Cable and Connectors

Connector Specifications

10/100/1000 Ports

The 10/100/1000 Ethernet ports on the router 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 and POE+. For UPOE, all pins are used.

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**
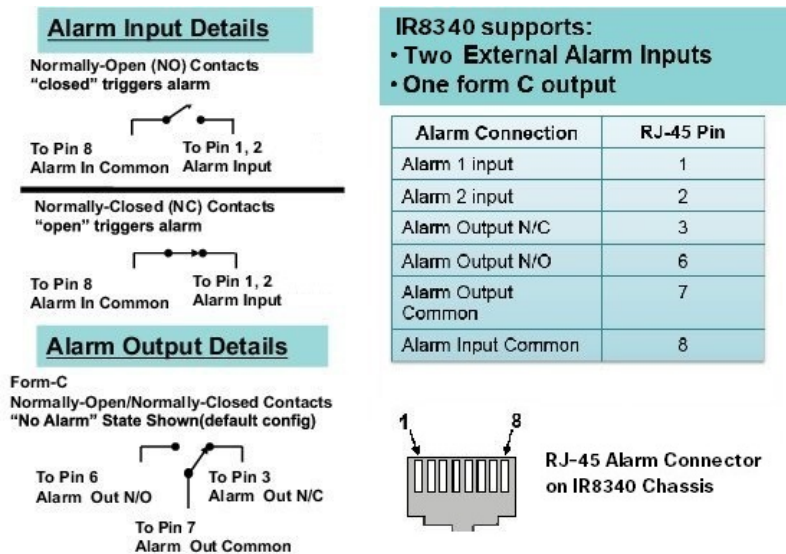
Console Port

The router has an RJ-45 (RS-232) console port.

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 router to a console PC. You need to provide a RJ-45-to-DB-25 female DTE adapter if you want to connect the router console port to a terminal. You can order a kit (part number ACS-DSBUASYN=) containing that adapter.

Alarm Port

The alarm port uses an RJ-45 connector. The following figure shows the alarm port details. For more information on alarm input and output, see Alarm Ports. For information on alarm ratings, see Alarm Ratings.

Figure 3: Alarm Port Details

Alarm Input Details

Normally-Open (NO) Contacts
"closed" triggers alarm

To Pin 8
Alarm In Common

To Pin 1, 2
Alarm Input

Normally-Closed (NC) Contacts
"open" triggers alarm

To Pin 8
Alarm In Common

To Pin 1, 2
Alarm Input

Alarm Output Details

Form-C
Normally-Open/Normally-Closed Contacts
"No Alarm" State Shown(default config)

To Pin 6
Alarm Out N/O

To Pin 3
Alarm Out N/C

To Pin 7
Alarm Out Common

IR8340 supports:
- **Two 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 Output N/O	6
Alarm Output Common	7
Alarm Input Common	8

RJ-45 Alarm Connector
on IR8340 Chassis

Cables and Adapters

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 router 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 router console port to a terminal. You can order an adapter (part number ACS-DSBUASYN=).

The following table shows the pinout descriptions for the DB-9 connections:

Table 1: Pinout Descriptions for the DB-9 Connections

Console Port (DTE)	RJ-45 to RJ-45 Rollover Cable		RJ-45 to DB-9 Terminal Adapter	Console Device
Signal	RJ-45 Pin	RJ-45 Pin	DB-9 Pin	Signal
RTS	1[1]	8	8	CTS
DTR	2	7	6	DSR
TxD	3	6	2	RxD
GND	4	5	5	GND
GND	5	4	5	GND
RxD	6	3	3	TxD
DSR	7	2	4	DTR
CTS	8	1	7	RTS

[1] Pin 1 is connected internally to Pin 8.

The following table shows the pinout descriptions for the DB-25 connections:

Table 2: Pinout Descriptions for the DB-25 Connections

Console Port (DTE) [2]	RJ-45 to RJ-45 Rollover Cable		RJ-45 to DB-25 Terminal Adapter	Console Device
Signal	RJ-45 Pin	RJ-45 Pin	DB-25 Pin	Signal

Console Port (DTE) [2]	RJ-45 to RJ-45 Rollover Cable		RJ-45 to DB-25 Terminal Adapter	Console Device
RTS	1[3]	8	5	CTS
DTR	2	7	6	DSR
TxD	3	6	3	RxD
GND	4	5	7	GND
GND	5	4	7	GND
RxD	6	3	2	TxD
DSR	7	2	20	DTR
CTS	8	1	4	RTS

[2] You can use the same cabling to connect a console to the auxiliary port.
[3] Pin 1 is connected internally to Pin 8.