Overview

Features

The Cisco Firepower Management Center (FMC) 1600, 2600, and 4600 management appliances run software that provides extensive intelligence about the users, applications, devices, threats, and vulnerabilities that exist in your network. It also uses this information to analyze your network's vulnerabilities. It then provides tailored recommendations on what security policies to put in place and what security events you should investigate.

See Product ID Numbers, on page 15 for a list of the field-replaceable product IDs (PIDs) associated with the FMC 1600, 2600, and 4600. You can remove and replace drives and power supplies. For all other internal component failures, you must send your chassis for return material authorization (RMA).

The FMC management appliances support Cisco Firepower Threat Defense software. See the Cisco Firepower Compatibility Guide, which provides Cisco Firepower software and hardware compatibility, including operating system and hosting environment requirements, for each supported Firepower version.

The following table lists the features of the FMC 1600, 2600, and 4600.

Table 1: FMC 1600, 2600, and 4600 Features

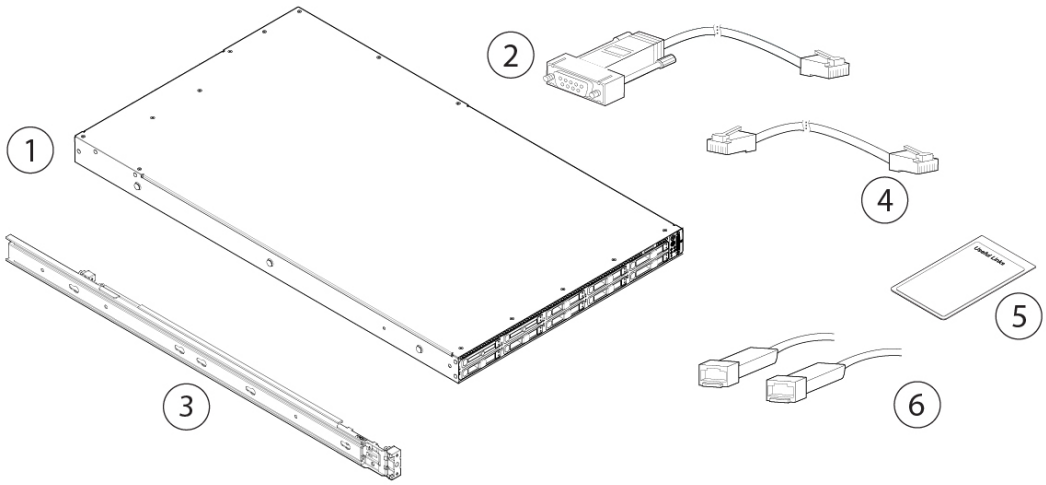
Feature	1600	2600	4600
Security standards certifications	• Common Criteria Certification for the Network Device Collaborative Protection Profile (NDcPPv2.2E), Firewall Collaborative Protection Profile Module (MOD_FW_v1.4e), Virtual Private Network Gateway Protection Profile Module (MOD_VPNGW_v1.1), and IPS Extended Package (IPSEP v2.11) on FTD 6.4.*x* and FX-OS 2.6.*x* • Federal Information Processing Standards (FIPS) 140-2 on FTD 6.4.*x* • Department of Defense Information Network Approved Product List (DoDIN APL) • US Government Compliance for IPv6 (USGv6) and Ready Logo certified on FMC 7.0.*x* See the "Security Certifications Compliance" topic in the "Appliance Platform Settings" chapter in the Firepower Management Center Configuration Guide, Version 6.7 for the instructions on how to enable security certifications compliance.		
Form factor	1 RU		
Rack mount	Standard 19-in. (48.3 cm) 4-post EIA rack		
Airflow	Front to rear Cold aisle to hot aisle		
Pullout asset card	Displays the serial number and the MAC address for the two built-in management ports		
Grounding hole	Two threaded holes for a dual-hole grounding lug Use is optional; the supported AC power supplies have internal grounding, so no additional chassis grounding is required.		
Unit identification button	On the front panel		
Power button	On the rear panel		
Processor	Before January 2021: One Intel Xeon 4110 processor After January 2021: One Intel Xeon 4215	Before January 2021: Two Intel Xeon 4110 processors After January 2021: Two Intel Xeon 4215	Before January 2021: Two Intel Xeon 4116 processors After January 2021: Two Intel Xeon 4214
Memory	32-GB RAM	64-GB RAM	128-GB RAM

Feature	1600	2600	4600
RDIMMs Internal component only; not field-replaceable	Before January 2021: Two 16-GB DDR4-2400-MHz DIMMs After January 2021: Two 16-GB DDR4-2933-MHz DIMMs	Before January 2021: Four 16-GB DDR4-2400-MHz DIMMs After January 2021: Four 16-GB DDR4-2933-MHz DIMMs	Before January 2021: Eight 16-GB DDR4-2400-MHz DIMMs After January 2021: Eight 16-GB DDR4-2933-MHz DIMMs
Management ports	Two built-in RJ-45 SFP+ ports Support for 1000 Mbps, 1 Gbps, and 10 Gbps The primary management port is eth0. You can use eth1, eth2, and eth3 as secondary management or event ports.		
USB ports	Two USB 3.0 Type A		
VGA port	One 3-row 15-pin DB-15 connector Enabled by default		
SFP ports	Two fixed SFP+ ports		
Supported SFP+	SFP-10G-SR (10 Gb) SFP-10G-LR (10 Gb) **Note** Only these two SFPs have been qualified for use on the FMC. Although non-Cisco SFPs and other Cisco SFPs are allowed, we do not recommend using them because they have not been tested and validated by Cisco. Cisco TAC may refuse support for any interoperability problems that result from using an untested SFP transceiver.		
Serial console port	RJ-45 serial port running RS-232 (RS-232D TIA-561)		
System power	Two 770-W AC power supplies Hot-swappable and redundant as 1+1		
Power consumption	2626 BTU/hr		
Fans	Six fans for front-to-rear cooling Internal component only; not field-replaceable		
Storage	Two 1.2-TB 10-K SAS HDDs RAID 1, hot-swappable	Four 600-GB 10-K SAS HDDs RAID 5, hot-swappable	Ten 1.2-TB SAS HDDs RAID 6, hot-swappable

Package Contents

The following figure shows the package contents for the FMC 1600, 2600, and 4600. Note that the contents are subject to change and your exact contents might contain additional or fewer items.

Figure 1: Package Contents

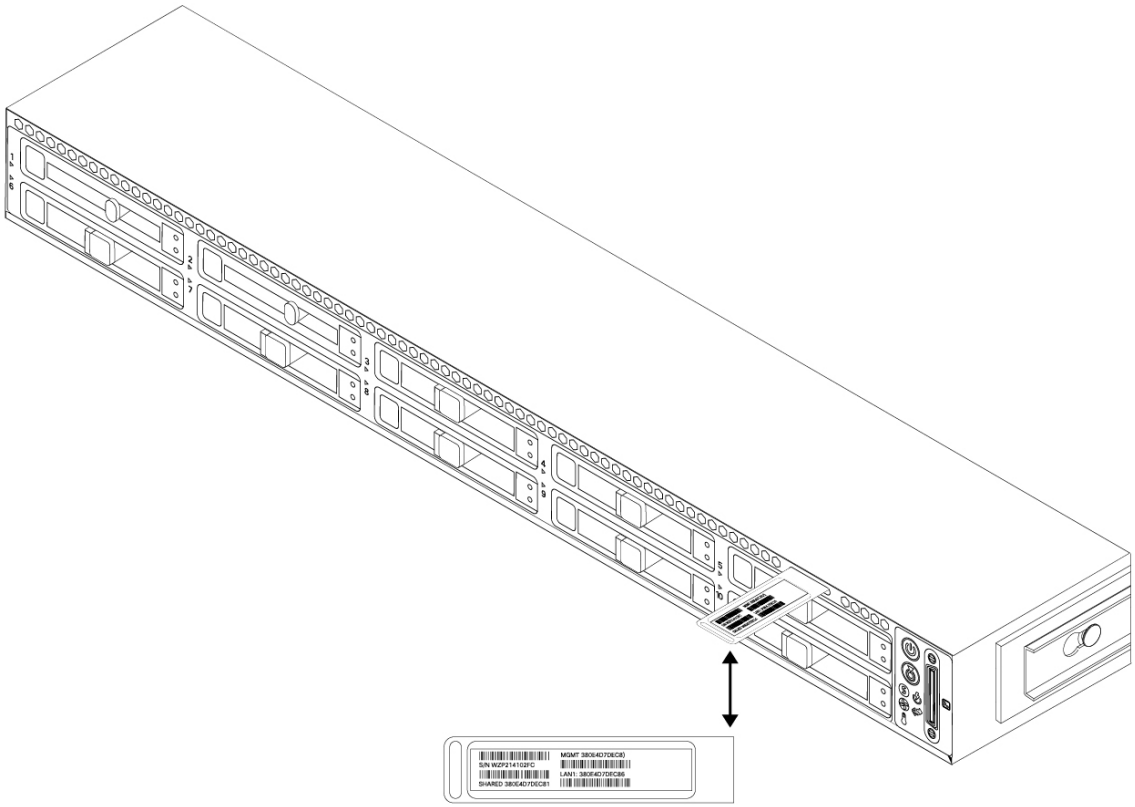


1	Chassis	**2**	RJ-45 to DP9-RS232 console cable (Cisco part number 72-3383-XX)
3	Cisco rail kit (Cisco part number 800-43376-02)	**4**	RJ-45 to RJ-45 Cat 5 Ethernet cable, yellow six feet long (Cisco part number 72-1482-XX)
5	*Useful Links Cisco Firepower Management Center 1600, 2600, and 4600* The steps in the Useful Links document send you to the documentation you need to install, set up, and configure your FMC.	**6**	Two 10-Gb SFP+ transceivers with cables Optional for all models; in package if ordered.

Serial Number Locations

The serial number (SN) for the FMC 1600, 2600, and 4600 is printed on the pullout asset card located on the front panel as shown in the following figure of the FMC 1600.

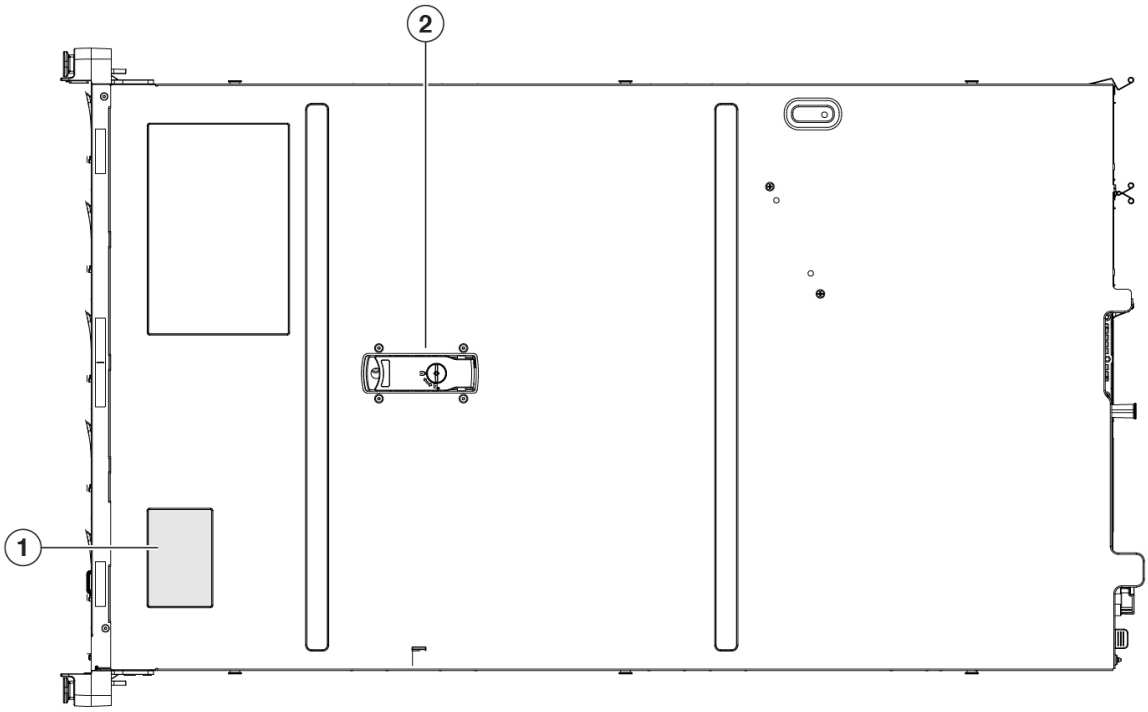
Figure 2: Serial Number on Pullout Asset Card



The serial number is also on the label on the cover of the chassis as shown in the following figure.

Caution The cover latch on the top of the chassis cover is not supported. There are no internal field-replaceable parts in the FMC 1600, 2600, and 4600.

Figure 3: Serial Number Location on Cover

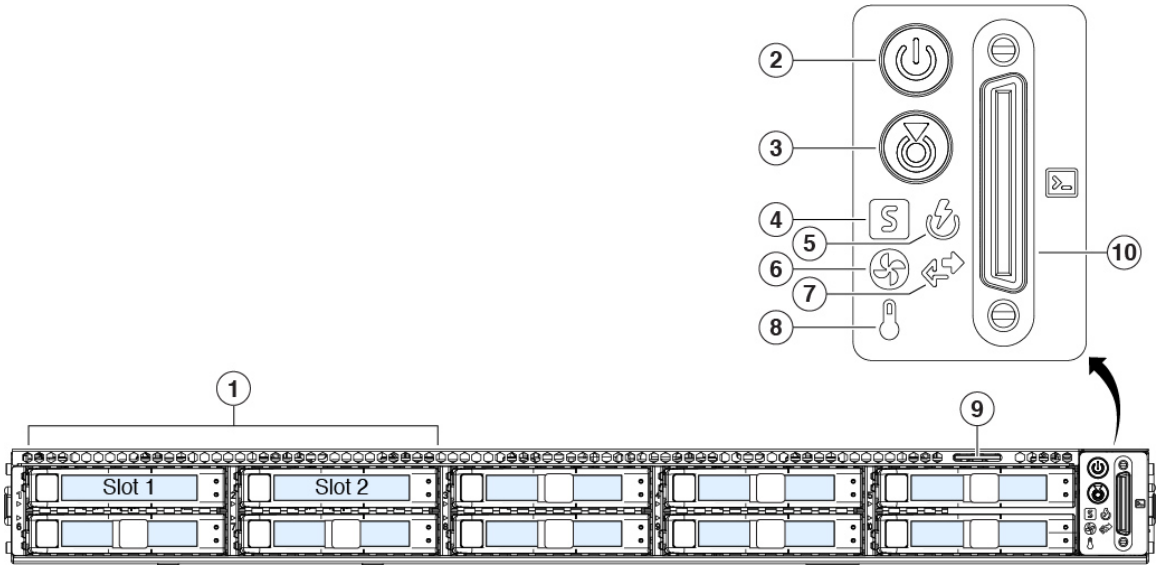


1	Serial number label	**2**	Cover latch Not supported

Front Panel

The following figure shows the front panel features and disk-drive configuration for the FMC 1600. See Front Panel LEDs, on page 9 for a description of the LEDs.

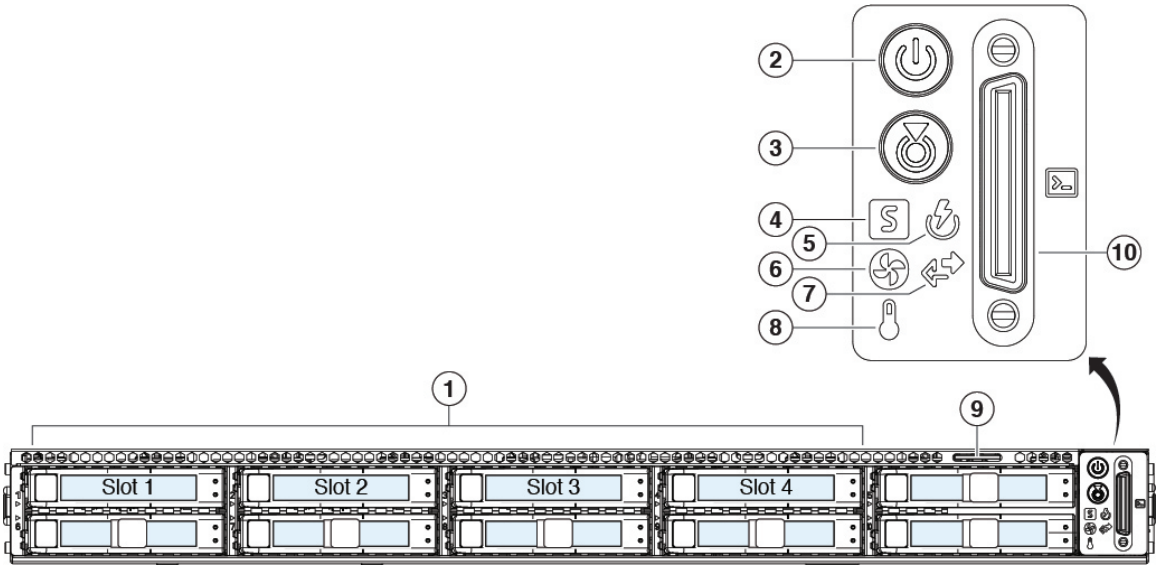
Figure 4: FMC 1600 Front Panel



1	Drive bays Supports two SAS HDDs in slots 1 and 2	**2**	Power button/power status LED
3	Unit identification button/LED	**4**	System status LED
5	Power supply status LED	**6**	Fan status LED
7	Network link activity LED	**8**	Temperature status LED
9	Pullout asset card	**10**	Keyboard, video, and mouse (KVM) port Not supported; use the VGA and USB keyboard ports instead.

The following figure shows the front panel features and disk-drive configuration for the FMC 2600. See Front Panel LEDs, on page 9 for a description of the LEDs.

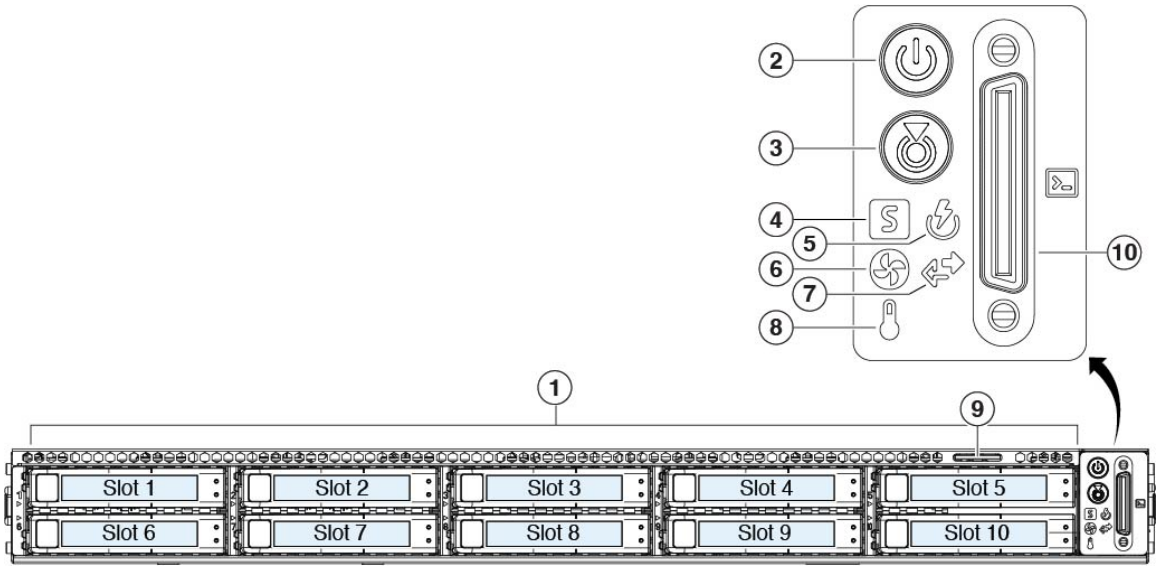
Figure 5: FMC 2600 Front Panel



1	Drive bays Supports four SAS HDDs in slots 1 through 4	**2**	Power button/power status LED
3	Unit identification button/LED	**4**	System status LED
5	Power supply status LED	**6**	Fan status LED
7	Network link activity LED	**8**	Temperature status LED
9	Pullout asset card	**10**	KVM port Not supported; use the VGA and USB keyboard ports instead.

The following figure shows the front panel features and disk-drive configuration for the FMC 4600. See Front Panel LEDs, on page 9 for a description of the LEDs.

Figure 6: FMC 4600 Front Panel

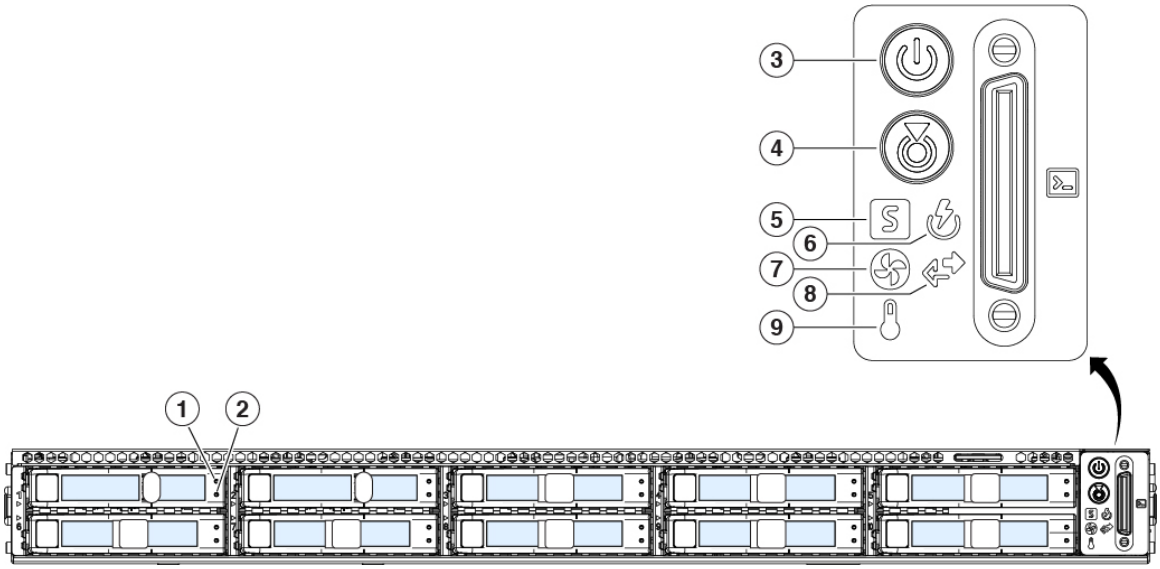


1	Drive bays Supports ten SAS HDDs in slots 1 through 6	**2**	Power button/power status LED
3	Unit identification button/LED	**4**	System status LED
5	Power supply status LED	**6**	Fan status LED
7	Network link activity LED	**8**	Temperature status LED
9	Pullout asset card	**10**	KVM port Not supported; use the VGA and USB keyboard ports instead.

Front Panel LEDs

The following figure shows the front panel LEDs and describes their states.

Figure 7: Front Panel LEDs and Their States



1	Drive fault LED: • Off—The drive is operating properly. • Amber—Drive fault detected. • Amber, flashing—The drive is rebuilding. • Amber, flashing with 1-second interval—Drive locate function activated in the software.	**2**	Drive activity LED: • Off—There is no drive in the drive tray (no access, no fault). • Green—The drive is ready. • Green, flashing—The drive is reading or writing data.
3	Power LED: • Off—There is no AC power to the chassis. • Amber—The chassis is in standby mode. • Green—The chassis is in main power mode. Power is supplied to all components.	**4**	Unit identification LED: • Off—The unit identification function is not in use. • Blue, flashing—The unit identification function is activated.

5	System status LED:
	• Green—The chassis is running in normal operating condition.
	• Green, flashing—The chassis is performing system initialization and memory check.
	• Amber—The chassis is in a degraded operational state (minor fault).
	  • Power supply redundancy is lost.
	  • CPUs are mismatched.
	  • At least one CPU is faulty.
	  • At least one DIMM is faulty.
	  • At least one drive in a RAID configuration failed.
	• Amber, two flashes—There is a major fault with the system board.
	• Amber, three flashes—There is a major fault with the DIMMs.
	• Amber, four flashes—There is a major fault with the CPUs.
		6	Power supply status LED:
			• Green—All power supplies are operating normally.
			• Amber—One or more power supplies are in a degraded operational state.
			• Amber, flashing—One or more power supplies are in a critical fault state.

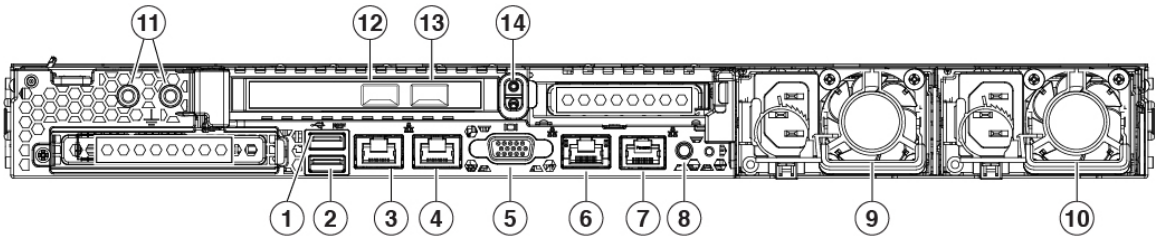
7	Fan status LED: • Green—All fans are operating properly. • Amber, flashing—One or more fans breached the unrecoverable threshold.	**8**	Network link activity LED: • Off—The Ethernet port link is idle. • Green—One or more Ethernet ports are link-active, but there is no activity. • Green, flashing—One or more Ethernet ports are link-active with activity.
9	Temperature status LED: • Green—The chassis is operating at normal temperature. • Amber—One or more temperature sensors breached the critical threshold. • Amber, flashing—One or more temperature sensors breached the unrecoverable threshold.		

Rear Panel

Note The Cisco Integrated Management Controller (CIMC) is only supported for Lights-Out Management (LOM) access on the CIMC port (labeled M) on a Serial Over LAN (SOL) connection to remotely monitor or manage the FMC system. For information on using LOM and SOL, see the "Set Up Lights Out Management" section in the Cisco Firepower Management Center Getting Started Guide for Models 1600, 2600, and 4600.

The following figure shows the rear panel of the FMC 1600, 2600, and 4600.

Figure 8: Rear Panel



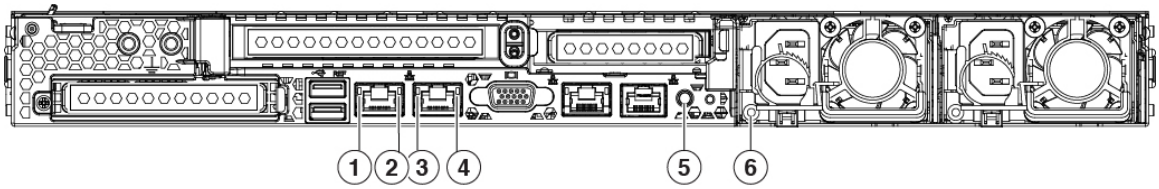
1	USB 3.0 Type A (USB 1) You can connect a keyboard, and along with a monitor on the VGA port, you can access the console.	**2**	USB 3.0 Type A (USB 2) You can connect a keyboard, and along with a monitor on the VGA port, you can access the console.
3	eth0 management interface (labeled 1) Supports 100/1000/10000 Mbps depending on link partner capability.	**4**	eth1 management interface (labeled 2) Gigabit Ethernet 100/1000/10000 Mbps interface, RJ-45, LAN2
5	VGA video port (DB-15 connector)	**6**	CIMC interface (labeled M) **Note** CIMC is supported *only* for LOM access. CIMC is *not* supported on any other interfaces.
7	Serial console port (RJ-45 connector) Disabled by default; use the VGA port and keyboard USB port instead. For more information on the serial port, see the "Set up Serial Access" topic in the Cisco Firepower Management Center Getting Started Guide for Models 1600, 2600, and 4600.	**8**	Unit identification button
9	770-W AC power supply (PSU 1)	**10**	770-W AC power supply (PSU 2)

11	Threaded holes for dual-hole grounding lug	**12**	eth2 management interface (Optional) 10-Gigabit Ethernet SFP+ support SFP-10G-SR and SFP-10G-LR are qualified for use on the FMC.
13	eth3 management interface (Optional) 10-Gigabit Ethernet SFP+ support SFP-10G-SR and SFP-10G-LR are qualified for use on the FMC.	**14**	Riser handle Not supported

Rear Panel LEDs

The following figure shows the rear panel LEDs and describes their states.

Figure 9: Rear Panel LEDs and Their States



1	100-Mbps/1-Gbps/10-Gbps Ethernet link (speed on both LAN1 and LAN2): • Off—Link speed is 100 Mbps. • Amber—Link speed is 1 Gbps. • Green—Link speed is 10 Gbps.	**2**	100-Mbps/1-Gbps/10-Gbps Ethernet link status (speed on both LAN1 and LAN2): • Off—No link is present. • Green—Link is active. • Green, flashing—Traffic is present on the active link.
3	1-Gbps Ethernet dedicated management link: • Off—Link speed is 10 Mbps. • Amber—Link speed is 100 Gbps. • Green—Link speed is 1 Gbps.	**4**	1-Gbps Ethernet dedicated management link: • Off—No link is present. • Amber—Link is active. • Green, flashing—Traffic is present on the active link.

5	Unit identification: • Off—The unit identification function is not in use. • Blue, flashing—The unit identification function is activated.	**6**	Power supply (one LED for each power supply): • Off—No AC input (12-V main power off; 12-V standby power off) • Green, flashing—12-V main power off; 12-V standby power on. • Green—12-V main power on; 12-V standby power on. • Amber, flashing—Warning threshold detected but 12-V main power on. • Amber—Critical error detected; 12-V main power off (for example, overcurrent, overvoltage, or overtemperature failure).

Power Supply

The following table lists the specifications for each 770-W AC power supply used in the FMC 1600, 2600, and 4600.

Table 2: Power Supply Specifications

Description	Specification
Power consumption	1313 BTU/hr
AC input voltage range	Nominal range: 100 to 120 V AC, 200 to 240 V AC Range: 90–132 V AC, 180–264 V AC
AC input frequency	Nominal range: 50–60 Hz Range: 47–63 Hz
Maximum AC input current	9.5 A peak at 100-V AC 4.5 A peak at 208 V AC
Maximum input volt amperes	950 VA at 100 V AC
Maximum output power for each power supply	770 W
Maximum inrush current	15 A (subcycle duration)
Maximum hold-up time	12 ms at 770 W
Power supply output voltage	12 V DC
Power supply standby voltage	12 V DC
Efficiency rating	Climate Savers Platinum Efficiency (80 Plus Platinum certified)

Description	Specification
Form factor	RSP2
Input connector	IEC320 C13/C15

Hardware Specifications

The following table lists the hardware specifications for the FMC 1600, 2600, and 4600.

Table 3: FMC 1600, 2600, and 4600 Hardware Specifications

Specification	1600	2600	46
Dimensions (H x W x D)	1.7 x 16.89 x 29.8 in. (4.32 x 43.0 x 75.6 cm)		
Weight	32.2 lb (16.6 kg)	34.1 lb (16.8 kg)	36
Temperature	Operating: 50 to 95°F (10 to 35°C) Maximum temperature is derated by 1°F/547 ft (1°C/300 m) of altitude abov Nonoperating: –40 to 149°F (–40 to 65°C) When the appliance is stored or transported.		
Relative humidity	Operating: 8 to 90% noncondensing Nonoperating: 5 to 95% noncondensing		
Altitude	Operating: 0 to 10,000 ft Nonoperating: 0 to 40,000 ft when the appliance is stored or transported		
Sound power level	5.8 Bels (measure A-weighted per ISO7779 LWAd) Operation at 73°F (23°C)		
Sound pressure level	43 dBa (measure A-weighted per ISO7779 LpAM) Operation at 73°F (23°C)		

Product ID Numbers

The following table lists the field-replaceable PIDs associated with the FMC 1600, 2600, and 4600. The spare components are ones that you can order and replace yourself. If any internal components fail, you must get a return material authorization (RMA) for the entire chassis including the SFPs and SFP cables. Remove the drives and power supplies before you send the chassis for RMA. See the Cisco Returns Portal for more information.

Table 4: FMC 1600, 2600, and 4600 PIDs

PID	Description
FMC-M5-PS-AC-770W	AC power supply
FMC-M5-PS-AC-770W=	AC power supply (spare)
FMC-M5-HDD-1.2TB	FMC 1600 and 4600 1.2-TB drive
FMC-M5-HDD-1.2TB=	FMC 1600 and 4600 1.2-TB drive (spare)
FMC-M5-HDD-600G	FMC 2600 600-GB drive
FMC-M5-HDD-600G=	FMC 2600 600-GB drive (spare)
UCSC-RAILB-M4	Rail kit

Power Cord Specifications

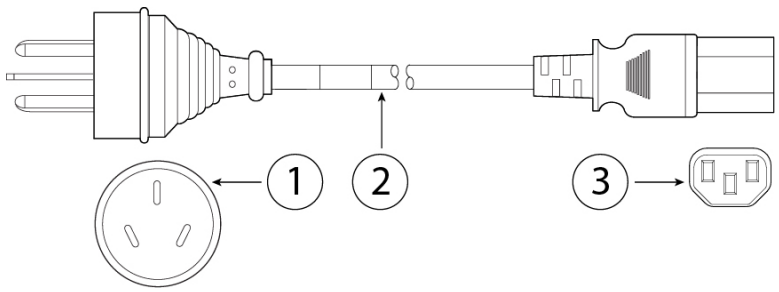
Each power supply has a separate power cord. Standard power cords or jumper power cords are available for connection to the FMC 1600, 2600, and 4600. The jumper power cords for use in racks are available as an optional alternative to the standard power cords.

If you do not order the optional power cord with the system, you are responsible for selecting the appropriate power cord for the product. Using a incompatible 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.

Note Only the approved power cords and jumper cords provided with the FMC 1600, 2600, and 4600 are supported.

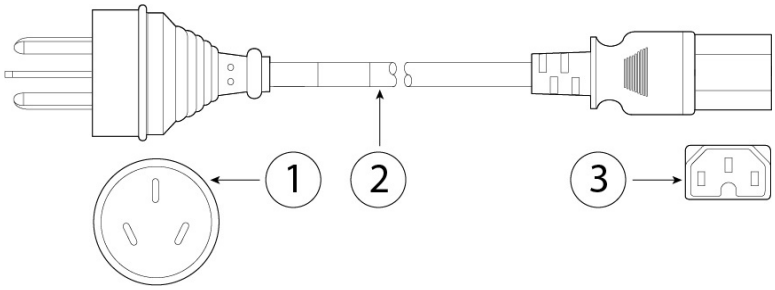
The following power cords and jumper cords are supported.

Figure 10: Argentina (CAB-250V-10A-AR)



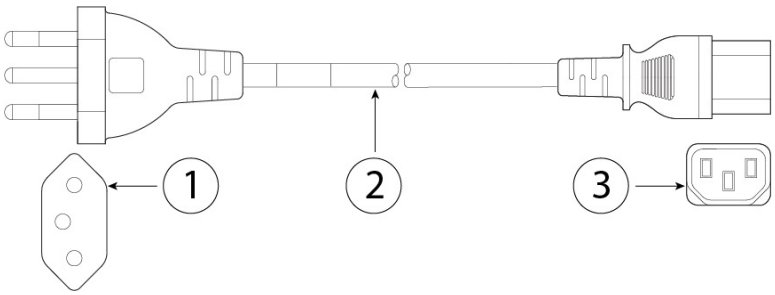
1	Plug: IRAM 2073	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		—

Figure 11: Australia (CAB-9K10A-AU)



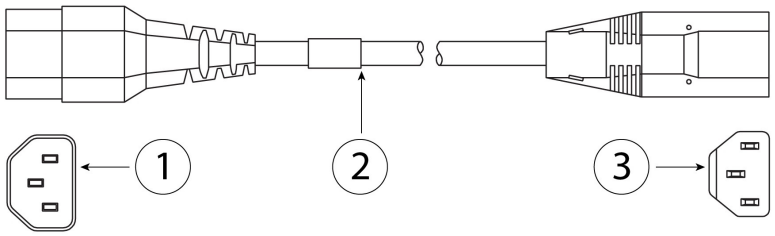
1	Plug: A.S. 3112-2000	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C15		—

Figure 12: Brazil (PWR-250V-10A-BZ)



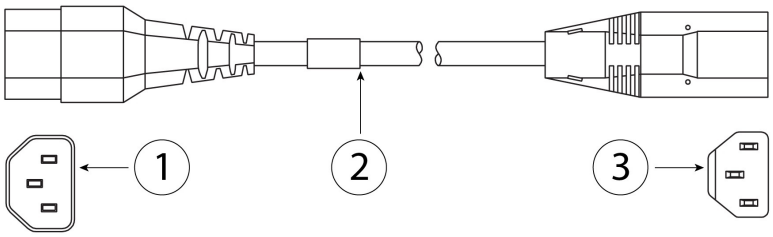
1	Plug: NBR 14136	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		—

Figure 13: Cabinet Jumper (CAB-C13-C14-2M)



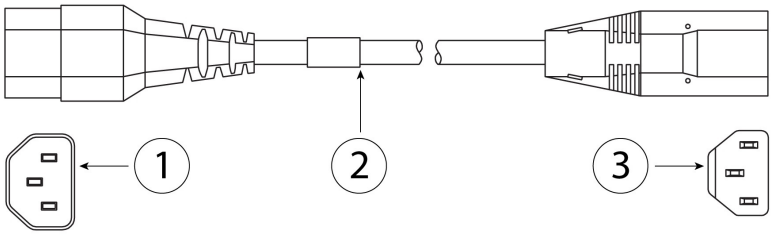
1	Plug: SS10A	**2**	Cord set rating: 10A, 250V
3	Connector: HS10S, C-13 to C-14		—

Figure 14: Cabinet Jumper (CAB-C13-C14-AC)



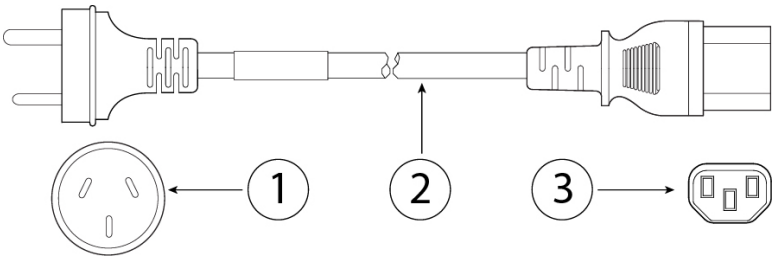
1	Plug: SS10A	**2**	Cord set rating: 10 A, 250 V
3	Connector: HS10S, C-13 to C-14 (recessed receptacle)		—

Figure 15: Cabinet Jumper (CAB-C13-CBN)



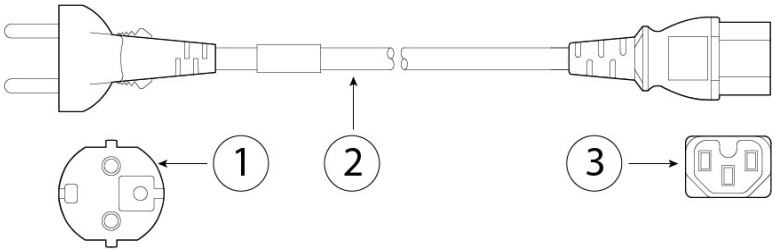
1	Plug: SS10A	**2**	Cord set rating: 10 A, 250 V
3	Connector: HS10S, C-13 to C-14		—

Figure 16: China (CAB-250V-10A-CH)



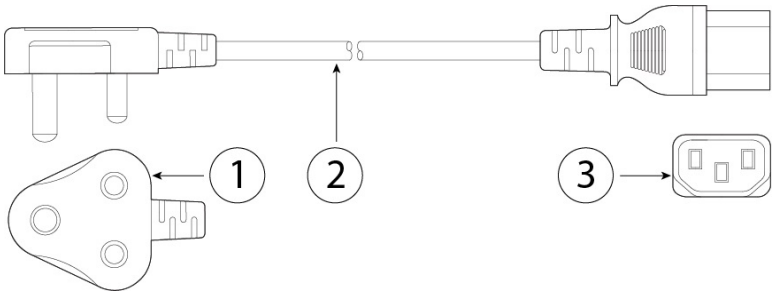
1	Plug: GB2099.1/2008	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		—

Figure 17: Europe (CAB-9K10A-EU)



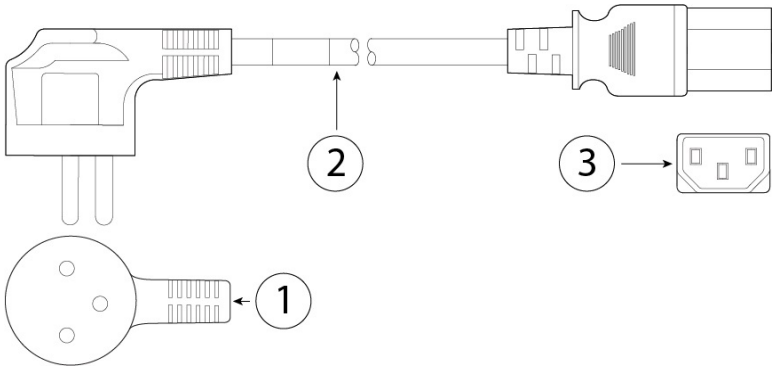
1	Plug: CEE 7/7 (M2511)	**2**	Cord set rating: 10 A/16 A, 250 V
3	Connector: IEC 60320/C15 (VSCC 15)		—

Figure 18: India (CAB-250V-10A-ID)



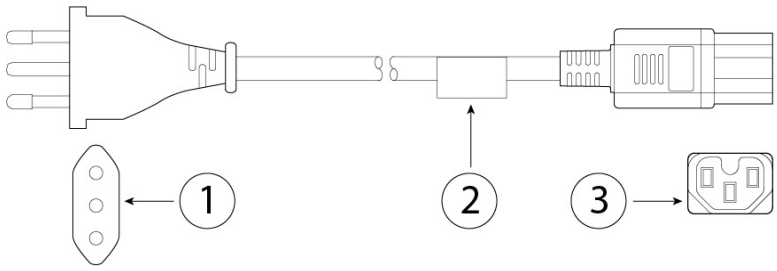
1	Plug: IS 6538-1971	**2**	Cord set rating: 16 A, 250 V
3	Connector: IEC 60320-C13		—

Figure 19: Israel (CAB-250V-10A-IS)



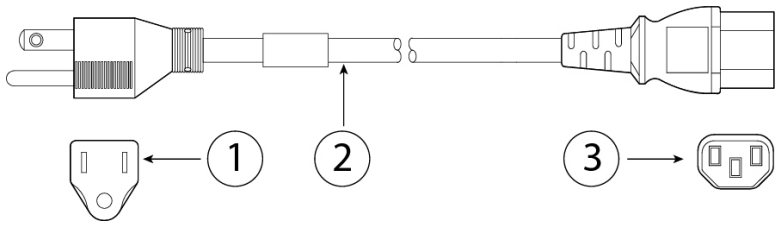
1	Plug: SI-32	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320-C13		—

Figure 20: Italy (CAB-9K10A-IT)



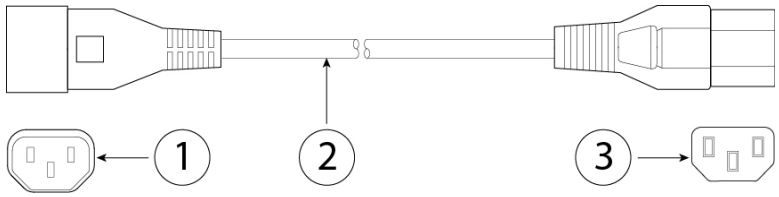
1	Plug: CEI 23-16/VII (I/3G)	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C15 (EN 60320/C15M)		—

Figure 21: Japan (CAB-JPN-3PIN)



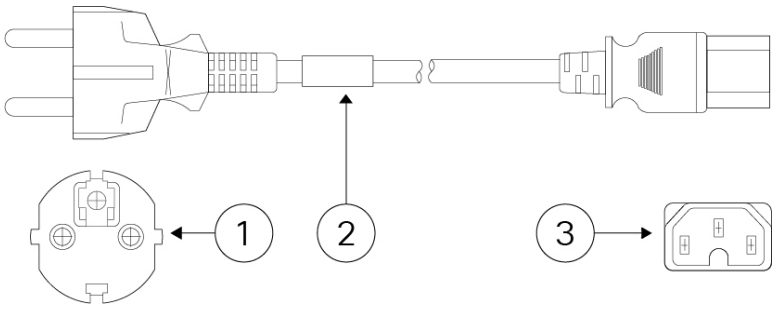
1	Plug: JIS 8303	**2**	Cord set rating: 12 A, 125 V
3	Connector: IEC 60320/C13		—

Figure 22: Japan (CAB-C13-C14-2M-JP)



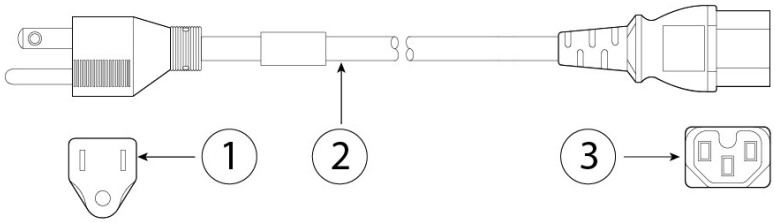
1	Plug: EN 60320-2-2/E	**2**	Cord set rating: 10 A, 250 V
3	Connector: EN 60320/C13 to C14		—

Figure 23: Korea (CAB-9K10S-KOR)



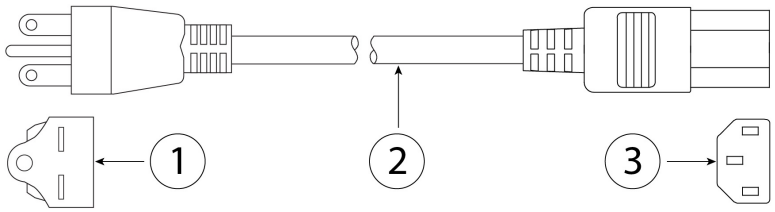
1	Plug: EL211 (KSC 8305)	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C15		—

Figure 24: North America (CAB-9K12A-NA)



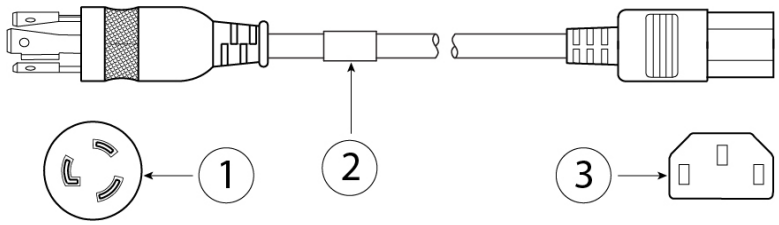
1	Plug: NEMA5-15P	**2**	Cord set rating: 13 A, 125 V
3	Connector: IEC 60320/C15		—

Figure 25: North America (CAB-N5K6A-NA)



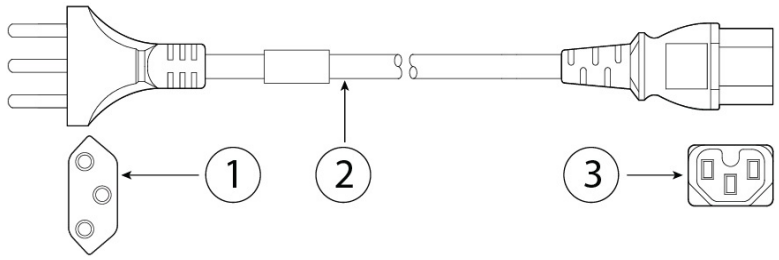
1	Plug: NEMA6-15P	**2**	Cord set rating: 10 A, 125 V
3	Connector: IEC 60320/C13		—

Figure 26: North America (CAB-AC-L620-C13)



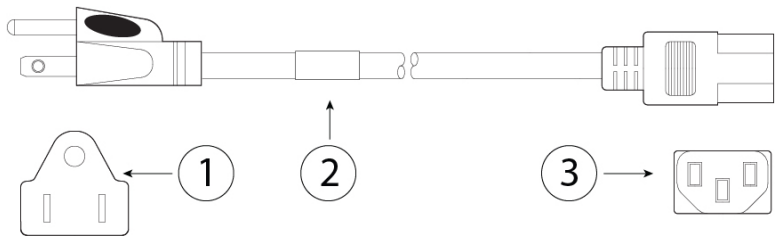
1	Plug: NEMA L6-20 (molded twist lock)	**2**	Cord set rating: 13 A, 250 V
3	Connector: IEC 60320/C13		—

Figure 27: Switzerland (CAB-9K10A-SW)



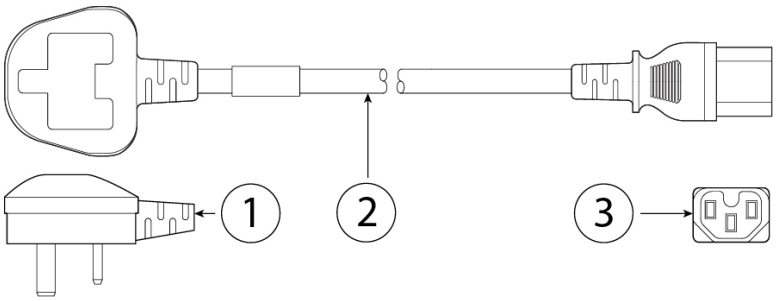
1	Plug: SEV 1011 (MP232-R)	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C15		—

Figure 28: Taiwan (CAB-ACTW)



1	Plug: EL 302 (CNS10917)	**2**	Cord set rating: 10 A, 125 V
3	Connector: IEC 60320/C13		—

Figure 29: United Kingdom (CAB-9K10A-UK)



1	Plug: BS1363A/SS145	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C15		—