 m or 4 m NOTE The default ground cable delivered with a switch is 1 m long. You can also order a 4 m ground cable for a switch based on your installation environment.

Connection

A ground cable grounds a device to protect it from lightning and electromagnetic interference. A ground cable is connected to a chassis in the following way:

- The OT6-4 naked crimping connector connects to the ground point on the chassis.
- The OT6-6 naked crimping connector connects to the ground point on the cabinet.

8.5 Console Cable

Appearance and Structure

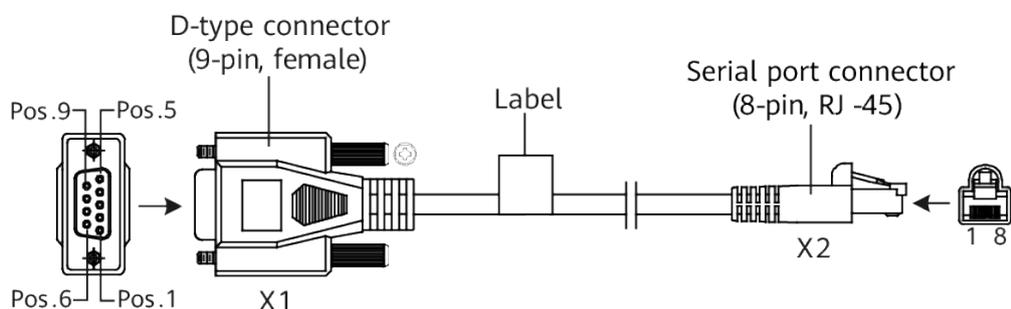
Figure 8-14 shows the appearance of a console cable.

Figure 8-14 Console cable appearance



Figure 8-15 shows the structure of a console cable.

Figure 8-15 Console cable structure



Pin Assignments

Table 8-6 lists the pin assignments of console cable connectors.

Table 8-6 Pin assignments

Connector	X1 (DB-9)	X2 (RJ45)
Pin assignment	2	3
	3	6
	5	5

Connection

A console cable connects the console port of a device to the serial port of an operation terminal, enabling users to commission or locally maintain the device.

A console cable connects a device and a console as follows:

- The 8-pin RJ45 connector is connected to the console port of the device.
- The DB-9 female connector is connected to a maintenance terminal, such as a computer.

8.6 Ethernet Cable

Types of Ethernet Cables

Ethernet cables are classified into straight-through cables and crossover cables.

- Straight-through cable: The pin assignments of RJ45 connectors at both ends are shown in [Table 8-7](#).
- Crossover cable: The pin assignments of RJ45 connectors at both ends are shown in [Table 8-8](#).

Appearance and Structure

NOTE

- Straight-through cables and crossover cables are standard unshielded twisted pairs that use RJ45 connectors.
- A straight-through cable and a crossover cable have the same appearance.

[Figure 8-16](#) and [Figure 8-17](#) show the appearance of an Ethernet cable.

Figure 8-16 Ethernet cable appearance (1)

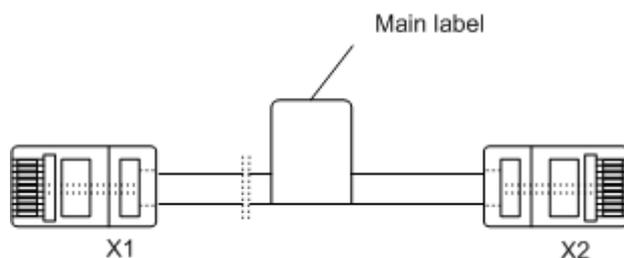


Figure 8-17 Ethernet cable appearance (2)



Figure 8-18 shows the structure of an Ethernet cable.

Figure 8-18 Ethernet cable structure



Pin Assignments

Table 8-7 lists the pin assignments of a straight-through cable.

Table 8-7 Pin assignments of a straight-through cable

X1 Pin	Wire Color	X2 Pin
1	White and orange	1
2	Orange	2
3	White and green	3
4	Blue	4
5	White and blue	5

X1 Pin	Wire Color	X2 Pin
6	Green	6
7	White and brown	7
8	Brown	8

Table 8-8 lists the pin assignments of a crossover cable.

Table 8-8 Pin assignments of a crossover cable

X1 Pin	Wire Color	X2 Pin
1	White and orange	3
2	Orange	6
3	White and green	1
4	Blue	4
5	White and blue	5
6	Green	2
7	White and brown	7
8	Brown	8

 **NOTE**

To achieve the best electrical transmission performance, ensure that the wires connected to pins 1 and 2 and to pins 3 and 6 are twisted pairs.

Connection

Ethernet cables connect network devices to each other to enable the devices to communicate or to allow local maintenance and remote access.

- A straight-through cable connects a terminal (such as a PC or switch) to a network device.
- A crossover cable connects two terminals (such as PCs and switches).

Supported Cabling Types for 10GBASE-T

Table 8-9 describes the supported cabling types for a 10GBASE-T Ethernet electrical port.

Table 8-9 Supported cabling types for 10GBASE-T

Item	Category 7 STP	Category 6A STP	Category 6A F/UTP	Category 6A U/UTP	Category 6 STP	Category 6 UTP
Cable Description	Category 7 shielded twisted pair (STP)	Category 6A shielded twisted pair	Category 6A foiled/unshielded twisted pair (Cat6A F/UTP)	Not supported	Not supported	Not supported
Type	Class F	Class Ea	Class Ea			
Maximum transmission distance	100 m	100 m	100 m			
Cabling system bandwidth	600 MHz NOTE The cabling system exceeds the requirements for IEEE 10GBASE-T performance	500 MHz NOTE The cabling system exceeds the requirements for IEEE 10GBASE-T performance.				

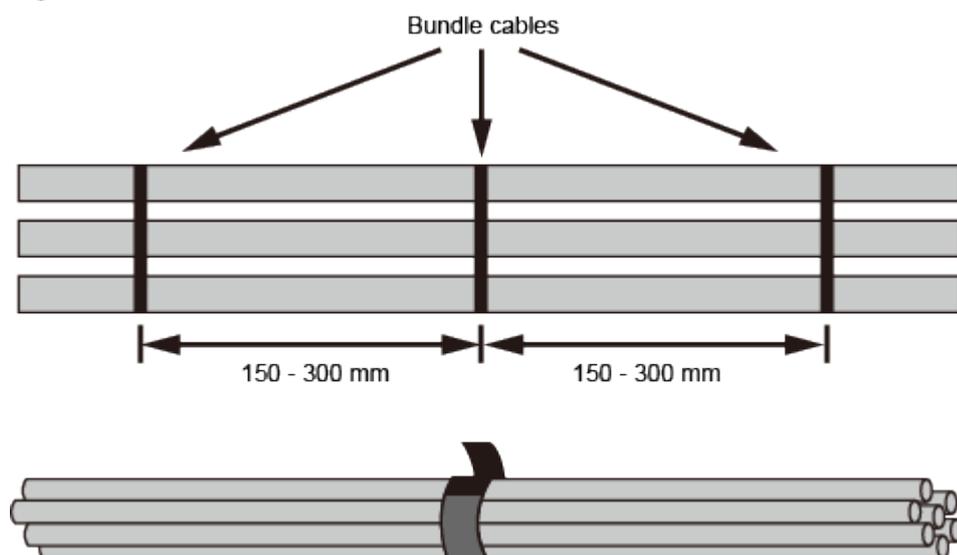
NOTE

- In a new built equipment room, Category 6A shielded twisted pairs or Category 7 twisted pairs are recommended. These cables can avoid alien crosstalk while having no special installation requirements. In addition, they can be used with other types of cables.
- If Category 6A foiled/unshielded twisted pairs are used in an equipment room and the cabling systems can meet requirements of TSB-155, follow these rules route these cables:
 - Separate these cables with other types of cables. If they must be routed in the same cable trough with other types of cables, separated them from other cables using a metal plate.
 - Separate cables as much as possible at the outlet and keep the cables parallel with each other. Most alien crosstalk appears within 20 m away from the outlet. To reduce alien crosstalk, do not bundle cables in the first 5 m to 20 m.
 - If cables need to be bundled, bundle cables with cable ties placed every 150 mm to 300 mm. See [Table 8-10](#). Bundle cables loosely, as shown in [Figure 8-19](#).
 - You are advised to add no more than 12 cables in a bundle. A bundle cannot have more than 24 cables.
- Strong interference may trigger the fast retrain function on 10GBASE-T Ethernet electrical ports, and a large number of bit errors occur for about 30 ms. To avoid this problem, keep the switch away from interference sources or take adequate interference shielding measures.

Table 8-10 Intervals between cable ties

Diameter of an Ethernet Cable Bundle (mm)	Interval Between Cable Ties (mm)
< 10	150
10-30	200
> 30	300

Figure 8-19 Method to bundle cables



8.7 Fiber Jumper

8.7.1 Overview of Fiber Jumpers

A fiber jumper is a length of fiber cabling fitted with an optical fiber connector at each end. A fiber jumper connects an optical module to a fiber terminal box.

Appearance

Figure 8-20 shows the appearance of an LC single-mode fiber jumper.

Figure 8-20 Appearance of an LC single-mode fiber jumper

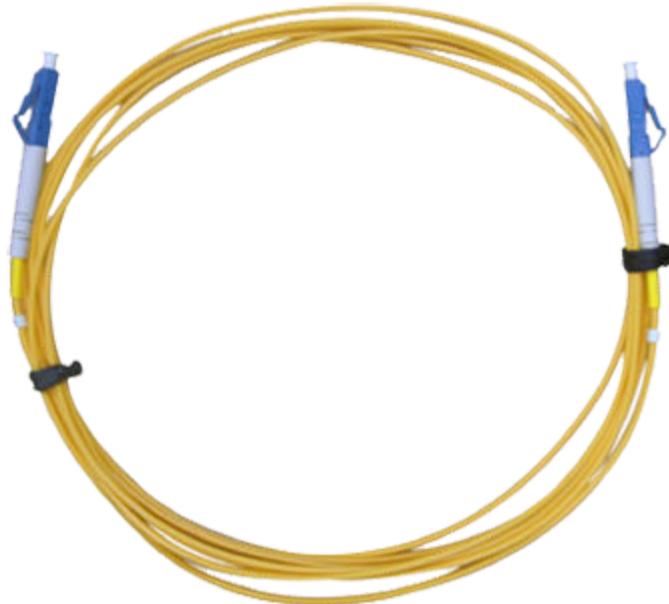


Figure 8-21 shows the appearance of an LC multimode fiber jumper.

Figure 8-21 Appearance of an LC multimode fiber jumper

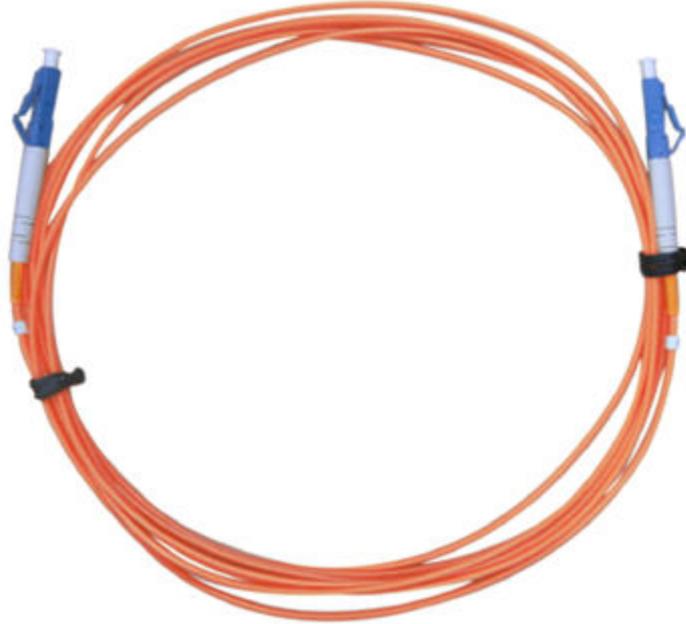


Figure 8-22 shows the appearance of an MPO-MPO single-mode fiber jumper.

Figure 8-22 Appearance of an MPO-MPO single-mode fiber jumper



Figure 8-23 shows the appearance of an 8-core or 12-core MPO-MPO multimode fiber jumper.

Figure 8-23 Appearance of an 8-core or 12-core MPO-MPO multimode fiber jumper



Figure 8-24 shows the appearance of a 16-core MPO-MPO multimode fiber jumper.

Figure 8-24 Appearance of a 16-core MPO-MPO multimode fiber jumper

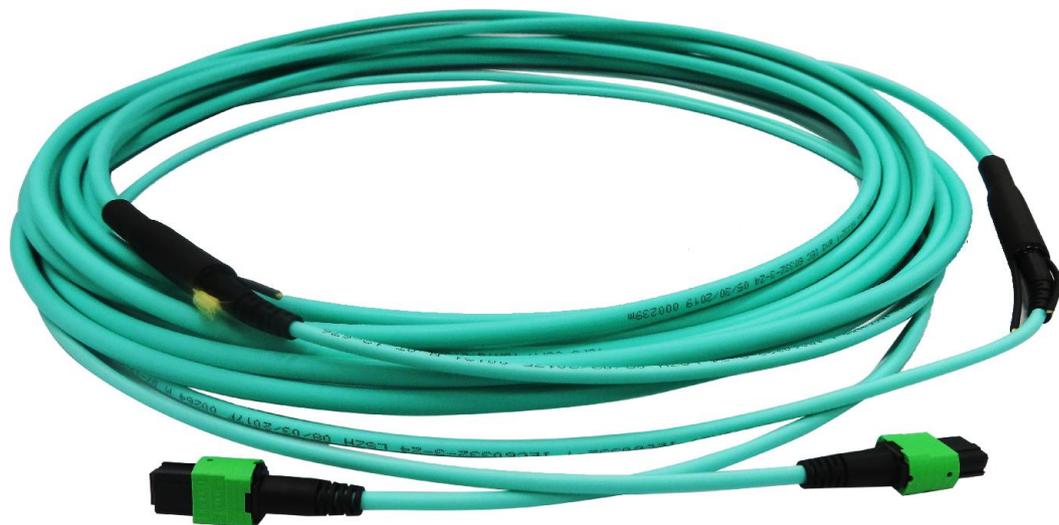


Figure 8-25 shows the appearance of an MPO-4*DLC fiber jumper.

Figure 8-25 Appearance of an MPO-4*DLC fiber jumper



Pin Definition

NOTE

If the pin assignment sequence of connector X1 is the same as that of connector X2, the connection type is A. If the pin assignment sequence of connector X1 is reverse to that of connector X2, the connection type is B.

- Pin assignments of an 8-core MPO-MPO fiber jumper

Figure 8-26 Structure of an 8-core MPO-MPO fiber jumper

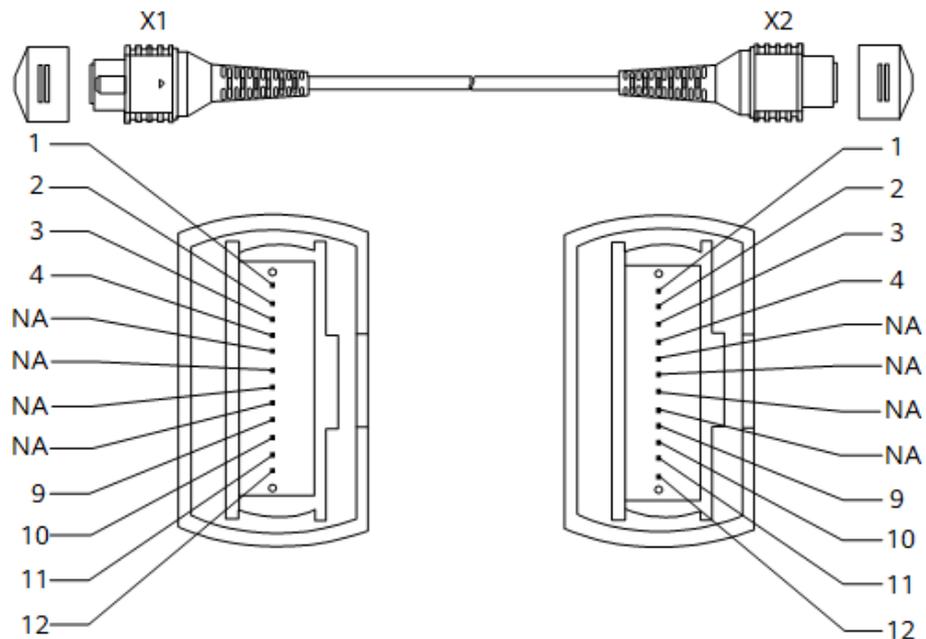


Table 8-11 Pin assignments of an 8-core MPO-MPO fiber jumper

X1 Pin	X2 Pin
1	12

X1 Pin	X2 Pin
2	11
3	10
4	9
9	4
10	3
11	2
12	1

- Pin assignments of a 12-core MPO-MPO fiber jumper

Figure 8-27 Structure of a 12-core MPO-MPO fiber jumper

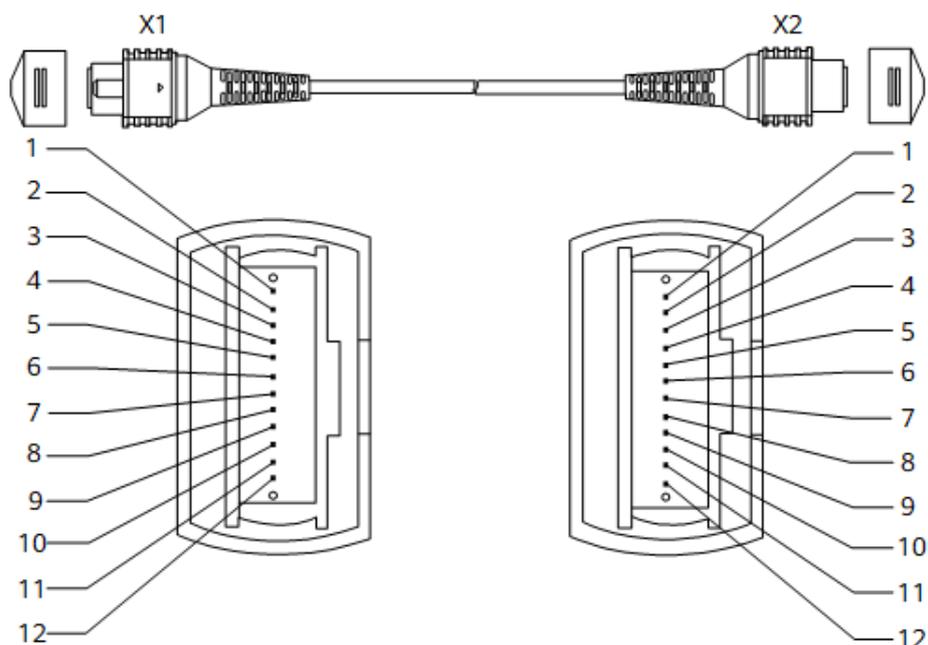


Table 8-12 Pin assignments of a 12-core MPO-MPO fiber jumper

X1 Pin	X2 Pin
1	12
2	11
3	10
4	9
5	8

X1 Pin	X2 Pin
6	7
7	6
8	5
9	4
10	3
11	2
12	1

- Pin assignments of an MPO-4*DLC fiber jumper

Figure 8-28 Structure of an MPO-4*DLC fiber jumper

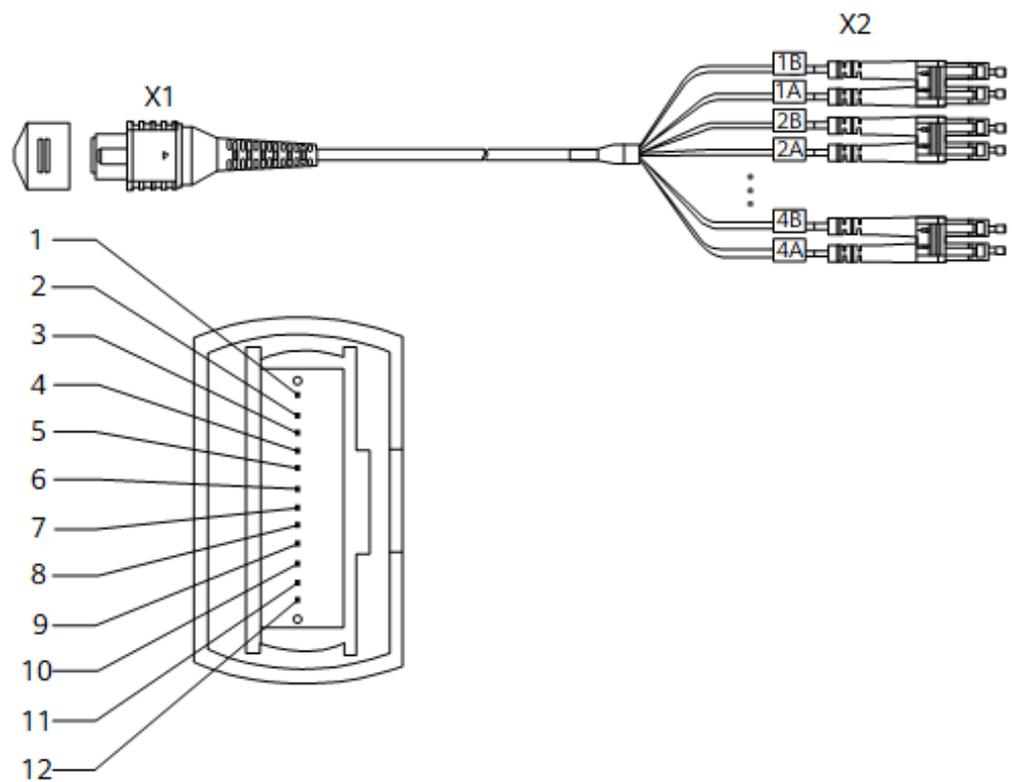


Table 8-13 Pin assignments of an MPO-4*DLC fiber jumper

X1 Pin	X2 Pin
1	1B
2	2B

X1 Pin	X2 Pin
3	3B
4	4B
9	4A
10	3A
11	2A
12	1A

Selection of Fiber Jumpers

1. Determine the length of fiber jumpers based on the onsite cabling distance.
2. Determine the fiber jumper type based on the optical module type.
 - Use a multimode fiber jumper for a multimode optical module.
 - Use a single-mode fiber jumper for a single-mode optical module.
3. Determine the optical fiber connector type based on the port type.
Ensure that the optical fiber connector at each end of a fiber jumper is of the same type as the port to which it will be connected.

8.7.2 Optical Fiber

Optical Fiber Type

Optical fibers are classified into single-mode optical fibers and multimode optical fibers. ITU-T G.652 and G.655 have defined two types of single-mode optical fibers. According to the latest cabling infrastructure of ISO/IEC 11801, multimode optical fibers are classified into four categories: OM1, OM2, OM3, and OM4. [Table 8-14](#) and [Table 8-15](#) list the characteristics and application scenarios of single-mode optical fibers and multimode optical fibers, respectively.

Table 8-14 Types and characteristics of single-mode optical fibers

Type	Diameter	Color	Characteristics	Modal Bandwidth	Application Scenario
G.652	9 μm	Typically yellow (as shown in Appearance of an LC single-mode fiber jumper)	Transmit laser in a single mode with a specified wavelength.	-	Single-mode optical fibers support a wide band and large transmission capacity, and are

Type	Diameter	Color	Characteristics	Modal Bandwidth	Application Scenario
G.655					used for long-distance transmission.

Table 8-15 Types and characteristics of multimode optical fibers

Type	Diameter	Color	Characteristics	Minimum Effective Modal Bandwidth (850nm)	Minimum Overfilled Launch Modal Bandwidth (1300nm)	Application Scenario	
OM1	62.5/125 μm	Typically orange (as shown in Appearance of an LC multimode fiber jumper)	Deliver high light gathering ability and bending resistance.	200 MHz*km	500 MHz*km	NOTE OM1 and OM2 deliver shorter transmission distances and poorer performance, and therefore are gradually replaced by OM3 and OM4.	Transmit laser in multiple modes with a specified wavelength. Modal dispersion may occur during transmission over multimode fibers. Multimode optical fibers have a small capacity and their
OM2	50/125 μm	Typically orange (as shown in Appearance of an LC multimode fiber jumper)	Compared with OM1, OM2 provides higher bandwidth because it significantly reduces modal dispersion.	500 MHz*km			

Type	Diameter	Color	Characteristics	Minimum Effective Modal Bandwidth (850nm)	Minimum Overfilled Launch Modal Bandwidth (1300nm)	Application Scenario	
OM3	50/125 μm	Typically light green (as shown in Appearance of an 8-core or 12-core MPO-MPO multimode fiber jumper)	OM3 provides longer transmission distances than OM1 and OM2.	2000 MHz*km		NOTE Typically, OM3 and OM4 are used for 25GE or higher optical modules.	performance is inferior to that of single-mode optical fibers, making them suitable to short-distance transmission.
OM4	50/125 μm	Typically light green (as shown in Appearance of an 8-core or 12-core MPO-MPO multimode fiber jumper)	OM4 is a laser optimized optical fiber. Compared with OM3, OM4 provides higher modal bandwidth.	4700 MHz*km			

8.7.3 Optical Fiber Connector

Optical Fiber Connector Type

Optical fiber connectors are used to connect optical fibers. [Table 8-16](#) lists common optical fiber connectors.

Table 8-16 Common optical fiber connectors

Connector Type	Optical Fiber Connector			
Square connector	SC/PC optical fiber connector 	LC/PC optical fiber connector  NOTICE When connecting or removing an LC optical fiber connector, align the connector with the optical port and do not rotate the optical fiber. Pay attention to the following points: <ul style="list-style-type: none"> • To connect an optical fiber, align the optical fiber connector with the optical port and gently insert the optical fiber into the port. • To remove an optical fiber, press the clip on the connector, push the connector inward slightly, and pull the optical fiber out. 	MTRJ/PC optical fiber connector 	MPO optical fiber connector  <ul style="list-style-type: none"> • Before removing an MPO optical fiber connector, pull out the shell of the middle part of the connector. • If an MPO optical fiber connector cannot be completely inserted into an optical port, do not force it into the port. Instead, turn the connector over and smoothly insert it into the optical port again.
Round connector	FC optical fiber connector 	ST/PC optical fiber connector 	-	-

Ceramic Ferrule Endface

According to the return loss, ceramic ferrule endfaces of optical fiber connectors are classified into physical contact (PC), ultra physical contact (UPC), and angled physical contact (APC), as shown in [Figure 8-29](#).

Figure 8-29 Polishing styles of ceramic ferrule endfaces

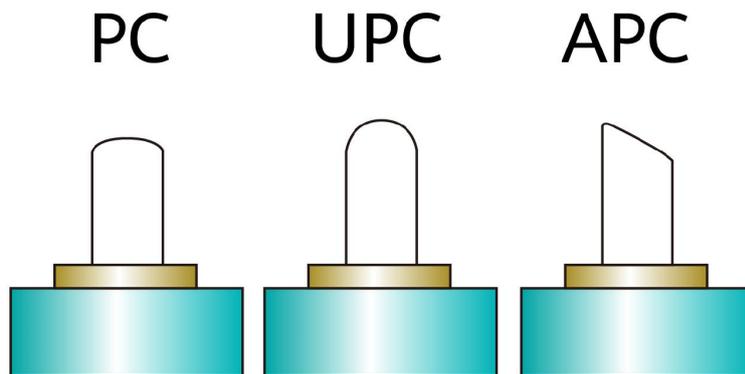


Table 8-17 Polishing styles of ceramic ferrule endfaces

Polishing Style	Return Loss	Characteristics	Application Scenario
PC	-35 dB	Flat	Scenarios with low requirements on return loss
UPC	-50 dB	Slightly curved	Scenarios with high requirements on return loss
APC	-60 dB	8-degree angled	

NOTICE

In principle, optical fiber connectors with different ceramic ferrule endfaces cannot be connected. Generally, connecting a PC connector with a UPC connector will not cause permanent physical damage to these connectors. However, connecting an APC connector with a PC connector will damage the connectors' ferrule endfaces. This is because the structures of the APC and PC connectors are completely different. To connect them together, use a PC/APC fiber jumper. This, however, will adversely affect the transmission performance.

Ceramic ferrule endface requirements

Different types of optical fibers have diverse requirements on the connectors' ceramic ferrule endfaces. [Figure 8-30](#) lists these requirements.

Figure 8-30 Ceramic ferrule endfaces

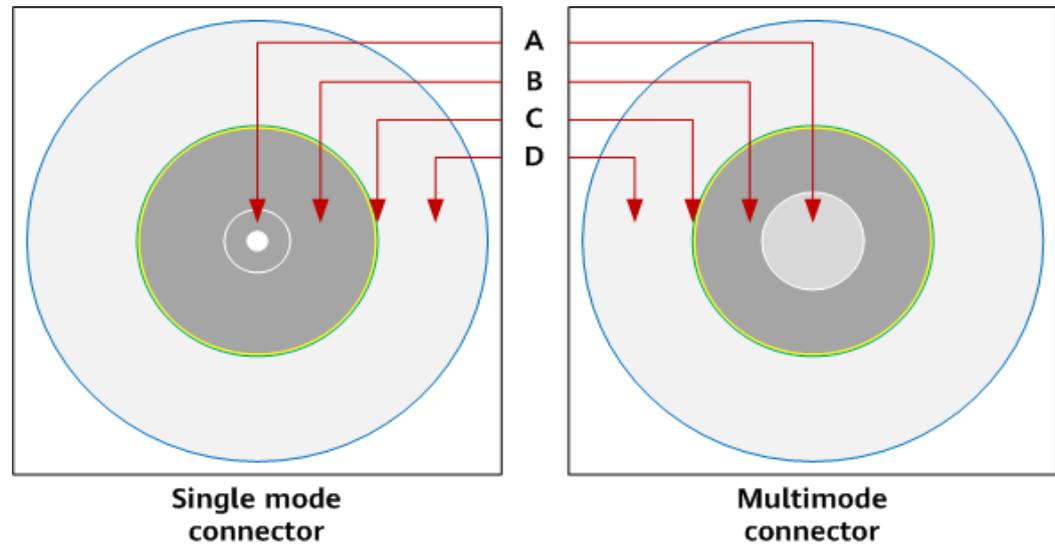


Table 8-18 Ceramic ferrule endface requirements

Connector Type	Zone	Diameter	Defect	Scratch
Single-mode optical fiber connector	A: Core zone	0–25 μm	None	None
	B: Cladding zone	25–120 μm	< 2 μm : no limit 2–5 μm : 5 > 5 μm : 0	\leq 3 μm : no limit > 3 μm : 0
	C: Adhesive/epoxy zone	120–130 μm	No limit	No limit
	D: Contact/ferrule zone	130–250 μm	\geq 10 μm : 0	No limit
Multi mode optical fiber connector	A: Core zone	0–65 μm	\leq 5 μm : 4 > 5 μm : 0	\leq 5 μm : no limit > 5 μm : 0
	B: Cladding zone	65–120 μm	< 2 μm : no limit 2–5 μm : 5 > 5 μm : 0	\leq 5 μm : no limit > 5 μm : 0
	C: Adhesive/epoxy zone	120–130 μm	No limit	No limit
	D: Contact/ferrule zone	130–250 μm	\geq 10 μm : 0	No limit

8.8 High-Speed Cable

8.8.1 Understanding High-Speed Cables

NOTE

You are advised to use high-speed cables that are certified for Huawei data center switches. This is because high-speed cables that are not certified for Huawei data center switches cannot ensure transmission reliability and may affect service stability. Huawei is not liable for any problems caused by high-speed cables that are not certified for Huawei data center switches and will not fix such problems.

Appearance and Structure

The following figures appearances various high-speed cables.

Figure 8-31 Appearance of an SFP+ to SFP+ or SFP28 to SFP28 high-speed cable



Figure 8-32 Appearance of a QSFP+ to QSFP+ or QSFP28 to QSFP28 high-speed cable



Figure 8-33 Appearance of a QSFP+ to 4*SFP+ or QSFP28 to 4*SFP28 high-speed cable



Figure 8-34 Appearance of a QSFP-DD to QSFP-DD high-speed cable



Figure 8-35 Appearance of a QSFP-DD to 2*QSFP56 high-speed cable



The following figures show structures of various high-speed cables.

Figure 8-36 Structure of an SFP+ to SFP+ or SFP28 to SFP28 high-speed cable



Figure 8-37 Structure of a QSFP+ to QSFP+ or QSFP28 to QSFP28 high-speed cable



Figure 8-38 Structure of a QSFP+ to 4*SFP+ or QSFP28 to 4*SFP28 high-speed cable

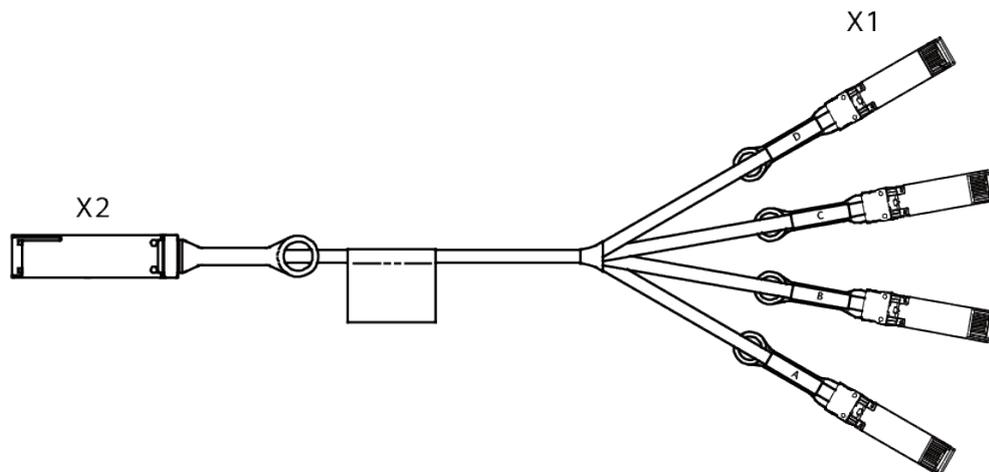
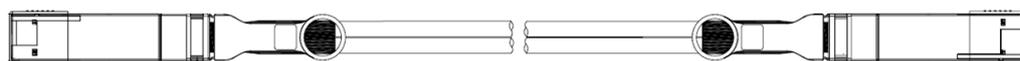


Figure 8-39 Structure of a QSFP-DD to QSFP-DD high-speed cable



8.8.2 SFP+ to SFP+ High-Speed Cable

8.8.2.1 SFP-10G-CU1M

Technical Specifications

Table 8-19 Technical specifications of the SFP-10G-CU1M

Item	Details
Part Number	02310MUN
Model	SFP-10G-CU1M
Description	SFP+,10G,High Speed Direct-attach Cables,1m,SFP+20M,CC2P0.254B(S),SFP+20M,Used indoor
Connector X1	SFP+
Connector X2	SFP+
Cable length [m(ft.)]	1 m (3.28 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	25 mm (0.98 in.)

Item	Details
Minimum Clearance for Cable Routing [mm (in.)]	60 mm (2.36 in.)

8.8.2.2 SFP-10G-CU3M

Technical Specifications

Table 8-20 Technical specifications of the SFP-10G-CU3M

Item	Details
Part Number	02310MUP
Model	SFP-10G-CU3M
Description	SFP+,10G,High Speed Direct-attach Cables,3m,SFP+20M,CC2P0.254B(S),SFP+20M,Used indoor
Connector X1	SFP+
Connector X2	SFP+
Cable length [m(ft.)]	3 m (9.84 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	25 mm (0.98 in.)
Minimum Clearance for Cable Routing [mm (in.)]	60 mm (2.36 in.)

8.8.2.3 SFP-10G-CU5M

Technical Specifications

Table 8-21 Technical specifications of the SFP-10G-CU5M

Item	Details
Part Number	02310QPR
Model	SFP-10G-CU5M

Item	Details
Description	SFP+,10G,High Speed Cable,5m,SFP+20M,CC2P0.254B(S),SFP+20M,LSFRZH For Indoor
Connector X1	SFP+
Connector X2	SFP+
Cable length [m(ft.)]	5 m (16.40 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	30 mm (1.18 in.)
Minimum Clearance for Cable Routing [mm (in.)]	60 mm (2.36 in.)

8.8.2.4 SFP-10G-AC7M

Technical Specifications

Table 8-22 Technical specifications of the SFP-10G-AC7M

Item	Details
Part Number	02310QPS
Model	SFP-10G-AC7M
Description	SFP+,10G,Active High Speed Cable,7m,SFP+20M,CC2P0.254B(S),SFP+20M,LSFRZH For Indoor
Connector X1	SFP+
Connector X2	SFP+
Cable length [m(ft.)]	7 m (22.97 ft.)
Electrical attribute	Active
Bend radius [mm (in.)]	25 mm (0.98 in.)
Minimum Clearance for Cable Routing [mm (in.)]	60 mm (2.36 in.)

8.8.2.5 SFP-10G-AC10M

Technical Specifications

Table 8-23 Technical specifications of the SFP-10G-AC10M

Item	Details
Part Number	02310MUQ
Model	SFP-10G-AC10M
Description	SFP+,10G,Active High Speed Cables, 10m,SFP+20M,CC2P0.32B(S),SFP+20M,Used indoor
Connector X1	SFP+
Connector X2	SFP+
Cable length [m(ft.)]	10 m (32.81 ft.)
Electrical attribute	Active
Bend radius [mm (in.)]	25 mm (0.98 in.)
Minimum Clearance for Cable Routing [mm (in.)]	60 mm (2.36 in.)

8.8.3 SFP28 to SFP28 High-Speed Cable

8.8.3.1 SFP-25G-CU1M

Technical Specifications

Table 8-24 Technical specifications of the SFP-25G-CU1M

Item	Details
Part Number	02311NKS
Model	SFP-25G-CU1M
Description	SFP28,25G,High Speed Direct-attach Cables,1m,(SFP28),CC8P0.254B(S),SFP28
Connector X1	SFP28
Connector X2	SFP28
Cable length [m(ft.)]	1 m (3.28 ft.)
Electrical attribute	Passive

Item	Details
Bend radius [mm (in.)]	25 mm (0.98 in.)
Minimum Clearance for Cable Routing [mm (in.)]	70 mm (2.76 in.)

8.8.3.2 SFP-25G-CU3M

Technical Specifications

Table 8-25 Technical specifications of the SFP-25G-CU3M

Item	Details
Part Number	02311NKV
Model	SFP-25G-CU3M
Description	SFP28,25G,High Speed Direct-attach Cables,3m, (SFP28),CC8P0.254B(S),SFP28
Connector X1	SFP28
Connector X2	SFP28
Cable length [m(ft.)]	3 m (9.84 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	25 mm (0.98 in.)
Minimum Clearance for Cable Routing [mm (in.)]	70 mm (2.76 in.)

8.8.3.3 SFP-25G-CU3M-N

Technical Specifications

Table 8-26 Technical specifications of the SFP-25G-CU3M-N

Item	Details
Part Number	02311MNV
Model	SFP-25G-CU3M-N

Item	Details
Description	SFP28,25G,High Speed Direct-attach Cables,3m,(SFP28),CC2P0.4B(S), (SFP28)
Connector X1	SFP28
Connector X2	SFP28
Cable length [m(ft.)]	3 m (9.84 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	30 mm (1.18 in.)
Minimum Clearance for Cable Routing [mm (in.)]	70 mm (2.76 in.)

8.8.3.4 SFP-25G-CU5M

Technical Specifications

Table 8-27 Technical specifications of the SFP-25G-CU5M

Item	Details
Part Number	02311MNW
Model	SFP-25G-CU5M
Description	SFP28,25G,High Speed Direct-attach Cables,5m,(SFP28),CC2P0.4B(S), (SFP28)
Connector X1	SFP28
Connector X2	SFP28
Cable length [m(ft.)]	5 m (16.40 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	30 mm (1.18 in.)
Minimum Clearance for Cable Routing [mm (in.)]	70 mm (2.76 in.)

8.8.3.5 SFP-25G-AC10M

Technical Specifications

Table 8-28 Technical specifications of the SFP-25G-AC10M

Item	Details
Part Number	02312LNP
Model	SFP-25G-AC10M
Description	SFP28,25G,Active High Speed Cables, 10m,SFP28,CC2P0.254B(S),SFP28,Used indoor
Connector X1	SFP28
Connector X2	SFP28
Cable length [m(ft.)]	10 m (32.81 ft.)
Electrical attribute	Active
Bend radius [mm (in.)]	30 mm (1.18 in.)
Minimum Clearance for Cable Routing [mm (in.)]	70 mm (2.76 in.)

8.8.4 QSFP+ to QSFP+ High-Speed Cable

8.8.4.1 QSFP-40G-CU1M

Technical Specifications

Table 8-29 Technical specifications of the QSFP-40G-CU1M

Item	Details
Part Number	02310MUG
Model	QSFP-40G-CU1M
Description	QSFP+,40G,High Speed Direct-attach Cables,1m,QSFP +38M,CC8P0.254B(S),QSFP+38M,Used indoor
Connector X1	QSFP+
Connector X2	QSFP+
Cable length [m(ft.)]	1 m (3.28 ft.)

Item	Details
Electrical attribute	Passive
Bend radius [mm (in.)]	35 mm (1.38 in.)
Minimum Clearance for Cable Routing [mm (in.)]	75 mm (2.95 in.)

8.8.4.2 QSFP-40G-CU3M

Technical Specifications

Table 8-30 Technical specifications of the QSFP-40G-CU3M

Item	Details
Part Number	02310MUH
Model	QSFP-40G-CU3M
Description	QSFP+,40G,High Speed Direct-attach Cables,3m,QSFP+38M,CC8P0.32B(S),QSFP+38M,Used indoor
Connector X1	QSFP+
Connector X2	QSFP+
Cable length [m(ft.)]	3 m (9.84 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	40 mm (1.57 in.)
Minimum Clearance for Cable Routing [mm (in.)]	75 mm (2.95 in.)

8.8.4.3 QSFP-40G-CU5M

Technical Specifications

Table 8-31 Technical specifications of the QSFP-40G-CU5M

Item	Details
Part Number	02310MUJ

Item	Details
Model	QSFP-40G-CU5M
Description	QSFP+,40G,High Speed Direct-attach Cables,5m,QSFP+38M,CC8P0.40B(S),QSFP+38M,Used indoor
Connector X1	QSFP+
Connector X2	QSFP+
Cable length [m(ft.)]	5 m (16.40 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	45 mm (1.77 in.)
Minimum Clearance for Cable Routing [mm (in.)]	75 mm (2.95 in.)

8.8.5 QSFP+ to 4*SFP+ High-Speed Cable

8.8.5.1 QSFP-4SFP10G-CU1M

Technical Specifications

Table 8-32 Technical specifications of the QSFP-4SFP10G-CU1M

Item	Details
Part Number	02310MUK
Model	QSFP-4SFP10G-CU1M
Description	QSFP+,4SFP+10G,High Speed Direct-attach Cables,1m,QSFP+38M,CC8P0.254B(S),4*SFP+20M,Used indoor
Connector X1	QSFP+
Connector X2	4*SFP+
Cable length [m(ft.)]	1 m (3.28 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	25 mm (0.98 in.)

Item	Details
Minimum Clearance for Cable Routing [mm (in.)]	QSFP+ end: 100 mm (3.94 in.) SFP+ end: 60 mm (2.36 in.)

8.8.5.2 QSFP-4SFP10G-CU3M

Technical Specifications

Table 8-33 Technical specifications of the QSFP-4SFP10G-CU3M

Item	Details
Part Number	02310MUL
Model	QSFP-4SFP10G-CU3M
Description	QSFP+,4SFP+10G,High Speed Direct-attach Cables,3m,QSFP+38M,CC8P0.32B(S),4*SFP+20M,Used indoor
Connector X1	QSFP+
Connector X2	4*SFP+
Cable length [m(ft.)]	3 m (9.84 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	25 mm (0.98 in.)
Minimum Clearance for Cable Routing [mm (in.)]	QSFP+ end: 100 mm (3.94 in.) SFP+ end: 60 mm (2.36 in.)

8.8.5.3 QSFP-4SFP10G-CU5M

Technical Specifications

Table 8-34 Technical specifications of the QSFP-4SFP10G-CU5M

Item	Details
Part Number	02310MUM
Model	QSFP-4SFP10G-CU5M

Item	Details
Description	QSFP+,4SFP+10G,High Speed Direct-attach Cables,5m,QSFP+38M,CC8P0.4B(S),4*SFP+20M,Used indoor
Connector X1	QSFP+
Connector X2	4*SFP+
Cable length [m(ft.)]	5 m (16.40 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	30 mm (1.18 in.)
Minimum Clearance for Cable Routing [mm (in.)]	QSFP+ end: 100 mm (3.94 in.) SFP+ end: 60 mm (2.36 in.)

8.8.6 QSFP28 to QSFP28 High-Speed Cable

8.8.6.1 QSFP28-100G-CU1M

Technical Specifications

Table 8-35 Technical specifications of the QSFP28-100G-CU1M

Item	Details
Part Number	02311KNW
Model	QSFP28-100G-CU1M
Description	QSFP28,100G,High Speed Direct-attach Cables,1m,(QSFP28),CC8P0.254B(S),QSFP28,Used indoor
Connector X1	QSFP28
Connector X2	QSFP28
Cable length [m(ft.)]	1 m (3.28 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	70 mm (2.76 in.)
Minimum Clearance for Cable Routing [mm (in.)]	90 mm (3.54 in.)

8.8.6.2 QSFP28-100G-CU3M

Technical Specifications

Table 8-36 Technical specifications of the QSFP28-100G-CU3M

Item	Details
Part Number	02311KNX
Model	QSFP28-100G-CU3M
Description	QSFP28,100G,High Speed Direct-attach Cables,3m,(QSFP28),CC8P0.254B(S),QSFP28,Used indoor
Connector X1	QSFP28
Connector X2	QSFP28
Cable length [m(ft.)]	3 m (9.84 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	70 mm (2.76 in.)
Minimum Clearance for Cable Routing [mm (in.)]	90 mm (3.54 in.)

8.8.6.3 QSFP28-100G-CU5M

Technical Specifications

Table 8-37 Technical specifications of the QSFP28-100G-CU5M

Item	Details
Part Number	02311KNY
Model	QSFP28-100G-CU5M
Description	QSFP28,100G,High Speed Direct-attach Cables,5m,(QSFP28),CC8P0.4B(S),QSFP28,Used indoor
Connector X1	QSFP28
Connector X2	QSFP28
Cable length [m(ft.)]	5 m (16.40 ft.)

Item	Details
Electrical attribute	Passive
Bend radius [mm (in.)]	70 mm (2.76 in.)
Minimum Clearance for Cable Routing [mm (in.)]	90 mm (3.54 in.)

8.8.7 QSFP28 to 4*SFP28 High-Speed Cable

8.8.7.1 QSFP-4SFP25G-CU1M

Technical Specifications

Table 8-38 Technical specifications of the QSFP-4SFP25G-CU1M

Item	Details
Part Number	02311MNX
Model	QSFP-4SFP25G-CU1M
Description	100GE QSFP28-4SFP25G,High Speed Direct-attach Cables,1m,(QSFP28), (4*(CC2P0.254B(S))),(4SFP28)
Connector X1	QSFP28
Connector X2	4*SFP28
Cable length [m(ft.)]	1 m (3.28 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	35 mm (1.38 in.)
Minimum Clearance for Cable Routing [mm (in.)]	QSFP28 end: 100 mm (3.94 in.) SFP28 end: 70 mm (2.76 in.)

8.8.7.2 QSFP-4SFP25G-CU3M

Technical Specifications

Table 8-39 Technical specifications of the QSFP-4SFP25G-CU3M

Item	Details
Part Number	02311MNY
Model	QSFP-4SFP25G-CU3M
Description	100GE QSFP28-4SFP25G,High Speed Direct-attach Cables,3m,(QSFP28), (4*(CC2P0.254B(S))),(4SFP28)
Connector X1	QSFP28
Connector X2	4*SFP28
Cable length [m(ft.)]	3 m (9.84 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	35 mm (1.38 in.)
Minimum Clearance for Cable Routing [mm (in.)]	QSFP28 end: 100 mm (3.94 in.) SFP28 end: 70 mm (2.76 in.)

8.8.7.3 QSFP-4SFP25G-CU3M-N

Technical Specifications

Table 8-40 Technical specifications of the QSFP-4SFP25G-CU3M-N

Item	Details
Part Number	02311MPA
Model	QSFP-4SFP25G-CU3M-N
Description	100GE QSFP28-4SFP25G,High Speed Direct-attach Cables,3m,(QSFP28), (4*(CC2P0.4B(S))),(4SFP28)
Connector X1	QSFP28
Connector X2	4*SFP28
Cable length [m(ft.)]	3 m (9.84 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	45 mm (1.77 in.)

Item	Details
Minimum Clearance for Cable Routing [mm (in.)]	QSFP28 end: 100 mm (3.94 in.) SFP28 end: 70 mm (2.76 in.)

8.8.7.4 QSFP-4SFP25G-CU5M

Technical Specifications

Table 8-41 Technical specifications of the QSFP-4SFP25G-CU5M

Item	Details
Part Number	02311MPB
Model	QSFP-4SFP25G-CU5M
Description	100GE QSFP28-4SFP25G,High Speed Direct-attach Cables,5m,(QSFP28), (4*(CC2P0.4B(S))),(4SFP28)
Connector X1	QSFP28
Connector X2	4*SFP28
Cable length [m(ft.)]	5 m (16.40 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	45 mm (1.77 in.)
Minimum Clearance for Cable Routing [mm (in.)]	QSFP28 end: 100 mm (3.94 in.) SFP28 end: 70 mm (2.76 in.)

8.8.8 QSFP-DD to QSFP-DD High-Speed Cable

8.8.8.1 QSFP-DD-400G-CU1M

Technical Specifications

Table 8-42 Technical specifications of the QSFP-DD-400G-CU1M

Item	Details
Part Number	02313FGX

Item	Details
Model	QSFP-DD-400G-CU1M
Description	400G-QSFP-DD-Passive High Speed Cable-1m-DAC-Indoor
Connector X1	QSFP-DD
Connector X2	QSFP-DD
Cable length [m(ft.)]	1 m (3.28 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	45 mm (1.77 in.)
Minimum Clearance for Cable Routing [mm (in.)]	100 mm (3.94 in.)
Operating Temperature [°C (°F)]	-20 °C to 75 °C (-4 °F to 167 °F)

 **NOTE**

Version support: V200R021C00 and later versions.

8.8.8.2 QSFP-DD-400G-CU2M5

Technical Specifications

Table 8-43 Technical specifications of the QSFP-DD-400G-CU2M5

Item	Details
Part Number	02313FGY
Model	QSFP-DD-400G-CU2M5
Description	400G-QSFP-DD-Passive High Speed Cable-2.5m-DAC-Indoor
Connector X1	QSFP-DD
Connector X2	QSFP-DD
Cable length [m(ft.)]	2.5 m (8.20 ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	70 mm (2.76 in.)
Minimum Clearance for Cable Routing [mm (in.)]	100 mm (3.94 in.)

Item	Details
Operating Temperature [°C (°F)]	-20 °C to 75 °C (-4 °F to 167 °F)

 NOTE

Version support: V200R021C00 and later versions.

8.8.9 QSFP-DD to 2*QSFP56 High-Speed Cable

8.8.9.1 QSFP-DD-2QSFP200G-CU2M5

Technical Specifications

Table 8-44 Technical specifications of the QSFP-DD-2QSFP200G-CU2M5

Item	Details
Part Number	02313TDR
Model	QSFP-DD-2QSFP200G-CU2M5
Description	400G QSFP-DD,2*200G QSFP56,Passive High Speed Cable,2.5m,DAC,Used indoor
Connector X1	QSFP-DD
Connector X2	2*QSFP56
Cable length [m(ft.)]	2.5 m(ft.)
Electrical attribute	Passive
Bend radius [mm (in.)]	50 mm (in.)
Minimum Clearance for Cable Routing [mm (in.)]	400GE QSFP-DD end: 100 mm 200GE QSFP56 end: 90 mm
Operating Temperature [°C (°F)]	-20 °C to 75 °C (-4 °F to 167 °F)

 NOTE

Version support: V200R021C10 and later versions.

8.9 AOC Cable

8.9.1 Understanding High-Speed Cable

Overview

An active optical cable (AOC) is an active optical fiber with optical modules at both ends, and therefore is easy to use.

Appearance and Structure

Figure 8-40 SFP+ to SFP+/SFP28 to SFP28 AOC cable



Figure 8-41 QSFP+ to QSFP+/QSFP28 to QSFP28 AOC cable



Figure 8-42 QSFP+ to 4*SFP+ AOC cable



Figure 8-43 QSFP-DD to QSFP-DD AOC cable



Figure 8-44 QSFP-DD to 2*QSFP56 AOC cable



Connection

Table 8-45 describes usage scenarios of AOC cables and cable connections in these scenarios.

Table 8-45 AOC cable usage scenarios and connections

Cable Type	Connection
SFP+ to SFP+ AOC cable	<ul style="list-style-type: none">Scenario 1: used for 10GE optical port connection or stacking between CloudEngine 9800, 8800, 7800, 6800, and 5800 series switches.Scenarios 2: used for 10GE connection between and CloudEngine 9800, 8800, 7800, 6800, and 5800 series switches. Both ends connect to a 10GE optical port.

Cable Type	Connection
QSFP+ to QSFP+ AOC cable	<ul style="list-style-type: none"> Scenario 1: used for 40GE/100GE optical port connection or stacking between CloudEngine 9800, 8800, 7800, 6800, and 5800 series switches. Scenarios 2: used for 40GE/100GE optical port connection between and CloudEngine 9800, 8800, 7800, 6800, and 5800 series switches.
QSFP+ to 4*SFP+ AOC cable	<p>When a 40GE optical port is split into four 10GE optical ports:</p> <ul style="list-style-type: none"> Scenario 1: used for 10GE optical port connection or stacking between CloudEngine 9800, 8800, 7800, 6800, and 5800 series switches. Scenarios 2: used for 10GE connection between and CloudEngine 9800, 8800, 7800, 6800, and 5800 series switches. <p>One end connects to the 40GE optical port, and the other end connects to four 10GE optical ports.</p>
SFP28 to SFP28 AOC cable	<p>Used for 25GE optical port connection or stacking between CloudEngine 9800, 8800, 7800, 6800, and 5800 series switches.</p> <p>Both ends connect to a 25GE optical port.</p>
QSFP28 to QSFP28 AOC cable	<p>Used for 100GE optical port connection or stacking between CloudEngine 9800, 8800, 7800, 6800, and 5800 series switches.</p> <p>Both ends connect to a 100GE optical port.</p>
QSFP-DD to QSFP-DD AOC cable	<p>Used for 400GE optical port connection or stacking between CloudEngine 9800, 8800, 7800, 6800, and 5800 series switches.</p> <p>Both ends connect to a 400GE optical port.</p>
QSFP-DD to 2*QSFP56 AOC cable	<p>When a 400GE optical port is split into two 200GE optical ports:</p> <p>Used for 200GE optical port connection or stacking between CloudEngine 9800, 8800, 7800, 6800, and 5800 series switches.</p> <p>One end connects to the 400GE optical port, and the other end connects to two 200GE optical ports.</p>

8.9.2 SFP+ to SFP+ AOC Cable

8.9.2.1 SFP-10G-AOC-3M

Technical Specifications

Table 8-46 Technical specifications of the SFP-10G-AOC-3M

Item	Details
Part Number	02311BKP
Model	SFP-10G-AOC-3M
Description	Optical transceiver,SFP+,1G~10.5G, (850nm,3m,AOC)
Connector X1	SFP+
Connector X2	SFP+
Cable length [m(ft.)]	3 m (9.84 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.2.2 SFP-10G-AOC-5M

Technical Specifications

Table 8-47 Technical specifications of the SFP-10G-AOC-5M

Item	Details
Part Number	02311PQS
Model	SFP-10G-AOC-5M
Description	Active Optical Cable ,SFP+,10G, (850nm,5m,AOC)
Connector X1	SFP+
Connector X2	SFP+
Cable length [m(ft.)]	5 m (16.40 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.2.3 SFP-10G-AOC-7M

Technical Specifications

Table 8-48 Technical specifications of the SFP-10G-AOC-7M

Item	Details
Part Number	02311PQT
Model	SFP-10G-AOC-7M
Description	Active Optical Cable ,SFP+,10G, (850nm,7m,AOC)
Connector X1	SFP+
Connector X2	SFP+
Cable length [m(ft.)]	7 m (22.97 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.2.4 SFP-10G-AOC10M

Technical Specifications

Table 8-49 Technical specifications of the SFP-10G-AOC10M

Item	Details
Part Number	02310QWH
Model	SFP-10G-AOC10M
Description	AOC Optical Transceiver,SFP+,850nm, 1G~10G,10m
Connector X1	SFP+
Connector X2	SFP+
Cable length [m(ft.)]	10 m (32.81 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.2.5 SFP-10G-AOC20M

Technical Specifications

Table 8-50 Technical specifications of the SFP-10G-AOC20M

Item	Details
Part Number	02310SSK
Model	SFP-10G-AOC20M
Description	Optical transceiver,SFP+ AOC,850nm, 2.5G~10.5G,20m
Connector X1	SFP+
Connector X2	SFP+
Cable length [m(ft.)]	20 m (65.62 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.3 SFP28 to SFP28 AOC Cable

8.9.3.1 SFP-25G-AOC-3M

Technical Specifications

Table 8-51 Technical specifications of the SFP-25G-AOC-3M

Item	Details
Part Number	02311MPE
Model	SFP-25G-AOC-3M
Description	Active Optical Cable ,SFP28,25G, (850nm,3m,AOC)
Connector X1	SFP28
Connector X2	SFP28
Cable length [m(ft.)]	3 m (9.84 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.3.2 SFP-25G-AOC-5M

Technical Specifications

Table 8-52 Technical specifications of the SFP-25G-AOC-5M

Item	Details
Part Number	02311MPD
Model	SFP-25G-AOC-5M
Description	Active Optical Cable ,SFP28,25G, (850nm,5m,AOC)
Connector X1	SFP28
Connector X2	SFP28
Cable length [m(ft.)]	5 m (16.40 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.3.3 SFP-25G-AOC-7M

Technical Specifications

Table 8-53 Technical specifications of the SFP-25G-AOC-7M

Item	Details
Part Number	02311MPC
Model	SFP-25G-AOC-7M
Description	Active Optical Cable ,SFP28,25G, (850nm,7m,AOC)
Connector X1	SFP28
Connector X2	SFP28
Cable length [m(ft.)]	7 m (22.97 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.3.4 SFP-25G-AOC-10M

Technical Specifications

Table 8-54 Technical specifications of the SFP-25G-AOC-10M

Item	Details
Part Number	02311KNT
Model	SFP-25G-AOC-10M
Description	Active Optical Cable ,SFP28,25G, (850nm,10m,AOC)
Connector X1	SFP28
Connector X2	SFP28
Cable length [m(ft.)]	10 m (32.81 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.4 QSFP+ to QSFP+ AOC cable

8.9.4.1 QSFP-H40G-AOC10M

Technical Specifications

Table 8-55 Technical specifications of the QSFP-H40G-AOC10M

Item	Details
Part Number	02310SSH
Model	QSFP-H40G-AOC10M
Description	Optical transceiver,QSFP+,40G,(850nm, 10m,AOC)
Connector X1	QSFP+
Connector X2	QSFP+
Cable length [m(ft.)]	10 m (32.81 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.5 QSFP+ to 4*SFP+ AOC cable

8.9.5.1 QSFP-4SFP10-AOC10M

Technical Specifications

Table 8-56 Technical specifications of the QSFP-4SFP10-AOC10M

Item	Details
Part Number	02310SSJ
Model	QSFP-4SFP10-AOC10M
Description	Optical transceiver,QSFP+,40G,(850nm,10m,AOC)(Connect to four SFP+ Optical Transceiver)
Connector X1	QSFP+
Connector X2	4*SFP+
Cable length [m(ft.)]	10 m (32.81 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.6 QSFP28 to QSFP28 AOC Cable

8.9.6.1 QSFP-100G-AOC-10M

Technical Specifications

Table 8-57 Technical specifications of the QSFP-100G-AOC-10M

Item	Details
Part Number	02311KNQ
Model	QSFP-100G-AOC-10M
Description	Active Optical Cable ,QSFP28,100G,(850nm,10m,AOC)

Item	Details
Connector X1	QSFP28
Connector X2	QSFP28
Cable length [m(ft.)]	10 m (32.81 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.6.2 QSFP-100G-AOC-30M

Technical Specifications

Table 8-58 Technical specifications of the QSFP-100G-AOC-30M

Item	Details
Part Number	02311RAH
Model	QSFP-100G-AOC-30M
Description	Active Optical Cable ,QSFP28,100G, (850nm,30m,AOC)
Connector X1	QSFP28
Connector X2	QSFP28
Cable length [m(ft.)]	30 m (98.42 ft.)
Operating Wavelength [nm]	850 nm
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

8.9.7 QSFP56 to QSFP56 AOC Cable

8.9.7.1 QSFP56-200G-AOC-5M

Technical Specifications

Table 8-59 Technical specifications of the QSFP56-200G-AOC-5M

Item	Details
Part Number	02314KLK
Model	QSFP56-200G-AOC-5M
Description	200G,QSFP56,Active Optical Cable Assembly,5m,AOC
Connector X1	QSFP56
Connector X2	QSFP56
Cable length [m(ft.)]	5 m (16.4 ft.)
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)
Note	NOTE Before interconnecting with servers, you are advised to contact the server vendor to evaluate whether their servers support the AOC.

8.9.7.2 QSFP56-200G-AOC-10M

Technical Specifications

Table 8-60 Technical specifications of the QSFP56-200G-AOC-10M

Item	Details
Part Number	02313TDN
Model	QSFP56-200G-AOC-10M
Description	200G,QSFP56,Active Optical Cable Assembly,10m,AOC
Connector X1	QSFP56
Connector X2	QSFP56
Cable length [m(ft.)]	10 m (32.80 ft.)
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)
Note	NOTE Before interconnecting with servers, you are advised to contact the server vendor to evaluate whether their servers support the AOC.

8.9.7.3 QSFP56-200G-AOC-20M

Technical Specifications

Table 8-61 Technical specifications of the QSFP56-200G-AOC-20M

Item	Details
Part Number	02314KLL
Model	QSFP56-200G-AOC-20M
Description	200G,QSFP56,Active Optical Cable Assembly,20m,AOC
Connector X1	QSFP56
Connector X2	QSFP56
Cable length [m(ft.)]	20 m (65.62 ft.)
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)
Note	NOTE Before interconnecting with servers, you are advised to contact the server vendor to evaluate whether their servers support the AOC.

8.9.7.4 QSFP56-200G-AOC-30M

Technical Specifications

Table 8-62 Technical specifications of the QSFP56-200G-AOC-30M

Item	Details
Part Number	02314KLM
Model	QSFP56-200G-AOC-30M
Description	200G,QSFP56,Active Optical Cable Assembly,30m,AOC
Connector X1	QSFP56
Connector X2	QSFP56
Cable length [m(ft.)]	30 m (98.42 ft.)
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

Item	Details
Note	NOTE Before interconnecting with servers, you are advised to contact the server vendor to evaluate whether their servers support the AOC.

8.9.7.5 QSFP-2QSFP56100G-AOC10M

Technical Specifications

Table 8-63 Technical specifications of the QSFP-2QSFP56100G-AOC10M

Item	Details
Part Number	02313TUY
Model	QSFP-2QSFP56100G-AOC10M
Description	200G QSFP56-2*100G QSFP56-Active Optical Cable-10m-AOC
Connector X1	QSFP56
Connector X2	QSFP56
Cable length [m(ft.)]	10 m (32.81 ft.)
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)
Note	NOTE Before interconnecting with servers, you are advised to contact the server vendor to evaluate whether their servers support the AOC.

8.9.8 QSFP-DD to QSFP-DD AOC cable

8.9.8.1 QSFP-DD-400G-AOC-10M

Technical Specifications

Table 8-64 Technical specifications of the QSFP-DD-400G-AOC-10M

Item	Details
Part Number	02313FHA

Item	Details
Model	QSFP-DD-400G-AOC-10M
Description	400G-QSFP-DD-Active Optical Cable-10m-AOC
Connector X1	QSFP-DD
Connector X2	QSFP-DD
Cable length [m(ft.)]	10 m (32.80 ft.)
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)

 **NOTE**

Version support: V200R021C00 and later versions.

8.9.9 QSFP-DD to QSFP56 AOC Cable

8.9.9.1 QSFP-DD-2QSFP56200G-AOC5M

Technical Specifications

Table 8-65 Technical specifications of the QSFP-DD-2QSFP56200G-AOC5M

Item	Details
Part Number	02313TDP
Model	QSFP-DD-2QSFP56200G-AOC5M
Description	400G QSFP-DD-2*200G QSFP56-Active Optical Cable-5m-AOC
Connector X1	QSFP-DD
Connector X2	2*QSFP56
Cable length [m(ft.)]	5 m (16.4 ft.)
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)
Note	<p>NOTE Before interconnecting with servers, you are advised to contact the server vendor to evaluate whether their servers support the AOC.</p>

 NOTE

Version support: V200R022C10 and later versions.

8.9.9.2 QSFP-DD-2QSFP200G-AOC10M

Technical Specifications

Table 8-66 Technical specifications of the QSFP-DD-2QSFP200G-AOC10M

Item	Details
Part Number	02314KLG
Model	QSFP-DD-2QSFP200G-AOC10M
Description	400G QSFP-DD-2*200G QSFP56-Active Optical Cable-10m-AOC
Connector X1	QSFP-DD
Connector X2	2*QSFP56
Cable length [m(ft.)]	10 m (32.81 ft.)
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)
Note	NOTE Before interconnecting with servers, you are advised to contact the server vendor to evaluate whether their servers support the AOC.

 NOTE

Version support: V200R022C10 and later versions.

8.9.9.3 QSFP-DD-2QSFP200G-AOC30M

Technical Specifications

Table 8-67 Technical specifications of the QSFP-DD-2QSFP200G-AOC30M

Item	Details
Part Number	02314KLH
Model	QSFP-DD-2QSFP200G-AOC30M
Description	400G QSFP-DD-2*200G QSFP56-Active Optical Cable-30m-AOC

Item	Details
Connector X1	QSFP-DD
Connector X2	2*QSFP56
Cable length [m(ft.)]	30 m (98.42 ft.)
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)
Note	NOTE Before interconnecting with servers, you are advised to contact the server vendor to evaluate whether their servers support the AOC.

 **NOTE**

Version support: V200R022C10 and later versions.

8.9.9.4 QSFP-DD-2QSFP200G-AOC100M

Technical Specifications

Table 8-68 Technical specifications of the QSFP-DD-2QSFP200G-AOC100M

Item	Details
Part Number	02314KLJ
Model	QSFP-DD-2QSFP200G-AOC100M
Description	400G QSFP-DD-2*200G QSFP56-Active Optical Cable-100m-AOC
Connector X1	QSFP-DD
Connector X2	2*QSFP56
Cable length [m(ft.)]	100 m (328.08 ft.)
Operating Temperature [°C (°F)]	0 °C to 70 °C (32 °F to 158 °F)
Note	NOTE Before interconnecting with servers, you are advised to contact the server vendor to evaluate whether their servers support the AOC.

 **NOTE**

Version support: V200R022C10 and later versions.