



Cable and Connectors

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Connector Specifications

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10/100/1000 Ports

The 10/100/1000 Ethernet ports on the switches use RJ-45 connectors. [Figure 36 on page 53](#) shows the pinouts.

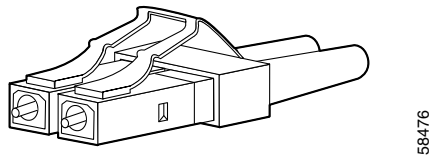
Figure 36 10/100/1000 Port Pinouts

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-	

Connector pins 1, 2, 3, and 6 are used for PoE.

SFP Module Connectors

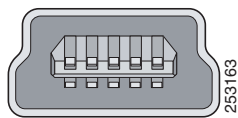
[Figure 37 on page 54](#) shows a LC style connector that is used with the SFP Module slots. It is a fiber-optic cable connector.

Figure 37 Fiber-Optic SFP Module LC Connector

Warning: Invisible laser radiation may be emitted from disconnected fibers or connectors. Do not stare into beams or view directly with optical instruments. Statement 1051

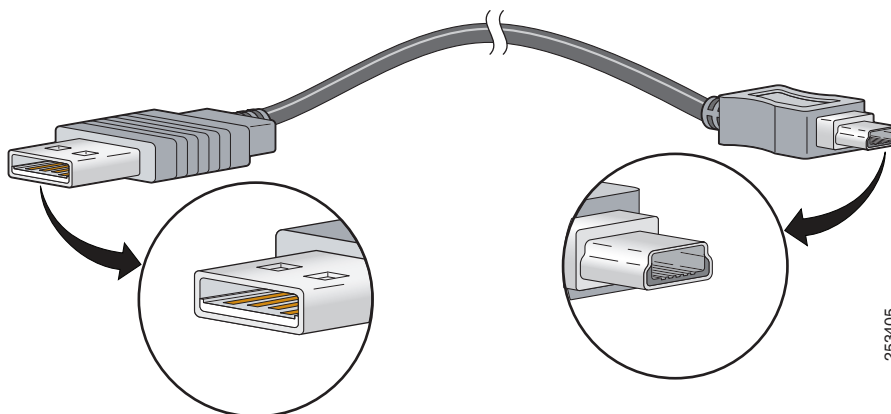
Console Port

The switch has two console ports: a USB 5-pin mini-Type B port (see [Figure 38 on page 54](#)) and an RJ-45 (RS-232) console port.

Figure 38 USB Mini-Type B Port

The USB console port uses a USB Type A to 5-pin mini-Type B cable, shown in [Figure 39 on page 54](#). The USB Type A-to-USB mini-Type B cable is not supplied. You can order an accessory kit that contains this cable.

Note: When running Linux, access the USB Console using **Minicom** instead of **Screen**.

Figure 39 USB Type A-to-USB 5-Pin Mini-Type B Cable

The RJ-45 console port uses an 8-pin RJ-45 connector. An 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 [Console Port, page 54](#).

Alarm Port

The alarm port uses an RJ-45 connector. See [100/1000 SFP Ports, page 4](#) for more information. For information on alarm ratings, see the [Alarm Ratings, page 72](#).

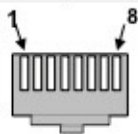
Figure 40 Alarm Port Details

IE4010 Alarm Pinout

IE4010 supports:

- Four External Alarm Inputs
- One form C output

Alarm Connection	RJ-45 Pin
Alarm 1 input	1
Alarm 2 input	2
Alarm Output N/C	3
Alarm 3 input	4
Alarm 4 input	5
Alarm Output N/O	6
Alarm Output Common	7
Alarm Input Common	8



RJ-45 Alarm Connector on IE-4010 Chassis

Alarm Input Details

Normally Open (NO) Contacts
"closed" triggers alarm

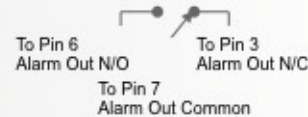


Normally Closed (NC) Contacts
"open" triggers alarm



Alarm Output Details

Form-C Normally Open/Normally Closed Contacts
"No Alarm" State Shown



Cables and Adapters

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SFP Module Cables

Each port must match the wave-length specifications on each end of the cable, and for reliable communications, the cable must not exceed the allowable length.

For more information about SFP/SFP+ modules and cables, see [Transceiver Modules](#).

Console Port Adapter Pinouts

The console port uses an 8-pin RJ-45 connector. 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 RJ-45-to-DB-25 female DTE adapter if you want to connect the switch console port to a terminal. You can order an adapter (part number ACS-DSBUASYN=).

[Table 11 on page 56](#) lists the pinouts for the console port, the RJ-45-to-DB-9 adapter cable, and the console device.

Table 11 Console Port Adapter Pinouts (RJ-45-to-DB-9)

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
RxD	3	TxD
DSR	4	DTR
CTS	7	RTS

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

Table 12 Console Port Adapter Pinouts (RJ-45-to-DB-25)

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