

# **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	12345678
1	TP0+	8888888
2	TPo-	
3	TP1+	M   M   M   M   M   M   M   M   M   M
4	TP2+	
5	TP2-	1
6	TP1-	
7	TP3+	
8	TP3-	

### **SFP Module Connectors**

Figure 2: Duplex LC Cable Connector

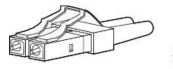


Figure 3: Simplex LC Cable Connector

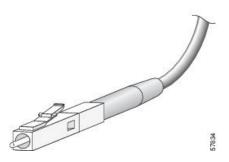
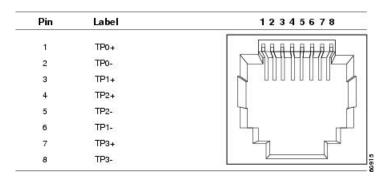


Figure 4: Copper SFP Module LC Connector



# **Cables and Adapters**

#### **SFP Module Cables**

For cabling specifications, refer to the following notes:

Cisco SFP Transceiver Module Installation Notes

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).

#### **Cable Pinouts**

Figure 5: Four Twisted-Pair Straight-Through Cable Schematic

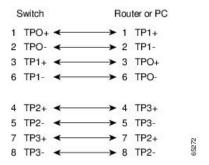


Figure 6: Four Twisted-Pair Semi-Cross Cable Schematic

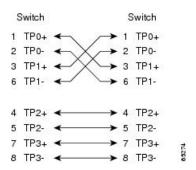


Figure 7: Two Twisted-Pair Straight-Through Cable Schematic

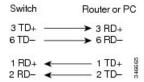
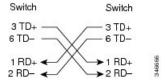


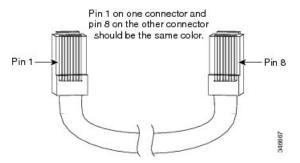
Figure 8: Two Twisted-Pair Crossover Cable Schematic



#### **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 9: 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 1: 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 2: 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

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

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