



APPENDIX **C**

Cable and Port Specifications

This appendix provides the cable and port specifications, and includes the following sections:

- [Cables and Adapters Provided, page C-1](#)
- [Console Port, page C-2](#)
- [COM1 Port, page C-3](#)
- [MGMT 10/100/1000 Ethernet Port, page C-4](#)
- [MGMT 10/100 Ethernet Port, page C-6](#)
- [Supported Power Cords and Plugs, page C-8](#)

Cables and Adapters Provided

The Cisco MDS 9500 Series accessory kit includes the following items:

- RJ-45 rollover cable
- DB-9F/RJ-45F PC—RJ-45 to DB-9 female DTE adapter (labeled “Terminal”)
- RJ-45/DSUB F/F adapter—RJ-45 to DB-25 female DTE adapter (labeled “Terminal”)
- RJ-45/DSUB R/P adapter—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 Cisco support through a Cisco reseller, contact the reseller directly. If you purchased support directly from Cisco Systems, contact Cisco Technical Support at this URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtm>

Console Port

The console port is an asynchronous RS-232 serial port with an RJ-45 connector. You can use the RJ-45 rollover cable and the RJ-45/DSUB F/F adapter or the DB-9F/RJ-45F PC terminal adapter to connect the console port to a computer running terminal emulation software.

Console Port Pinouts

Table C-1 lists the pinouts for the console port on the Cisco MDS 9500 Series.

Table C-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 rollover cable and RJ-45/DSUB F/F adapter (labeled “Terminal”) to connect the console port to a computer running terminal emulation software. Table C-2 lists the pinouts for the console port, the RJ-45 rollover cable, and the RJ-45/DSUB F/F adapter.

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

Console Port Signal	RJ-45 Rollover Cable		RJ4-5/DSUB F/F Terminal Adapter	Console Device
	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
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 rollover cable and DB-9F/RJ-45F PC terminal (labeled “Terminal”) to connect the console port to a computer running terminal emulation software. [Table C-3](#) lists the pinouts for the console port, the RJ-45 rollover cable, and the DB-9F/RJ-45F PC terminal.

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

Console Port	RJ-45 Rollover Cable		DB9F/RJ45F PC Terminal	Console Device
	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

COM1 Port

The COM1 port is a serial port with a DB-9 connector. The COM1 port can be connected to a modem using the cable and adapters provided in the accessory kit.

COM1 Port Pinouts

[Table C-4](#) lists the pinouts for the COM1 port on the Cisco MDS 9500 Series.



Note

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

Table C-4 COM1 Port Pinouts

Pin	Signal
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS

Table C-4 COM1 Port Pinouts (continued)

Pin	Signal
8	CTS
9	RI

Connecting the COM1 Port to a Modem

You can use the DB-9F/RJ-45F PC terminal (labeled “Terminal”) to connect to the COM1 port, and the RJ-45/DSUB R/P adapter (labeled “Modem”) to connect to the modem. You can use the RJ-45 rollover cable to connect these adapters.

Table C-5 lists the pinouts for the COM1 port, the DB-9F/RJ-45F PC terminal, RJ-45 rollover cable, and the RJ-45/DSUB R/P adapter.

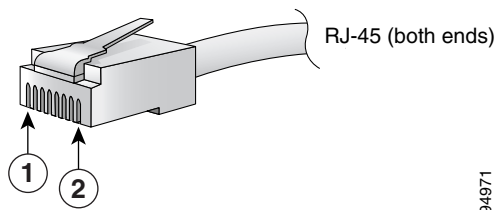
Table C-5 Port Mode Signaling and Pinouts for Modem with DB-25 Connection

COM1 Port	DB-9F/RJ45F PC terminal	RJ-45 Rollover Cable		RJ-45/DSUB R/P Adapter	Modem
Signal	DB-9 Pin	RJ-45 Pin	RJ-45 Pin	DB-25 Pin	Signal
CTS	8	8	1	5	CTS
DSR	6	7	2	8	DCD
RxD	2	6	3	3	RxD
GND	5	5	4	7	GND
GND	5	4	5	7	GND
TxD	3	3	6	2	TxD
DTR	4	2	7	20	DTR
RTS	7	1	8	4	RTS

MGMT 10/100/1000 Ethernet Port

The MGMT 10/100/1000 Ethernet port is an Ethernet port with an RJ-45 connector. You can use a modular, RJ-45, straight-through UTP cable to connect the management port to an external hub, switch, or router (see Figure C-3).

Figure C-1 RJ-45 Interface Cable Connector



1	Pin 1	2	Pin 8
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Table C-6 lists the connector pinouts and signal names for a 10/100/1000BASE-T management port (MDI) cable.

**Note**

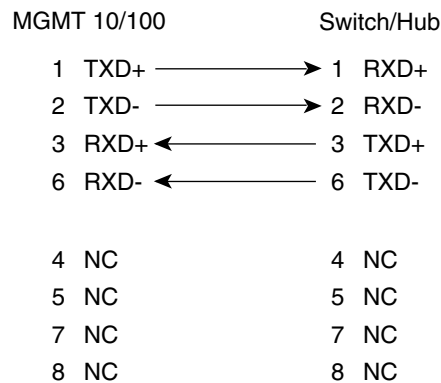
The RJ-45 interface only uses pins 1, 2, 3, and 6.

Table C-6 10/100/1000BASE-T Management Port Cable Pinout (MDI)

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

Figure C-2 shows a schematic of the 10/100/1000BASE-T cable required to connect the management port to a switch or hub (not provided with the switch).

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

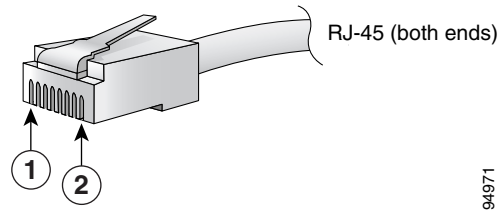


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MGMT 10/100 Ethernet Port

The MGMT 10/100 Ethernet port is an Ethernet port with an RJ-45 connector. You can use a modular, RJ-45, straight-through UTP cable to connect the management port to an external hub, switch, or router (see [Figure C-3](#)).

Figure C-3 RJ-45 Interface Cable Connector



1	Pin 1	2	Pin 8
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[Table C-8](#) lists the connector pinouts and signal names for a 10/100BASE-T management port (MDI) cable.



Note

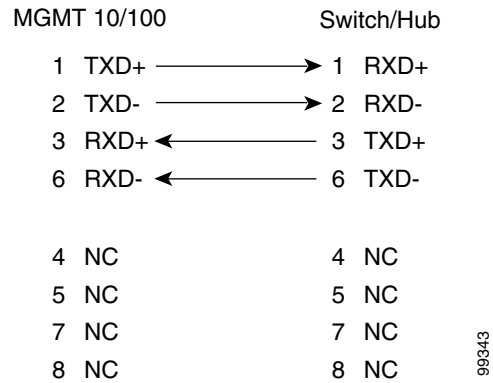
The RJ-45 interface only uses pins 1, 2, 3, and 6.

Table C-7 10/100BASE-T Management Port Cable Pinout (MDI)

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

Figure C-4 shows a schematic of the 10/100BASE-T cable required to connect the management port to a switch or hub (not provided with the switch).

Figure C-4 Twisted-Pair 10/100BASE-T Cable Schematic



Supported Power Cords and Plugs

Each power supply has a separate power cord. Standard power cords or jumper power cords are available for connection to a power distribution unit having IEC 60320 C19 outlet receptacles. The jumper power cords, for use in cabinets, are available as an optional alternative to the standard power cords.

Power Cords

The standard power cords have an IEC C19 connector on the end that plugs into the switch. The optional jumper power cords have an IEC C19 connector on the end that plugs into the switch, and an IEC C20 connector on the end that plugs into an IEC C19 outlet receptacle.



Note Only the regular power cords or jumper power cords provided with the switch are supported.

[Table C-8](#) lists the power cords for the Cisco MDS 9500 Series switches and provides their lengths in feet and meters.

Table C-8 Power Cords for the MDS 9500 Series Switches

Description	Length	
	Feet	Meters
MDS 9513 and MDS 9509 - 3000W Power Supply		
Power Cord, 125VAC 20A NEMA 5-20 Plug, North America/Japan	14	4.27
Power Cord, 250VAC 16A US/Japan, Src Plug NEMA 6-20	13.16	4
Power Cord, 250VAC 16A US/Japan, Src Plug NEMA L6-20	13.58	4.14
Power Cord, 250VAC 16A Europe, Src Plug CEE 7/7	13.65	4
Power Cord, 250VAC 16A International, Src Plug IEC 309	13.58	4.14
Power Cord, 250VAC 16A Switzerland, Src Plug SEV 5934-2 Type 23	8	2.5
Power Cord, 250VAC 16A South Africa, Src Plug EL208, SABS 164-1	14	4.27
Power Cord, 250VAC 16A Israel, Src Plug SI16S3	14	4.27
Power Cord, 250VAC 16A China, Src Plug GB16C	14	4.27
Power Cord, 250VAC 16A Australia, Src Plug AU20S3	14.76	4.5
Power Cord, 250VAC 16A Korea, Src Plug CEE (7) VII	14.83	4.5
Cabinet Jumper Power Cord, 250VAC 16A, C20-C19 Connectors	9	2.74
MDS 9509 - 2500W Power Supply		
Power Cord, 250VAC 20A NEMA, 6-20 Plug, USA	13.12	4
Power Cord, 250VAC 20A NEMA L6-20 Twist Lock Plug, USA	13.58	4.14

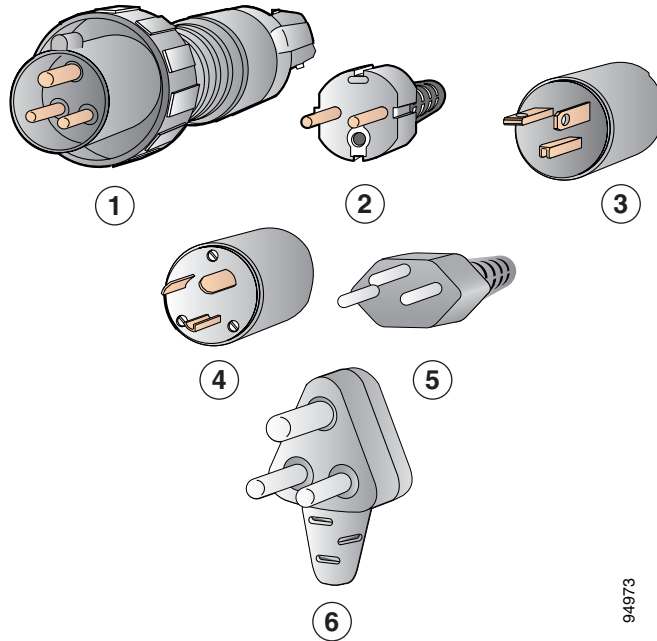
Table C-8 Power Cords for the MDS 9500 Series Switches

Description	Length	
	Feet	Meters
Power Cord, 250VAC 16A CEE 7/7 Plug, EU	13.12	4
Power Cord, 250VAC 16A IEC 309 Plug, International	13.58	4.14
Power Cord, 250VAC 16A SEV 1011 Plug, Switzerland	8	2.44
Power Cord, 250VAC SABS 1661 Plug, South Africa	14	4.27
Power Cord, 250VAC 16A SI16S3 Plug, Israel	14	4.27
Cabinet Jumper Power Cord, 250VAC 16A, C20-C19 Connectors	9	2.74
MDS 9506		
Power Cord, 250VAC 20A NEMA 6-20 Plug, US	13.94	4.25
Power Cord, 250VAC 20A NEMA L6-20 Twist Lock Plug, US	13.94	4.25
Power Cord, 250VAC 16A CEE 7/7 Plug, EU	13.94	4.25
Power Cord, 250VAC 16A IEC 309 Plug, INTL	13.94	4.25
Power Cord, 250VAC SEV 1011 Plug, SWITZ	13.94	4.25
Power Cord, 250VAC SABS 1661 Plug, South Africa	13.94	4.25
Power Cord, 250VAC 16A SI16S3 Plug, Israel	13.94	4.25
Power Cord, 250VAC 13A BS1363 Plug (13A fuse), UK	13.94	4.25
Power Cord, 250VAC 10A GB1002 Plug, China	13.94	4.25
Power Cord, 250VAC 13A KSC8305 Plug, Korea	13.94	4.25
Power Cord, 250VAC 15A CNS10917-2 Plug, Taiwan	13.94	4.25
Cabinet Jumper Power Cord, 250VAC 16A C20-C19 Connectors	9	2.74

Supported Plugs for 6000-W AC, 2500-W AC, and 1900-W AC Power Supplies

Figure C-5 shows the supported plugs for the 6000-W AC, 3000-W AC, 2500-W AC, and 1900-W AC power supplies.

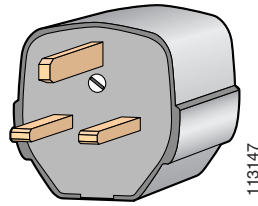
Figure C-5 6000-W AC, 3000-W AC, 2500-W AC, and 1900-W AC Power Supply Plugs



1	International (6000 W, 3000 W, 2500 W, and 1900 W) IEC 309 (20 A)	4	North America (locking) (6000 W, 3000 W, 2500 W, and 1900 W) NEMA L6-20 plug (20 A)
2	Europe (6000 W, 3000 W, 2500 W, and 1900 W) CEE 7/7 (16 A)	5	Switzerland (6000 W, 3000 W, 2500 W, and 1900 W) 23 G SEV 1011 (16 A)
3	North America (non-locking) (6000 W, 3000 W, 2500 W, and 1900 W) NEMA 6-20 plug (20 A)	6	South Africa (6000 W, 3000 W, 2500 W, and 1900 W) EL 208, SABS 164-1 (16 A)

Figure C-6 shows an additional plug that is supported for the 1900-W AC power supply only.

Figure C-6 Additional Power Supply Plug Supported for 1900-W Only



1	United Kingdom BS89/13, BS 1363/A (13 A; replaceable fuse)
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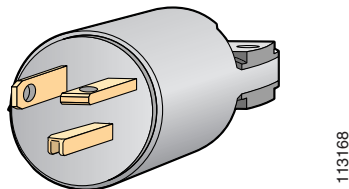
Figure C-7 shows an additional plug that is supported for the 3000-W and 2500-W power supply, using 110 VAC.



Note

Using the plug in Figure C-7 at 110 VAC results in 1300 W available to the system.

Figure C-7 Additional Power Supply Plug Supported for 3000-W and 2500-W 110 VAC Only

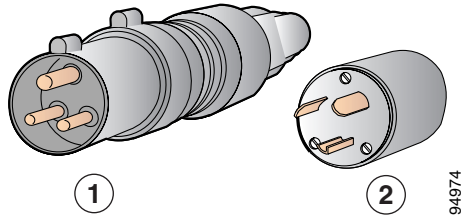


1	NEMA 5-20P North American power cord product ID: CAB-7513AC 110 VAC (20 A)
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Supported Plugs for the 4000-W AC Power Supply

Figure C-8 shows the supported plugs for the 4000-W AC power supply. The power cable on the 4000 W power supply is nondetachable.

Figure C-8 4000-W Power Supply Plugs

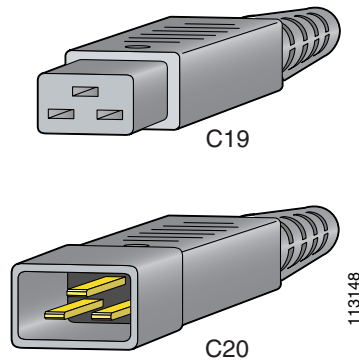


1 International (4000-W power supply) IEC 60309 (3 0A, 250 V)	2 North America (Locking) (4000-W power supply) NEMA L6-30 plug (30 A, 250 V)
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Jumper Power Cord

Figure C-9 shows the C19 and C20 connectors on the optional jumper power cord for the Cisco MDS 9500 Series. The C19 connector plugs into the C20 inlet on the Cisco MDS 9500 Series power supply, while the C20 connector plugs into the C19 receptacle of a power distribution unit for a cabinet.

Figure C-9 End of C19 and C20 Connectors on Jumper Power Cord for Cisco MDS 9500 Series



1 C19 and C20 connectors on jumper power cord for Cisco 9500 Series Power cord product ID:CAB-C19-CBN 250 VAC 16 A, C20-C19 connectors

Power Supply AC Power Cords

Figure C-9 lists the specifications for the 6000 W AC power cords that are available for the AC-input power supply. Included in the table are references to illustrations of the power cords.

Table 0-9 Power Supply AC Power Cords

Locale	Power Cord Part Number	Source Plug Type	Cordset Rating	Power Cord Reference Illustration
North America/Japan	CAB-9K2A-NA	NEMA 5-20	20 A, 125 VAC	Figure C-10
US/Japan	CAB-9K16A-US2	NMEA L6-20	16 A, 250 VAC	Figure C-11
Australia	CAB-9K16A-AUS	AU20S3	16 A, 250 VAC	Figure C-12
China	CAB-9k16A-CH	GB16C	16 A, 250 VAC	Figure C-13
Switzerland	CAB-9K16A-SW	SEV 5934	16 A 250 VAC	Figure C-14
Continental Europe	CAB-9K16A-EU	CEE7/7	16 A 250 VAC	Figure C-15
Cabinet Jumper Power Cord	CAB-C19-CBN	C 20-C19	16 A 250 VAC	Figure C-16

AC Power Cord Illustrations

This section contains the AC power cord illustrations. Note that an AC power cord can be used with several power supplies. See the power supply specifications tables for the correct AC power cord illustrations for your power supply.

Figure C-10 CAB-9K20A-NA

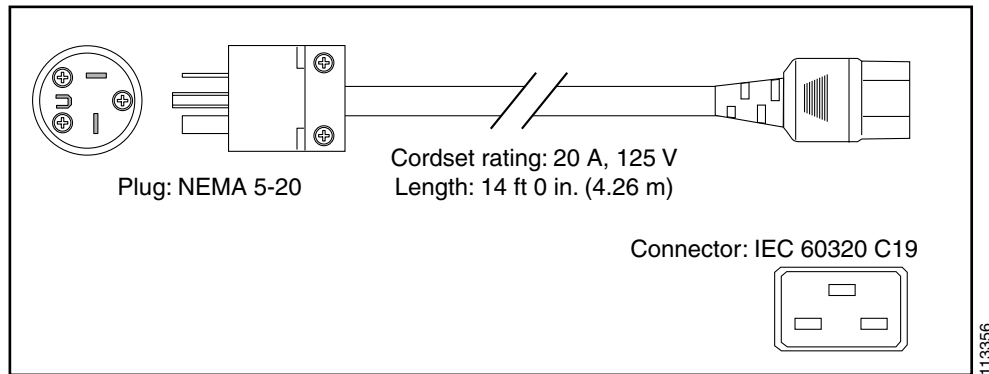


Figure C-11 CAB-9K16A-US2

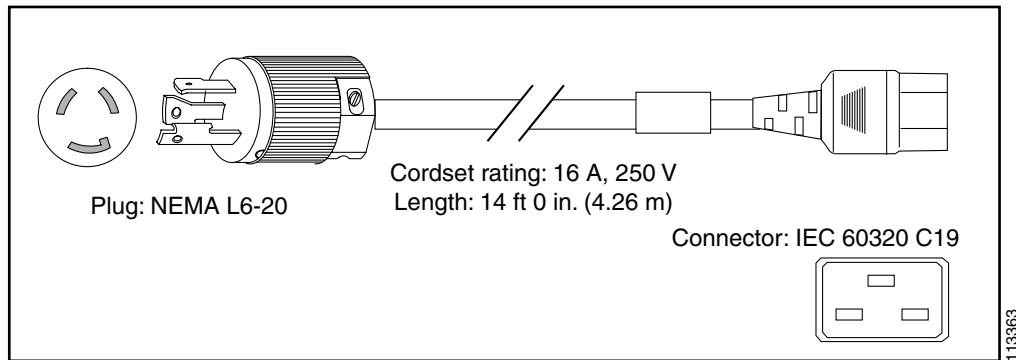


Figure C-12 CAB-9K16A-AUS

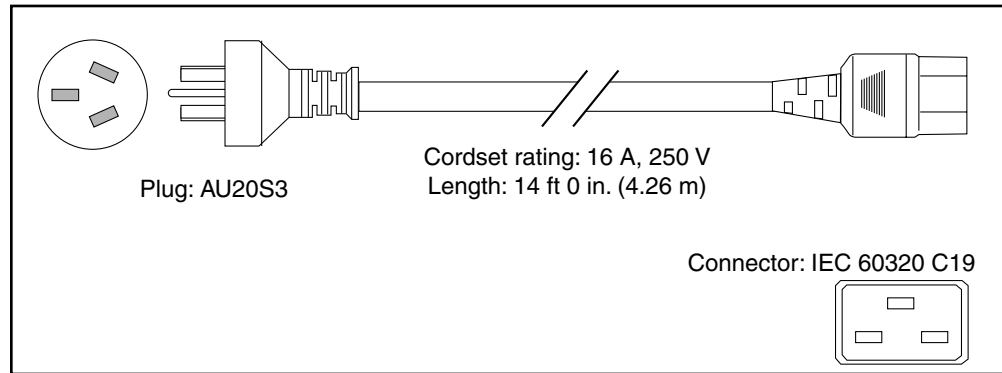


Figure C-13 CAB-9K16A-CH

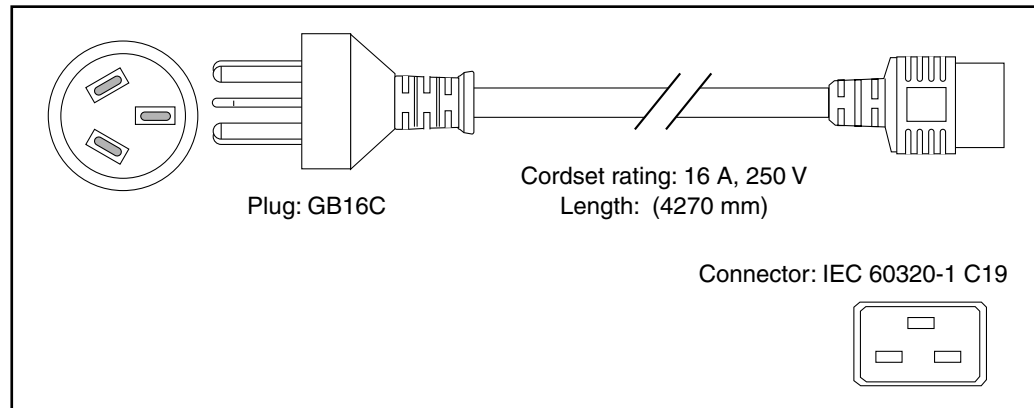


Figure C-14 CAB-9K16A-SW

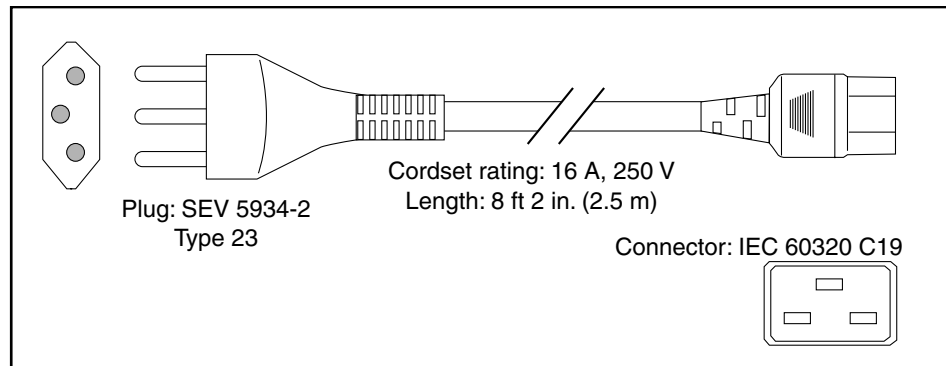


Figure C-15 CAB-9K16A-EU

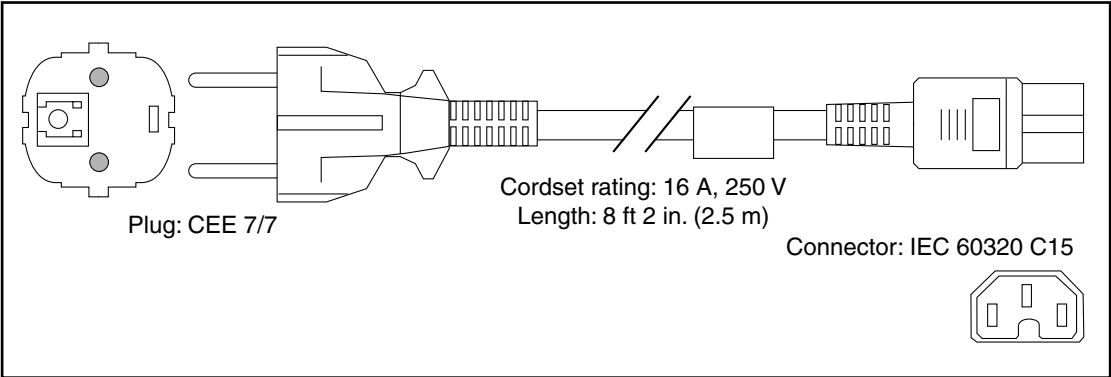


Figure C-16 CAB-C19-CBN

