



Cable and Connectors

This chapter contains the following sections:

- [Connector Specifications, on page 1](#)
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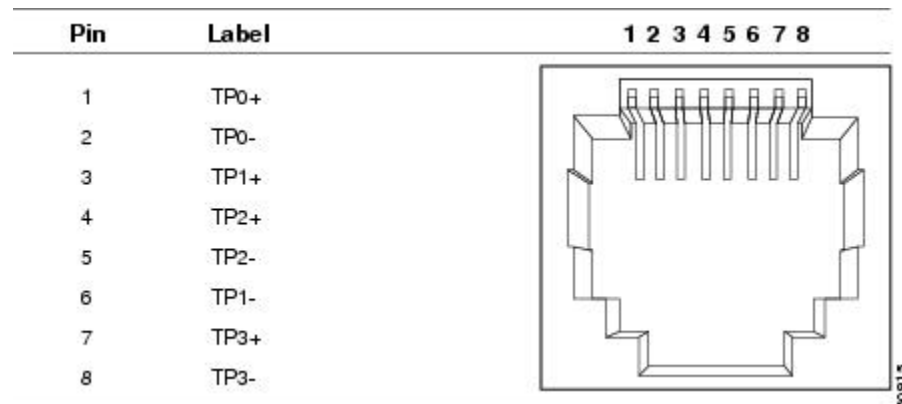
Connector Specifications

This section contains the following:

10/100/1000 Ports

The 10/100/1000 Ethernet ports on the switches use RJ-45 connectors. The following figure shows the pinouts.

Figure 1: 10/100/1000 Port Pinouts



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

SFP Module Connectors

The following figure shows a LC style connector that is used with the SFP Module slots. It is a fiber-optic cable connector.

Figure 2: Fiber-Optic SFP Module LC Connector

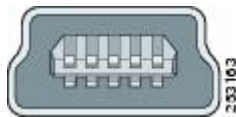


Warning Invisible laser radiation may be emitted from disconnected fibers or connectors. Do not stare into beams or view directly with optical instruments. Statement 1051

Console Port

The switch has two console ports: a USB 5-pin mini-Type B port (see the following figure) and an RJ-45 (RS-232) console port.

Figure 3: USB Mini-Type B Port

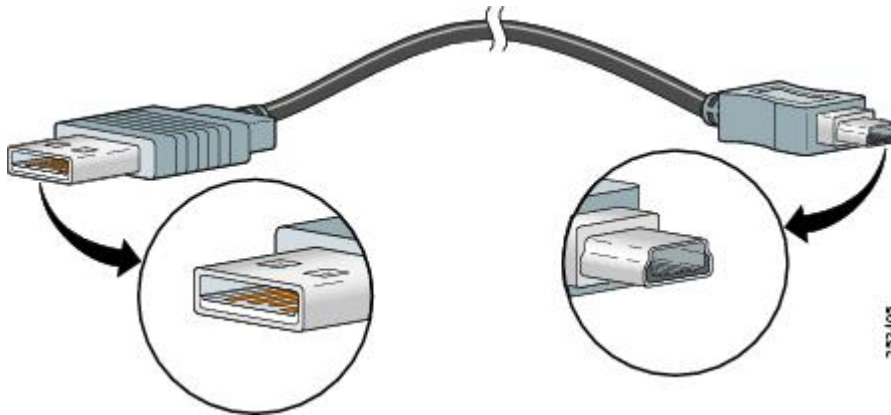


The USB console port uses a USB Type A to 5-pin mini-Type B cable. The USB Type A-to-USB mini-Type B cable is not supplied. You can order an accessory kit that contains this cable.



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

Figure 4: 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 Ports](#).

Alarm Port

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

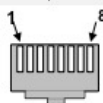
Figure 5: Alarm Port Details

IE4010 Alarm Pinout

IE4010 supports:

- Four External Alarm Inputs
- One form C output

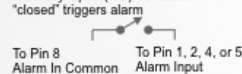
Alarm Connection	RJ-45 Pin
Alarm 1 input	1
Alarm 2 input	2
Alarm Output N/C	3
Alarm 3 input	4
Alarm 4 input	5
Alarm Output N/O	6
Alarm Output Common	7
Alarm Input Common	8



RJ-45 Alarm Connector on IE-4010 Chassis

Alarm Input Details

Normally Open (NO) Contacts



Normally Closed (NC) Contacts



Alarm Output Details

Form-C Normally Open/Normally Closed Contacts

"No Alarm" State Shown



Cables and Adapters

This section contains the following:

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=).

The following tables list the pinouts for the console port, the RJ-45-to-DB-9 adapter cable, and the console device.

Table 1: 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 2: Console Port Adapter Pinouts (RJ-45-to-DB-25)

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
RxD	2	TxD
DSR	20	DTR
CTS	4	RTS