Connector and Cable Specifications
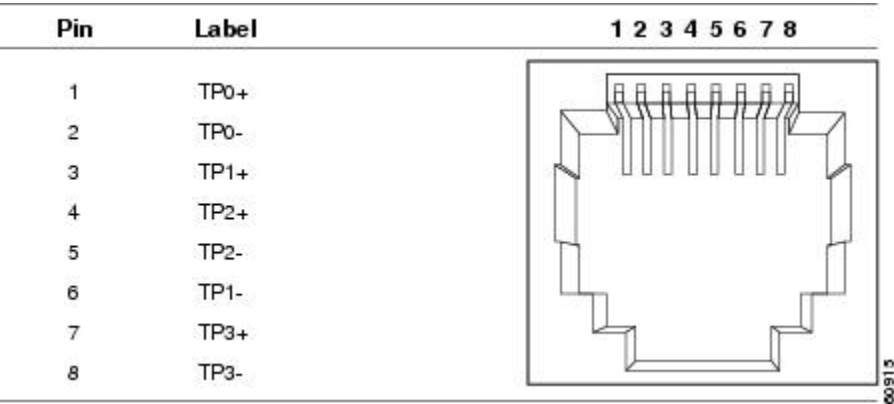
Connector Specifications

10/100/1000 Ports (Including PoE)

All 10/100/1000 ports use standard RJ-45 connectors and Ethernet pinouts.

Figure 1: 10/100/1000 Port Pinouts

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

SFP Module Connectors

Figure 2: Duplex LC Cable Connector

Figure 3: Simplex LC Cable Connector
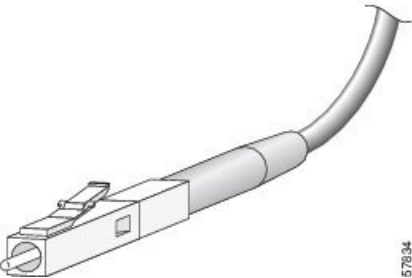
Figure 4: Copper SFP Module LC Connector
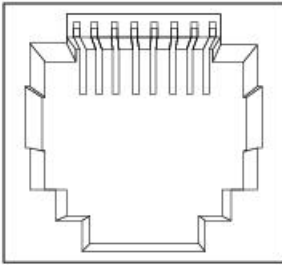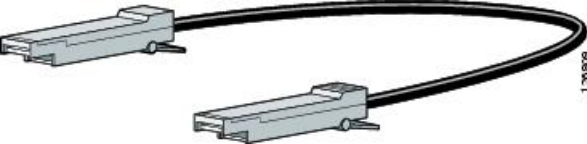

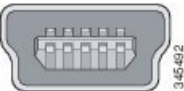| Pin	Label	1 2 3 4 5 6 7 8
1	TP0+	
2	TP0-	
3	TP1+	
4	TP2+	
5	TP2-	
6	TP1-	
7	TP3+	
8	TP3-	

Figure 5: SFP Module Patch Cable
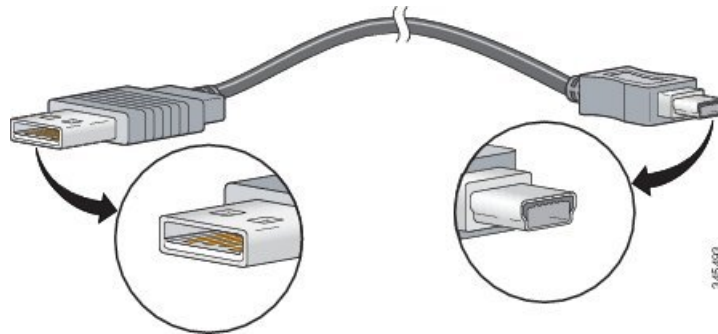

Console Port

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

Figure 6: USB Mini-Type B Port

The USB console port uses a USB Type A to 5-pin mini-Type B cable. 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 7: USB Type A-to-USB 5-Pin Mini-Type B Cable

The RJ-45 console port uses an 8-pin RJ-45 connection. 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.

Cables and Adapters

StackWise Cables

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

- STACK-T1-50CM= (0.5-meter cable)

- STACK-T1-1M= (1-meter cable)

- STACK-T1-3M= (3-meter cable)

Table 1: StackWise Cables Minimum Bend Radius and Coiled Diameter

Cable Part Number	Cable Length	Minimum Bend Radius	Minimum Coiled Diameter
STACK-T1-50CM	1.64 feet (0.5 m)	2.60 in. (66 mm)	5.20 in. (132 mm)
STACK-T1-1M	3.28 feet (1.0 m)	2.60 in. (66 mm)	5.20 in. (132 mm)
STACK-T1-3M	9.84 feet (3.0 m)	3.58 in. (91 mm)	7.17 in. (182 mm)
STACK-T2-50CM	1.64 feet (0.5 m)	2.60 in. (66 mm)	5.20 in. (132 mm)
STACK-T2-1M	3.28 feet (1.0 m)	2.60 in. (66 mm)	5.20 in. (132 mm)
STACK-T2-3M	9.84 feet (3.0 m)	3.58 in. (91 mm)	7.17 in. (182 mm)

SFP Module Cables

For cabling specifications, refer to the following notes:

- Cisco SFP and SFP+ Transceiver Module Installation Notes

• Cisco 40-Gigabit QSFP+ Transceiver Modules Installation Note

Cisco Catalyst 2960-X and 2960-XR Switches now support QSFP-4X10G-AOC5M, the 40GQSFP to four 10G SFP+ direct attach breakout Active Optical cable assembly.

Each port must match the wave-length specifications on the other 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).

# Cisco QSFP to SFP or SFP+ Adapter

Cisco QSFP to SFP or SFP+ Adapter (QSA) is a pluggable adapter that converts a QSFP port in to an SFP or SFP+ port. You can connect one of the following SFP+ or SFP module or an SFP+ copper.

The following is the list of Cisco SFP or SFP+ transceiver modules that are currently supported.

• Cisco SFP-10G-SR - Cisco 10GBASE-SR SFP+ Module for Multimode Fiber

• Cisco SFP-10G-SR-S module (S-Class) - Cisco 10GBASE-SR SFP+ Module for Multimode Fiber

• Cisco SFP-10G-LR - Cisco 10GBASE-LR SFP+ Module for Single-Mode Fiber

• Cisco SFP-10G-LR-S module (S-Class) - Cisco 10GBASE-LR SFP+ Module for Single-Mode Fiber

• Cisco SFP-10G-ER - Cisco 10GBASE-ER SFP+ Module for Single-Mode Fiber (extended reach)

• Cisco SFP-10G-ER-S module (S-Class) - Cisco 10GBASE-ER SFP+ Module for Single-Mode Fiber (extended reach)

• Cisco SFP-10G-ZR - Cisco 10GBASE-ZR SFP+ Module for Single-Mode Fiber (up to 80 km reach)

• Cisco SFP-10G-ZR-S module (S-Class) - Cisco 10GBASE-ZR SFP+ Module for Single-Mode Fiber (up to 80 km reach)
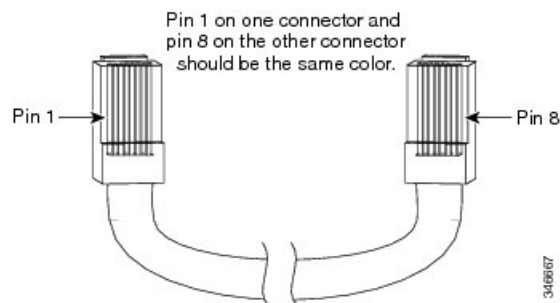
Cable Pinouts

Figure 8: Four Twisted-Pair Straight-Through Cable Schematic
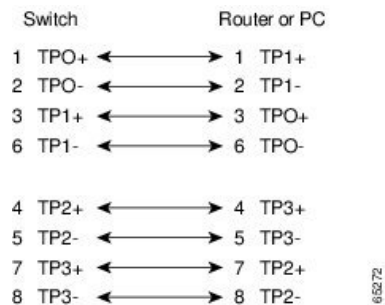
Figure 9: Four Twisted-Pair Semi-Cross Cable Schematic
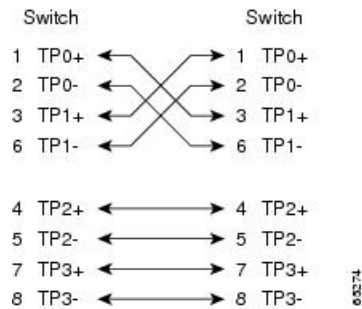
Figure 10: Two Twisted-Pair Straight-Through Cable Schematic
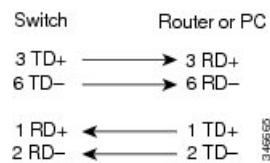
Figure 11: Two Twisted-Pair Crossover Cable Schematic
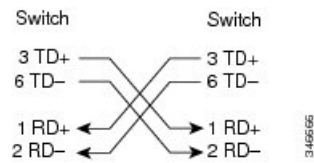
Identifying a Crossover Cable

To identify a crossover cable, compare the two modular ends of the 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 a different color from the wire connected to the pin on the inside of the right plug.

Figure 12: Identifying a Crossover Cable

Console Port Adapter Pinouts

The RS-232 console port uses an 8-pin RJ-45 connector. Use an RJ-45-to-DB-9 adapter cable to connect the switch console port to a console PC. You need to provide a RJ-45-to-DB-25 female DTE adapter to connect the switch console port to a terminal.

Table 2: Console Port Signaling with 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
GND	5	GND
GND	5	GND
RxD	3	TxD
DSR	4	DTR
CTS	7	RTS

Table 3: Console Port Signaling with 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