Cable and Port Specifications

This appendix includes information about the cables and connectors used with the Cisco MDS 9148T Multilayer Fabric Switch.

Caution We strongly recommend that power cable runs and other potential noise sources be located as far away as practical from network cabling that terminates at Cisco equipment. In situations where long parallel cable runs exist, but cannot be separated by at least 3.3 ft. (1 m), we recommend that you shield these potential noise sources. To avoid interference, the source should be shielded by housing it in a grounded metallic conduit.

- Cables and Adapters, on page 1
- Console Port, on page 2
- Out of Band Ethernet Management Port, on page 3
- Supported Power Cords and Plugs, on page 5

Cables and Adapters

The Cisco MDS 9148T Switch accessory kit includes the following:

- RJ-45-to-RJ-45 rollover cable
- RJ-45-to-DB-9 female DTE adapter (labeled Terminal)
- RJ-45-to-DB-25 female DTE adapter (labeled Terminal)
- RJ-45-to-DB-25 male DCE adapter (labeled Modem)

Note Additional cables and adapters can be ordered from your customer service representative.

Note If you purchased this product through a Cisco reseller, contact the reseller directly for technical support. If you purchased this product directly from Cisco, contact Cisco Technical Support at http://www.cisco.com/c/en/us/support/index.html.

Console Port

The console port is an asynchronous RS-232 serial port with an RJ-45 connector. You can use the RJ-45-to-RJ-45 rollover cable and the RJ-45-to-DB-9 female adapter or the RJ-45-to-DB-25 female DTE adapter (depending on your computer serial port) to connect the console port to a computer running terminal emulation software.

Console Port Pinouts

The following table lists the pinouts for the console port on the Cisco MDS 9148T switch:

Table 1: Console Port Pinouts

Pin	Signal
1[1]	RTS
2	DTR
3	TxD
4	GND
5	GND
6	RxD
7	DSR
8	CTS

1. Pin 1 is connected internally to pin 8.

Connecting the Console Port to a Computer Using the DB-25 Adapter

You can use the RJ-45-to-RJ-45 rollover cable and the RJ-45-to-DB-25 female DTE adapter (labeled Terminal) to connect the console port to a computer running terminal emulation software. The following table lists the pinouts for the console port, the RJ-45-to-RJ-45 rollover cable, and the RJ-45-to-DB-25 female DTE adapter:

Table 2: Port-Mode Signaling and Pinouts with DB-25 Adapter

Console Port	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**
RTS	1	8	5	CTS
DTR	2	7	6	DSR
TxD	3	6	3	RxD

Console Port	RJ-45-to-RJ-45 Rollover Cable		RJ-45-to-DB-25 Terminal Adapter	Console Device
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

Connecting the Console Port to a Computer Using the DB-9 Adapter

You can use the RJ-45-to-RJ-45 rollover cable and RJ-45-to-DB-9 female DTE adapter (labeled Terminal) to connect the console port to a computer running terminal emulation software. The following table lists the pinouts for the console port, the RJ-45-to-RJ-45 rollover cable, and the RJ-45-to-DB-9 female DTE adapter:

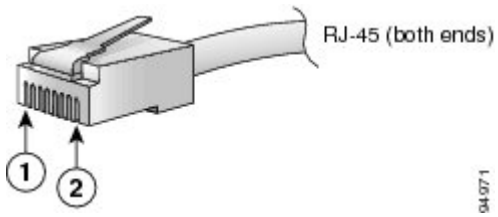
Table 3: Port-Mode Signaling and Pinouts with DB-9 Adapter

Console Port	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	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

Out of Band Ethernet Management Port

Use a modular, RJ-45, straight-through UTP cable to connect the 10/100/1000 management Ethernet port to external hubs and switches.

Figure 1: RJ-45 Interface Cable Connector



1. Pin	2. Pin
1	8

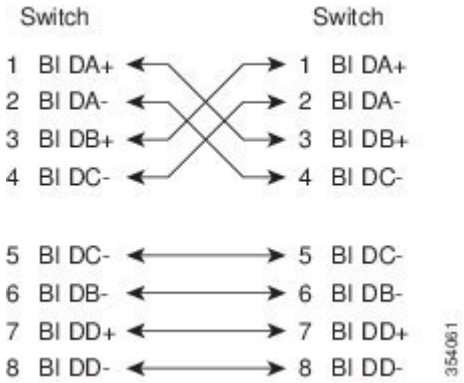
The following table lists the connector pinouts and signal names for a 10/100/1000BASE-T management port (MDI) cable.

Table 4: 10/100/1000 BASE-T Management Port Cable Pinout

Pin	Signal
1	BI DA+
2	BI DA-
3	BI DB+
4	BI DC+
5	BI DC-
6	BI DB-
7	BI DD+
8	BI DD-

The following figure shows a schematic representation of the 10/100/1000 BASE-T cable:

Figure 2: Twisted-Pair 10/100/1000 BASE-T Cable



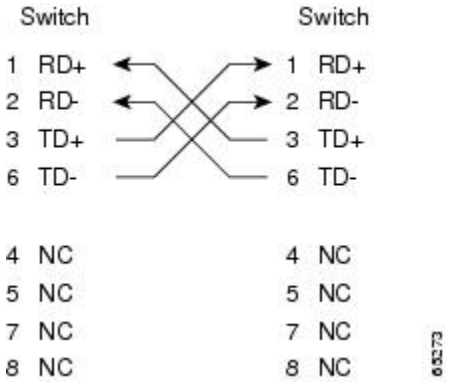
The following table lists the connector pinouts and signal names for a 10/100 BASE-T management port (MDI) cable:

Table 5: 10/100 BASE-T Management Port Cable Pinout

Pin	Signal
1	TD+
2	TD-
3	RD+
4	RD-
5	Not used
6	Not used
7	Not used
8	Not used

The following figure shows a schematic of the 10/100 BASE-T cable:

Figure 3: Twisted-Pair 10/100 BASE-T Cable Schematic



Supported Power Cords and Plugs

Each switch power supply unit requires one power cord. Cisco approved cords may be ordered with the product. Standard power cords with a country specific plug can be used with wall outlets. Jumper power cords can be used with cabinet outlets. The user may also source their own power cords for the product, as long as they meet the power cord specifications for this product.

Note Only the standard power cords or jumper power cords ordered from Cisco are supported.

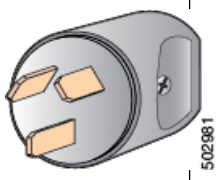
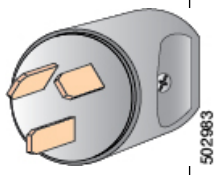
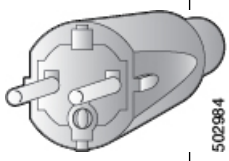
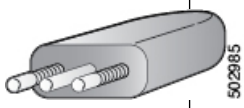
Caution If you do not order a power cord with the system, you are responsible for selecting the appropriate power cord for the product. Using a noncompatible power cord with this product may result in electrical safety hazard. Orders delivered to Argentina, Brazil, and Japan must have the appropriate power cord ordered with the system.

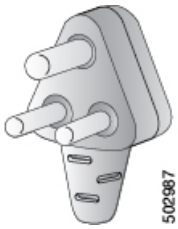
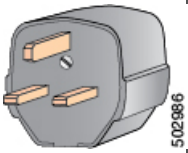
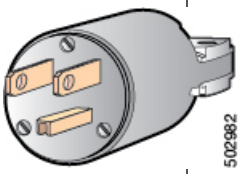
Standard Power Cords

Cisco standard power cords for the Cisco MDS 9148T switch have an IEC C15 connector on the outlet end of the cord and a country specific plug on the inlet end of the cord. To see the list of supported standard power cords, see the Cisco MDS 9148T 32-Gbps 48-Port Fibre Channel Switch Data Sheet.

The following table lists the supported power cords and power plugs for the Cisco MDS 9148T switch.

Table 6: Supported Power Cords and Power Plugs for the Cisco MDS 9148T Switch

Locale	Power Cord Part Number	Source Plug Type	Length		Power Plug Reference Illustration
			Feet	Meters	
Argentina	CAB-9K10A-AR	IRAM 2073 plug (10 A)	8.2	2.5	 502981
Australia	CAB-9K10A-AU	SAA/3 plug, AS 3112-1993 (10 A)	8.2	2.5	 502983
China	CAB-9K10A-CH	GB1002 (10A)		2.5	
Europe	CAB-9K10A-EU	VIIG Plug, CEE (7) VII (16 A)	8.2	2.5	 502984
Israel	CAB-9K10A-ISR	SI 32 Part 1.01 (16A)		4.27	
Italy	CAB-9K10A-IT	1/3G plug, CEI 23-16 (10 A)	8.2	2.5	 502985
Korea	CAB-9K10A-KOR	CEE 7 Standard Sheet VII (16A)		2.5	

Locale	Power Cord Part Number	Source Plug Type	Length		Power Plug Reference Illustration
			Feet	Meters	
South Africa	CAB-9K10A-SA	EL 208, SABS 164-1 (10 A)	5.12	1.82	 502987
Switzerland	CAB-9K10A-SW	12G SEV 1011 (10 A)	8.2	2.5	502988
Taiwan	CAB-9K10A-TWN	CNS 10917-2 & CNS 690 (15A)		4	
United Kingdom	CAB-9K10A-UK	BS89/13, BS 1363/A (13 A; replaceable fuse)	8.2	2.5	 502986
North America	CAB-9K12A-NA	NEMA 5-15P plug (15 A)	8.2	2.5	 502982
Brazil	CAB-250V-10A-BR	NBR 14136(10A)	7	2.133	

Jumper Power Cord

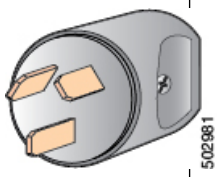
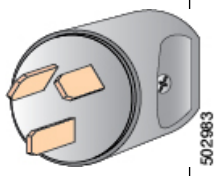
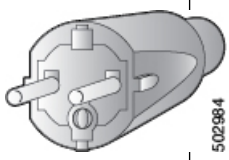
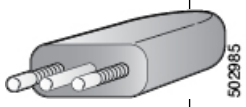
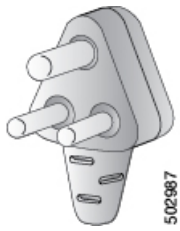
Jumper power cords have an IEC C15 connector on the outlet end of the cord and an IEC C14 connector on the inlet end of the cord. This cord is compatible with IEC C13 outlet receptacles. This type of outlet receptacle is commonly used for power distribution inside cabinets.

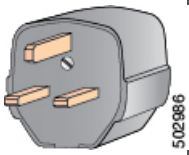
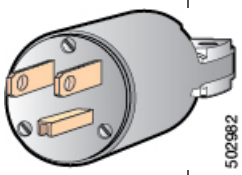
To see the list of supported jumper power cords, see the Cisco MDS 9148T 32-Gbps 48-Port Fibre Channel Switch Data Sheet.

The following table lists the supported power cords and power plugs for the Cisco MDS 9148T switch.

Cable and Port Specifications

Table 7: Supported Jumper Power Cords for the Cisco MDS 9148T Switch

Locale	Power Cord Part Number	Source Plug Type	Length		Power Plug Reference Illustration
			Feet	Meters	
Argentina	CAB-9K10A-AR	IRAM 2073 plug (10 A)	8.2	2.5	 502981
Australia	CAB-9K10A-AU	SAA/3 plug, AS 3112-1993 (10 A)	8.2	2.5	 502983
China	CAB-9K10A-CH	GB1002 (10A)		2.5	
Europe	CAB-9K10A-EU	VIIG Plug, CEE (7) VII (16 A)	8.2	2.5	 502984
Israel	CAB-9K10A-ISR	SI 32 Part 1.01 (16A)		4.27	
Italy	CAB-9K10A-IT	1/3G plug, CEI 23-16 (10 A)	8.2	2.5	 502985
Korea	CAB-9K10A-KOR	CEE 7 Standard Sheet VII (16A)		2.5	
South Africa	CAB-9K10A-SA	EL 208, SABS 164-1 (10 A)	5.12	1.82	 502987
Switzerland	CAB-9K10A-SW	12G SEV 1011 (10 A)	8.2	2.5	502988
Taiwan	CAB-9K10A-TWN	CNS 10917-2 & CNS 690 (15A)		4	

Locale	Power Cord Part Number	Source Plug Type	Length		Power Plug Reference Illustration
			Feet	Meters	
United Kingdom	CAB-9K10A-UK	BS89/13, BS 1363/A (13 A; replaceable fuse)	8.2	2.5	
North America	CAB-9K12A-NA	NEMA 5-15P plug (15 A)	8.2	2.5	
Brazil	CAB-250V-10A-BR	NBR 14136(10A)	7	2.133	

Fibre Cable Specifications

For information on the fibre cable specifications, see the Cisco MDS 9000 Family Pluggable Transceivers Data Sheet.