

Connector and Cable Specifications

This chapter describes the connector and cable specifications.

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- Cable and Adapter Specifications, page B-5

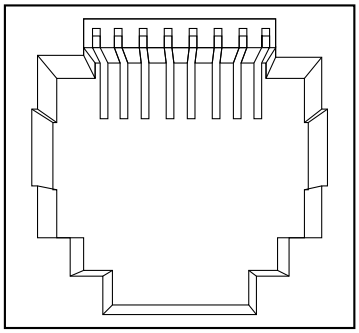
Connector Specifications

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10/100/1000 Ports

The 10/100/1000 Ethernet ports on switches use RJ-45 connectors and Ethernet pinouts.

Figure B-1 10/100/1000 Port Pinouts

Pin	Label	1 2 3 4 5 6 7 8
1	TP0+	
2	TP0-	
3	TP1+	
4	TP2+	
5	TP2-	
6	TP1-	
7	TP3+	
8	TP3-	

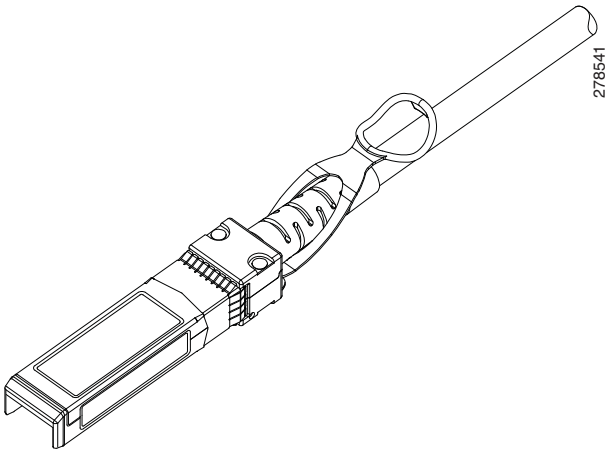
10-Gigabit Ethernet CX1 (SFP+ Copper) Connectors

The 10-Gigabit Ethernet electrical modules use CX1 copper connectors similar to the one shown in Figure B-2.

Note When ordering or using CX1 cables, ensure that the version identifier is 2 or higher.

The 10-Gigabit Ethernet optical modules use the connectors shown in Figure B-3 and Figure B-4.

Figure B-2 10-Gigabit Ethernet CX1 Copper Connector (example)



SFP and SFP+ Modules

Figure B-3, Figure B-4, and Figure B-5 show the SFP module connectors.

The switch supports the SFP module patch cable, a 0.5-meter, copper, passive cable with SFP module connectors at each end (Figure B-6). This cable can be used (only with 1-Gigabit Ethernet SFP ports) to connect two Catalyst 3650 switches in a cascaded configuration.

Figure B-3 Duplex LC Cable Connector

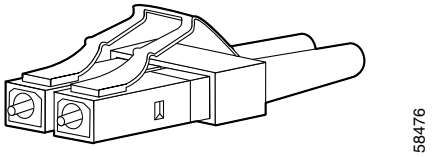


Figure B-4 Simplex LC Cable Connector

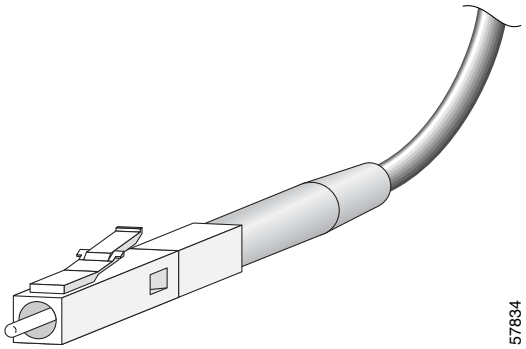


Figure B-5 Copper SFP Module RJ-45 Connector

Pin	Label	1 2 3 4 5 6 7 8
1	TP0+	
2	TP0-	
3	TP1+	
4	TP2+	
5	TP2-	
6	TP1-	
7	TP3+	
8	TP3-	

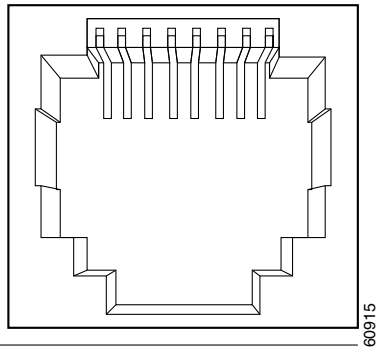
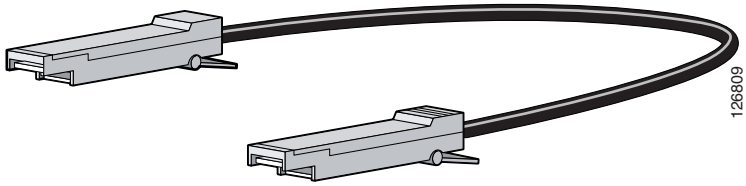


Figure B-6 SFP Module Patch Cable

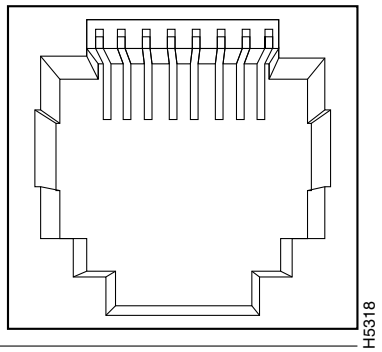


10/100/1000 Ethernet Management Port

The 10/100/1000 Ethernet management port uses RJ-45 connectors with Ethernet pinouts. Figure B-7 shows the pinouts.

Figure B-7 10/100 Port Pinouts

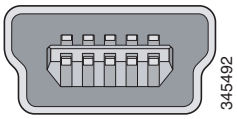
Pin	Label
1	RD+
2	RD-
3	TD+
4	NC
5	NC
6	TD-
7	NC
8	NC



Console Port

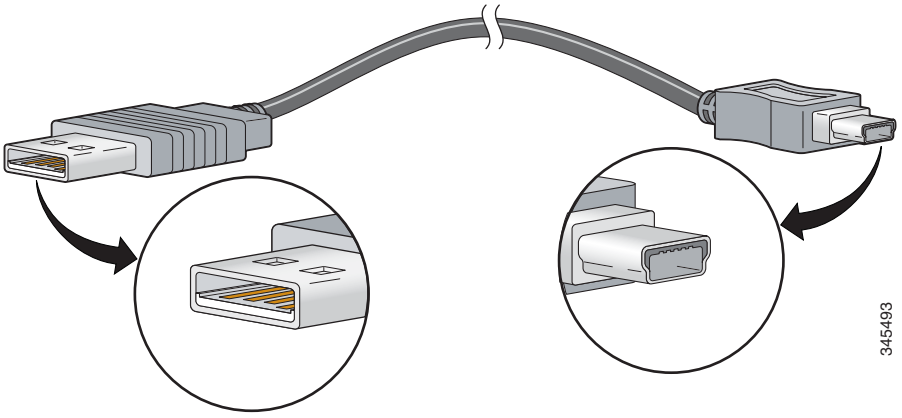
The switch has two console ports: a USB 5-pin mini-Type B port on the front panel (see Figure B-8) and an RJ-45 console port on the rear panel.

Figure B-8 USB Mini-Type B Port



The USB console port uses a USB Type A to 5-pin mini-Type B cable, shown in Figure B-9. The USB Type A-to-USB mini-Type B cable is not supplied. You can order an accessory kit (part number 800-33434) that contains this cable.

Figure B-9 USB Type A-to-USB 5-Pin Mini-Type B Cable



The RJ-45 console port uses an 8-pin RJ-45 connector (See Table B-2 and Table B-3.) The supplied RJ-45-to-DB-9 adapter cable is used to connect the console port of the switch to a console PC. You need to provide a RJ-45-to-DB-25 female DTE adapter if you want to connect the switch console port to a

terminal. You can order a kit (part number ACS-DSBUASYN=) containing that adapter. For console port and adapter pinout information, see Table B-2 and Table B-3.

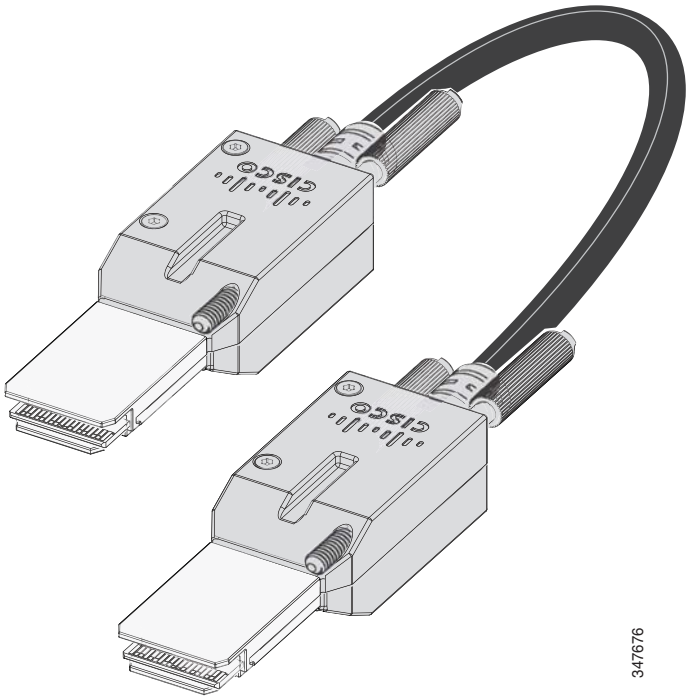
Cable and Adapter Specifications

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- StackWise Adapter Blanks, page B-7
- SFP and SFP+ Module Cable Specifications, page B-7
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StackWise Cables

Figure B-10 shows a StackWise stacking cable.

Figure B-10 StackWise Stacking Cable



You can order these StackWise cables (nonhalogen) from your Cisco sales representative:

- STACK-T2-50CM= (0.5-meter cable)
- STACK-T2-1M= (1-meter cable)
- STACK-T2-3M= (3-meter cable)

StackWise Cables Minimum Bend Radius and Coiled Diameter

Table B-1 specifies the minimum bend radius and coiled diameter for each StackWise cable.

Table B-1 StackWise Cables Minimum Bend Radius and Coiled Diameter

Cable Part Number	Cable Length	Minimum Bend Radius	Minimum Coiled Diameter
STACK-T2-50CM	1.64 ft (0.5 m)	2.60 in. (66 mm)	5.20 in. (132 mm)
STACK-T2-1M	3.28 ft (1.0 m)	2.60 in. (66 mm)	5.20 in. (132 mm)
STACK-T2-3M	9.84 ft (3.0 m)	3.58 in. (91 mm)	7.17 in. (182 mm)

StackWise Adapters

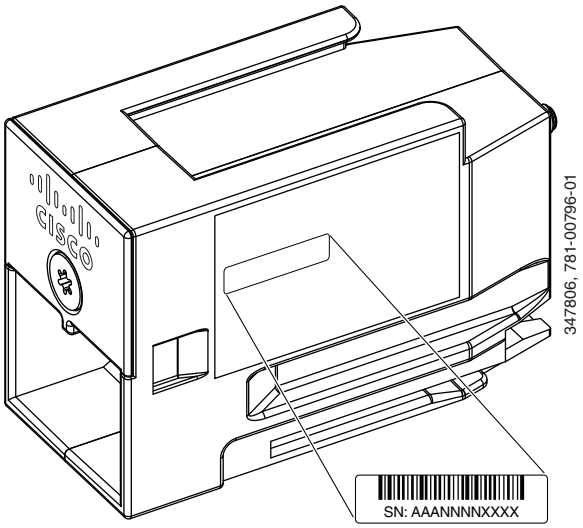
A StackWise adapter must be installed in the stacking port to enable stacking. The StackWise cable connects to the StackWise adapter in the stacking port. For switches ordered with stacking, the StackWise adapters are preinstalled.

If the switches are not ordered with stacking, the adapters must be ordered separately and installed. You can order a StackWise adapter as part of a StackWise stacking upgrade kit (part number C3650-STACK-KIT=), that contains two adapters and a 0.5 m StackWise cable..

Locating the StackWise Adapter Serial Number

If you contact Cisco Technical Assistance regarding a StackWise adapter, you need to know the serial number. See Figure B-11 to find the serial number.

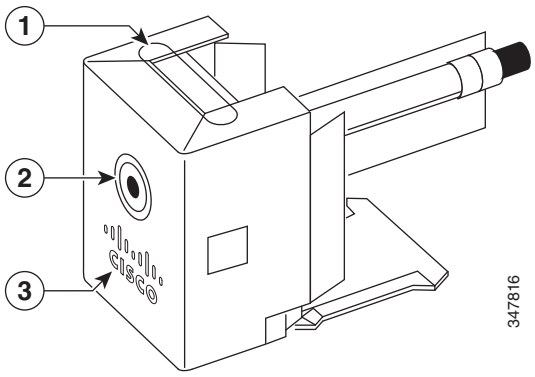
Figure B-11 Location of the Serial Number on the StackWise Adapter



StackWise Adapter Blanks

A StackWise adapter blank is installed in the stacking port if stacking is not specified at the time of ordering the switch. The StackWise adapter blank is screwed into the stacking port and must be removed and replaced by a StackWise adapter if the port is to be used for stacking. Figure B-12 shows a StackWise adapter blank.

Figure B-12 StackWise Adapter Blank



1	StackWise adapter blank	**3**	Cisco label
2	Assembly screw		

SFP and SFP+ Module Cable Specifications

Each port must match the wave-length specifications on each end of the cable, and the cable must not exceed the stipulated cable length. Copper 1000BASE-T SFP module transceivers use standard four twisted-pair, Category 5 cable at lengths up to 328 feet (100 meters).

For cabling specifications, refer to the Cisco Transceiver Modules data sheet at:

http://www.cisco.com/en/US/products/hw/modules/ps5455/products_data_sheets_list.html

Four Twisted-Pair Cable Pinouts

Figure B-13 Four Twisted-Pair Straight-Through Cable Schematic

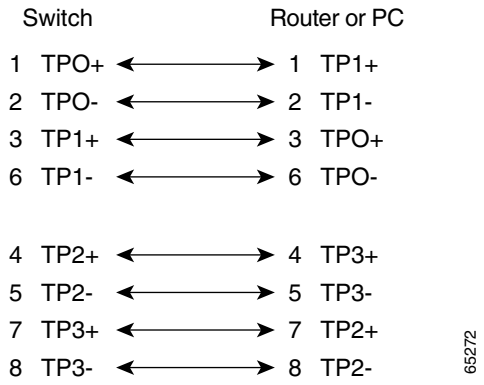
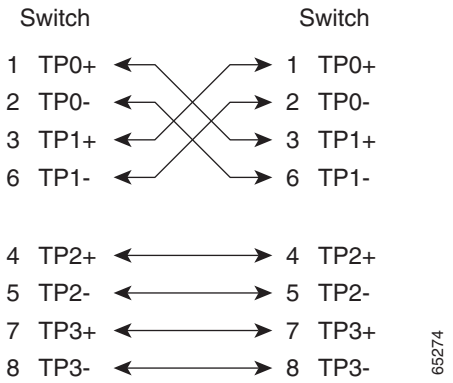


Figure B-14 Four Twisted-Pair Crossover Cable Schematic



Two Twisted-Pair Cable Pinouts

Figure B-15 Two Twisted-Pair Straight-Through Cable Schematic

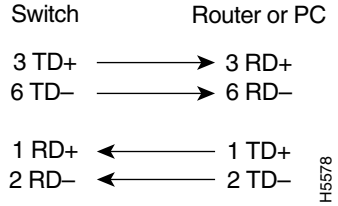
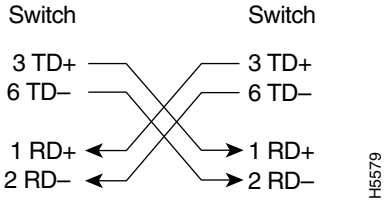


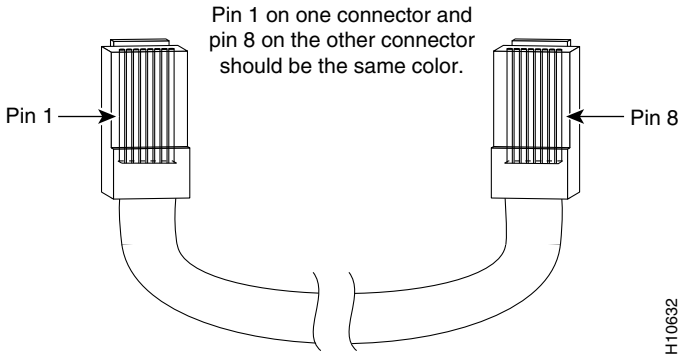
Figure B-16 Two Twisted-Pair Crossover Cable Schematic



Identifying a Crossover Cable

To identify a crossover cable, hold the cable ends side-by-side, with the tab at the back. The wire connected to the pin on the outside of the left plug should be the same color as the wire connected to the pin on the outside of the right plug. (See Figure B-17.)

Figure B-17 Identifying a Crossover Cable



Console Port Adapter Pinouts

The console port uses an 8-pin RJ-45 connector, which is described in Table B-2 and Table B-3. If you did not order a console cable, you need to provide an RJ-45-to-DB-9 adapter cable to connect the switch console port to a PC console port. You need to provide an RF-45-to-DB-25 female DTE adapter if you want to connect the switch console port to a terminal. You can order a kit with an adapter (part number ACS-DSBUASYN=). For console port and adapter pinout information, see Table B-2 and Table B-3.

Table B-2 lists the pinouts for the console port, the RF-45-to-DB-9 adapter cable, and the console device.

Table B-2 Console Port Signaling Using a DB-9 Adapter

Switch Console Port (DTE)	RJ-45-to-DB-9 Terminal Adapter	Console Device
Signal	**DB-9 Pin**	**Signal**
RTS	8	CTS
DTR	6	DSR
TxD	2	RxD

Table B-2 Console Port Signaling Using a DB-9 Adapter (continued)

Switch Console Port (DTE)	RJ-45-to-DB-9 Terminal Adapter	Console Device
Signal	**DB-9 Pin**	**Signal**
GND	5	GND
GND	5	GND
RxD	3	TxD
DSR	4	DTR
CTS	7	RTS

Table B-3 lists the pinouts for the console port, RJ-45-to-DB-25 female DTE adapter, and the console device.

Note The RJ-45-to-DB-25 female DTE adapter is not supplied with the switch. You can order a kit with the adapter (part number ACS-DSBUASYN=) from Cisco.

Table B-3 Console Port Signaling Using a DB-25 Adapter

Switch Console Port (DTE)	RJ-45-to-DB-25 Terminal Adapter	Console Device
Signal	**DB-25 Pin**	**Signal**
RTS	5	CTS
DTR	6	DSR
TxD	3	RxD
GND	7	GND
GND	7	GND
RxD	2	TxD
DSR	20	DTR
CTS	4	RTS