

# **Connector and Cable Specifications**

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# **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 2 3 4 5 6 7 8	
1	TP0+	0.0.0.0.0.0
2	TP0-	
3	TP1+	1
4	TP2+	
5	TP2-	14 /
6	TP1-	
7	TP3+	
8	TP3-	

## **Module Connectors**

Figure 2: Duplex LC Cable Connector



8470

Figure 3: Simplex LC Cable Connector

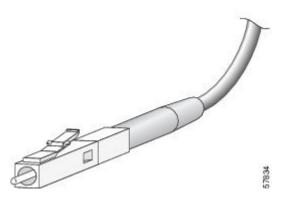
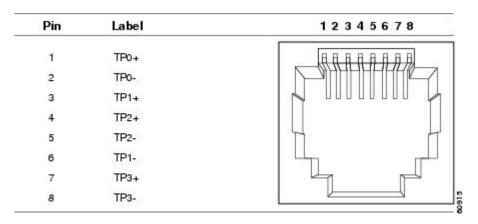


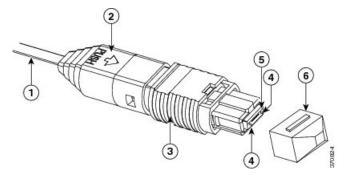
Figure 4: Copper SFP Module LC Connector



### **MPO-12 Connectors**

The multi-fiber push on (MPO) connector is a 12-fiber optical connector with a footprint similar to the SC simplex connector. The MPO connector conforms to the TIA/EIA-604-5 intermateability standard. It is used for establishing 40G and 100G optical parallel connections.

Figure 5: MPO-12 Fiber-Optic Connector



1	12-fiber ribbon	4	Guide pins
2	Boot	5	Ferrule

3	Housing assembly	6	Dust cap
<u></u>			



Note

You have to attach an adapter cable to this connector.

# **Console Port**

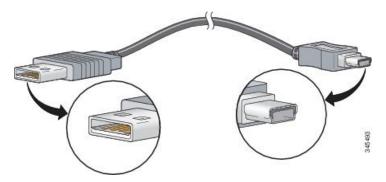
The switch has two console ports: a USB 5-pin mini-Type B port on the front panel and an RJ-45 console port on the rear panel.

#### 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 Accessories

All Cisco stack cables are halogen-free. The StackWise cables of lengths 0.5 m, 1 m and 3 m supported. You can order the stacking cables from your Cisco sales representative.

Table 1: Cisco StackWise-480 and StackWise-1T Accessories for C9300 and C9300X Series Switches

Product ID	Product Description
STACK-T1-50CM	50 cm stacking cable for Cisco StackWise-480 and Cisco StackWise-1T
STACK-T1-1M	1 m stacking cable for Cisco StackWise-480 and Cisco StackWise-1T
STACK-T1-3M	3 m stacking cable for Cisco StackWise-480 and Cisco StackWise-1T

The optional StackWise-320 kit for Catalyst 9300L and 9300LM Series models consists of two stack adapters and a stacking cable. The default stacking cable is 0.5 m, however options of 1m and 3m are also available.

Table 2: Cisco StackWise-320 Accessories for C9300L Series Switches

Product ID	Product Description	
C9300L-STACK	Stacking adapter for C9300L Series Switches that is used in conjunction with STACK-T3 type cables	
C9300L-STACK-A	Stacking adapter for C9300L and C9300LM Series Switches that is used in conjunction with STACK-T3A type cables	
STACK-T3-50CM	50 cm stacking cable for C9300L Series Switches	
STACK-T3-1M	1 m stacking cable for C9300L Series Switches	
STACK-T3-3M	3 m stacking cable for C9300L Series Switches	
STACK-T3A-50CM	50 cm stacking cable for C9300L and C9300LM Series Switches	
STACK-T3A-1M	1 m stacking cable for C9300L and C9300LM Series Switches	
STACK-T3A-3M	3 m stacking cable for C9300L and C9300LM Series Switches	



Note

C9300L Series Switches use both T3 and T3A type stacking cables.

The optional StackWise-320 kit for Catalyst 9300L and 9300LM Series models consists of two stack adapters and a stacking cable. The default stacking cable is 0.5 m, however options of 1m and 3m are also available.

Table 3: Cisco StackWise-320 Accessories for C9300LM Series Switches

Product ID	Product Description
C9300L-STACK-A	Stacking adapter for C9300L and C9300LM Series Switches that is used in conjunction with STACK-T3A type cables
STACK-T3A-50CM	50 cm stacking cable for C9300L and C9300LM Series Switches
STACK-T3A-1M	1 m stacking cable for C9300L and C9300LM Series Switches
STACK-T3A-3M	3 m stacking cable for C9300L and C9300LM Series Switches



Note

C9300LM Series Switches use only T3A type stacking cables.

Table 4: 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)	1.6 in. (41 mm)	Not applicable
STACK-T1-1M	3.28 feet (1.0 m)	1.6 in. (41 mm)	5.2 in. (132 mm)
STACK-T1-3M	9.84 feet (3.0 m)	3.2 in. (82 mm)	7.17 in. (182 mm)
STACK-T3-50CM	1.64 feet (0.5 m)	1.6 in. (41 mm)	Not applicable
STACK-T3-1M	3.28 feet (1.0 m)	1.6 in. (41 mm)	5.20 in. (132 mm)
STACK-T3-3M	9.84 feet (3.0 m)	3.2 in. (82 mm)	7.17 in. (182 mm)
STACK-T3A-50CM	1.64 feet (0.5 m)	1.6 in. (41 mm)	Not applicable
STACK-T3A-1M	3.28 feet (1.0 m)	1.6 in. (41 mm)	5.20 in. (132 mm)
STACK-T3A-3M	9.84 feet (3.0 m)	3.2 in. (82 mm)	7.17 in. (182 mm)

<sup>1.</sup> With a 0.5 m cable, the minimum coiled diameter is negligible and the cable cannot be physically coiled without exceeding the bending limit.

## **Transceiver Module Network 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

Each port must match the wavelength 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).

#### **Cable Pinouts**

Figure 8: Four Twisted-Pair Straight-Through Cable Schematic

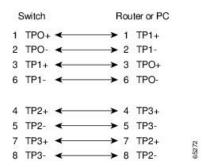


Figure 9: Four Twisted-Pair Semi-Cross Cable Schematic

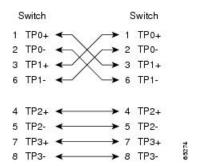


Figure 10: Two Twisted-Pair Straight-Through Cable Schematic

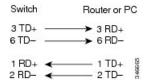
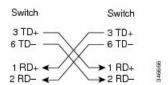


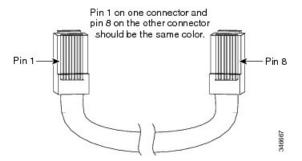
Figure 11: Two Twisted-Pair Crossover Cable Schematic



#### **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 5: 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
TxD	2	RxD
GND	5	GND
GND	5	GND
RxD	3	TxD

Table 6: 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
TxD	3	RxD
GND	7	GND
GND	7	GND
RxD	2	TxD

**Console Port Adapter Pinouts**