Overview

Features

The Cisco Secure Endpoint PC4000 appliance supports Secure Endpoint Private Cloud version 4.0 and later.

The following table lists the features of the Cisco Secure Endpoint PC4000. See Product ID Numbers, on page 12 for a list of the spare product IDs (PIDs) associated with the Secure Endpoint PC4000. You can remove and replace drives and power supplies. For all other internal component failures, you must send your chassis for return merchandise authorization (RMA). Use the Cisco Returns Portal for RMA: https://www.cisco.com/c/en/us/support/returns/returns-portal.html.

Table 1: Secure Endpoint PC4000

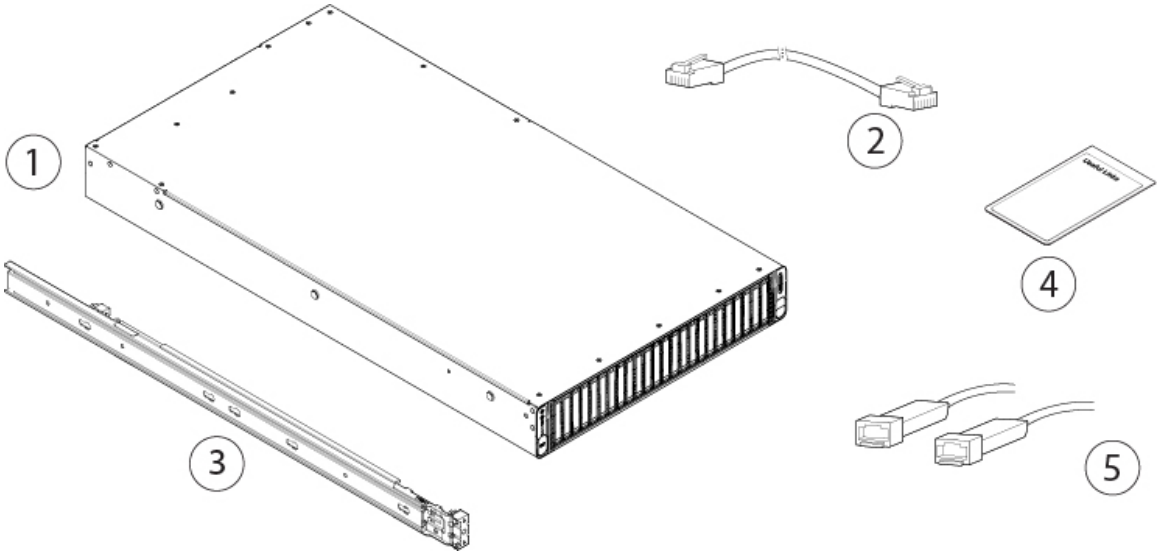
Feature	Description
Form factor	2 RU
Rack mount	Yes Standard 19-in. (48.3 cm) 4-post EIA rack
Airflow	Front to rear Cold aisle to hot aisle
Pullout asset card	Displays the serial number.

Feature	Description
Grounding hole	Yes Two threaded holes for dual-hole grounding lug. Use is optional. The supported AC power supplies have internal grounding, so no additional chassis grounding is required.
Locator beacon	Yes
Power switch	Yes
Processor	Two Intel Xeon Gold 6330 processors
Memory	2 TB RAM
RDIMMs	Thirty-two 64-GB DDR4-3200-MHz RDIMMs
Management ports	Two built-in dual 1/10-GB ports
USB ports	2 Version 3.0 Type A
VGA port	One 3-row 15-pin DE-15 connector Enabled by default.
SFP ports	4 fixed SFP+ ports Supported SFP cables SFP-10G-SR
Serial console port	One 1-GB RJ45 serial port running RS-232 (RS-232D TIA-561)
System power	Two 1050-W AC power supplies (hot-swappable and redundant as 1+1)
Power consumption	3196 BTU/hr
Fans	6 fans for front-to-rear cooling
Storage	Fourteen UCS-SD960G63X-EP (960 GB SSD RAID 6) Ten UCS-SD76T61X-EV (7.6 TB SSD RAID 6) Two UCS-SD38T61X-EV (3.8 TB SSD RAID 1) Hot-swappable
RAID controller	1

Package Contents

The following figure shows the package contents for the Secure Endpoint PC4000. Note that the contents are subject to change and your exact contents might contain additional or fewer items.

Figure 1: Package Contents

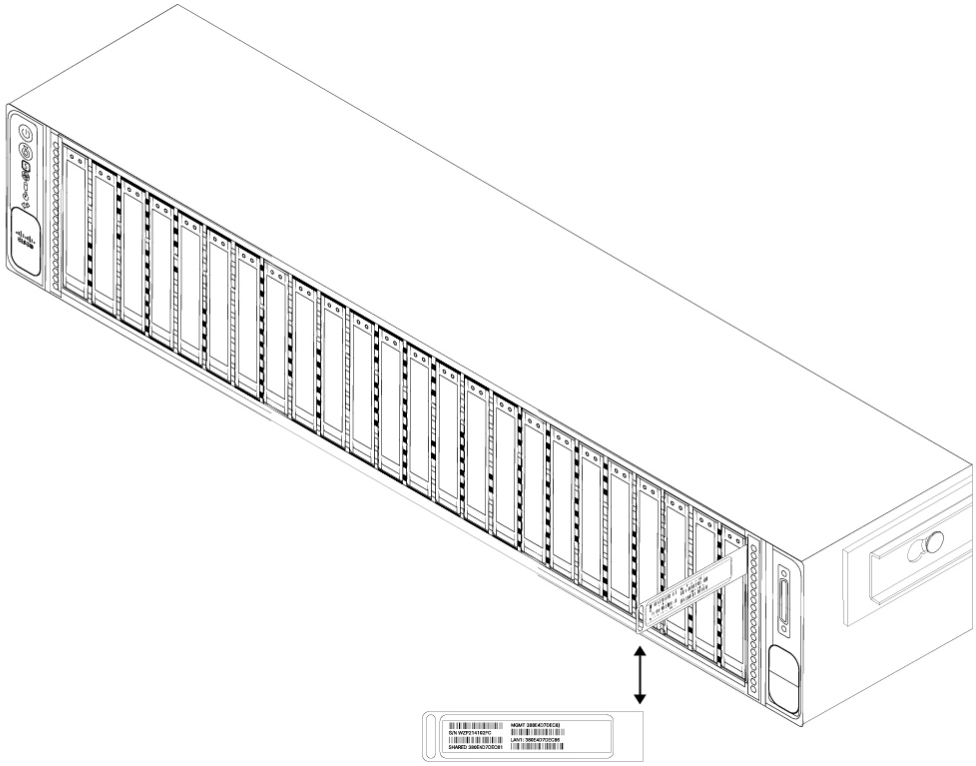


1	Chassis	**2**	RJ-45 to RJ-45 Cat 5 Ethernet cable, yellow six feet long (Cisco part number 72-1482-XX)
3	Cisco rail kit (Cisco part number 800-43376-02)	**4**	Cisco Secure Endpoint Private Cloud Virtual Appliance PC4000 This document has a URL and QR code that point to the Digital Documentation Portal. The portal contains links to the Product Information page, the Hardware Installation Guide, the Regulatory and Safety Information Guide, and the Quick start Guide.
5	SFP+ cables (Optional; in package if ordered.)		—

Serial Number Location

The serial number (SN) for the Secure Endpoint PC4000 is printed on the pullout asset card located on the front panel as shown in the following figure.

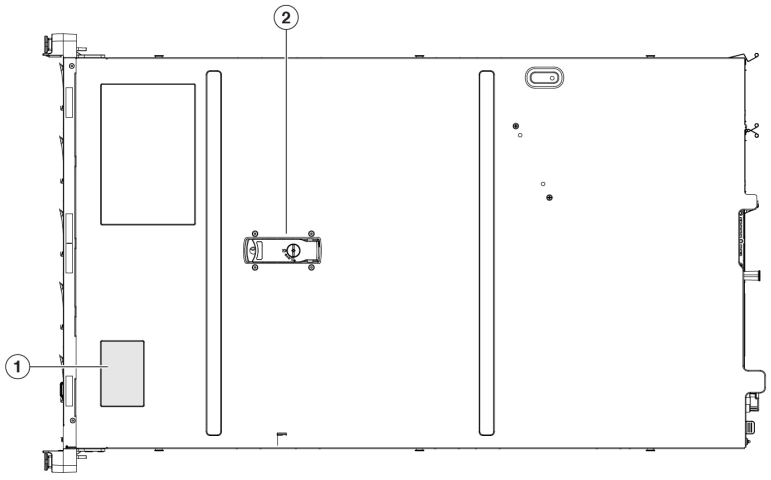
Figure 2: Serial Number on Pullout Asset Card



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 Secure Endpoint PC4000.

Figure 3: Serial Number Location on Cover

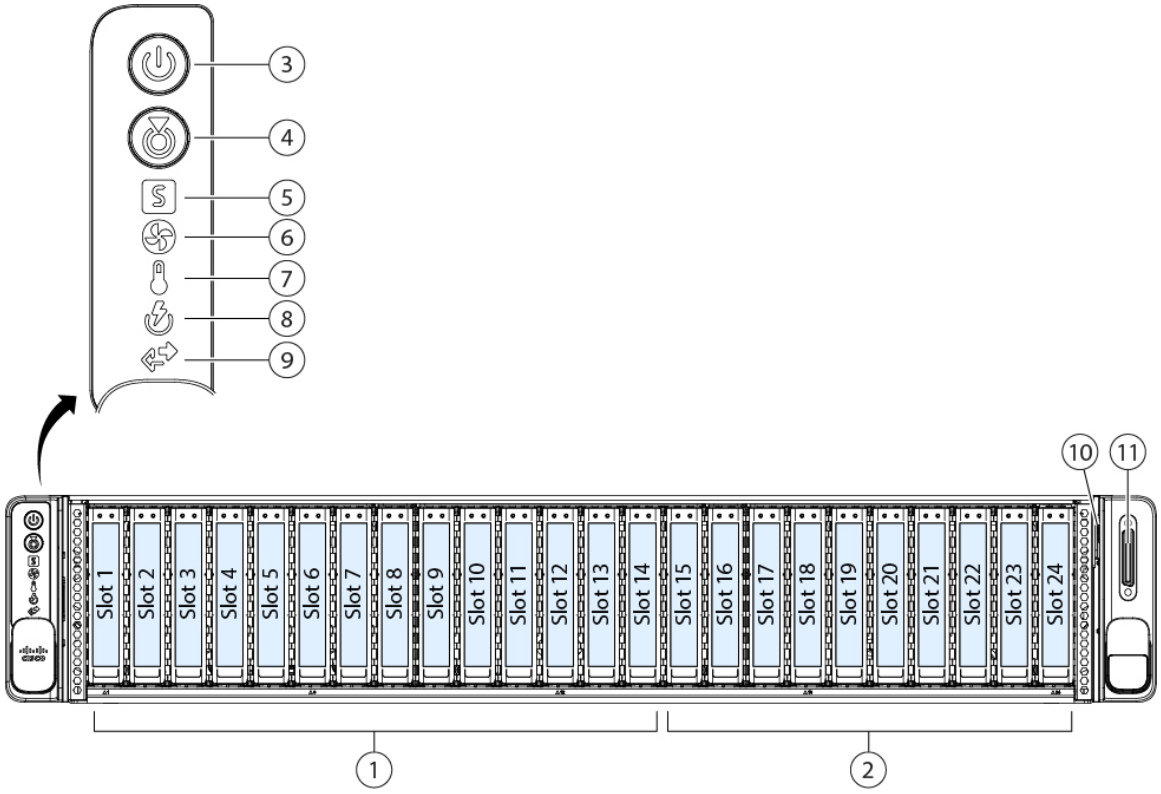


1	Serial number label

Front Panel

The following figure shows the front panel features and disk-drive configuration for the Secure Endpoint PC4000. See Front Panel LEDs, on page 6 for a description of the LEDs.

Figure 4: Secure Endpoint PC4000 Front Panel

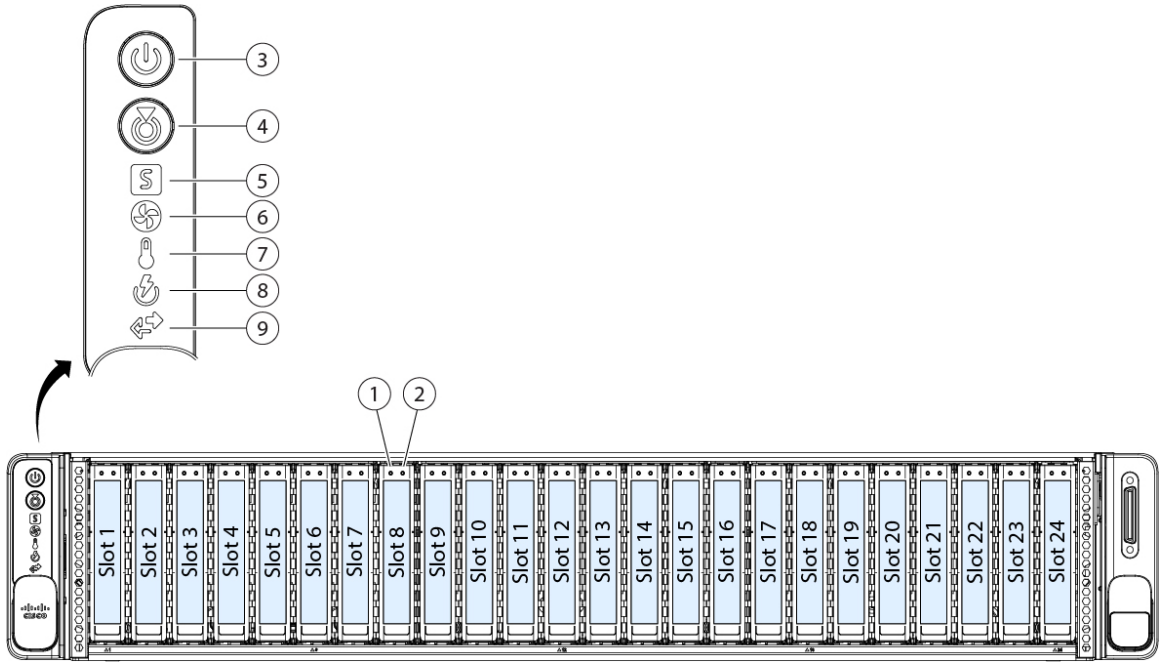


1	Drive bays 1-14 are populated with SSDs for the /data volume.	**2**	Drive bays 15-24 populated with 7.6TB SSDs for the backup volume.
3	Power button/power status LED	**4**	Unit identification button/LED
5	System status LED	**6**	Fan status LED
7	Temperature status LED	**8**	Power supply status LED
9	Network link activity LED	**10**	Pullout asset card
11	KVM connector Used with KVM cable that provides one DB-15 VGA, one DB-9 serial, and two USB connectors.	**—**	—

Front Panel LEDs

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

Figure 5: Front Panel LEDs and Their States



1	SAS/SATA drive fault • Off—The drive is operating properly. • Amber—Drive fault detected. • Amber, flashing—The drive is rebuilding. • Amber, flashing with one-second interval—Drive locate function activated in the software.	**2**	SAS/SATA 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 button/LED • Off—There is no AC power to the appliance. • Amber—The appliance is in standby mode. • Green—The appliance is in main power mode. Power is supplied to all appliance components.	**4**	Unit identification • Off—The unit identification function is not in use. • Blue, flashing—The unit identification function is activated.

5	System health
	• Green—The appliance is running in normal operating condition.
	• Green, flashing—The appliance is performing system initialization and memory check.
	• Amber—The appliance is in a degraded operational state (minor fault). For example:
	  • 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, 2 flashes—There is a major fault with the system board.
	• Amber, 3 flashes—There is a major fault with the memory DIMMs.
	• Amber, 4 flashes—There is a major fault with the CPUs.
		6	Power supply status
			• 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.

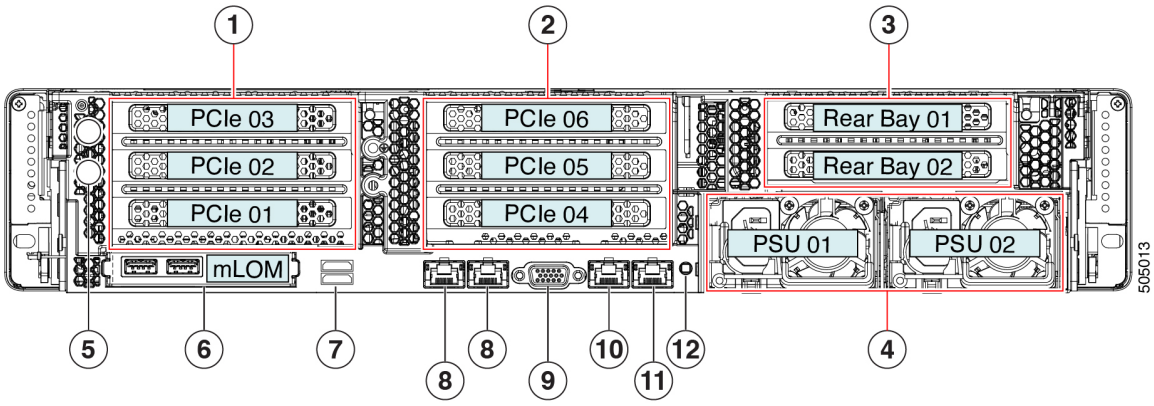
7	Fan status • Green—All fan modules are operating properly. • Amber, flashing—One or more fan modules breached the unrecoverable threshold.	**8**	Network link activity • Off—The Ethernet Lights Out Management (LOM) port link is idle. • Green—One or more Ethernet LOM ports are link-active, but there is no activity. • Green, flashing—One or more Ethernet LOM ports are link-active, with activity.

9	Temperature status • Green—The appliance 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

The following figure shows the rear panel of the Secure Endpoint PC4000.

Figure 6: Rear Panel



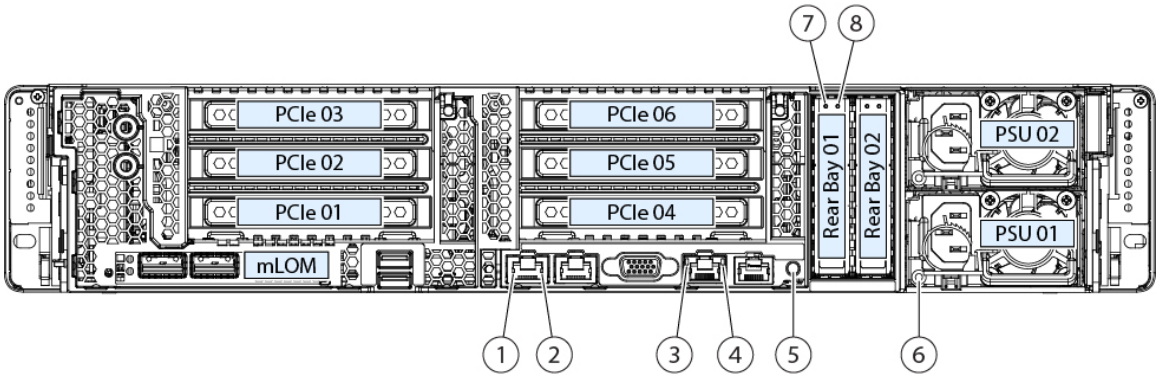
1	PCIe riser 1 (PCIe slot 1, 2, 3) PCIe slot 3 is used for the SFP+ ports. PCIe slots 1 and 2 are not supported.	**2**	PCIe riser 2 (PCIe slots 4, 5, 6) PCIe riser 2 is not supported.
3	2.5-inch HDD bays populated by 3.8 TB SSDs for the recovery partition	**4**	Power supplies (two, redundant as 1+1)
5	Threaded holes for dual-hole grounding lug	**6**	Modular LAN-on-motherboard (mLOM) card slot (x16)
7	2 USB 3.0 Type A ports	**8**	Dual 1-Gb/10-Gb Ethernet ports (LAN1 and LAN2) The dual LAN ports can support 1 Gbps and 10 Gbps depending on the link partner capability.
9	VGA video port (DB-15 connector)	**10**	1-Gb Ethernet dedicated Cisco Integrated Management Controller (CIMC) port

11	Serial port (RJ-45 connector)	**12**	Rear unit identification button/LED

Rear Panel LEDs

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

Figure 7: Rear Panel LEDs and Their States



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

5	Rear unit identification • Off—The unit identification function is not in use • Blue, flashing—The unit identification function is activated	**6**	Power supply status (one LED for each power supply unit) • 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, over-current, over-voltage, or over-temperature failure)
7	SAS/SATA drive fault • Off—The drive is operating properly • Amber—Drive fault detected • Amber, flashing—The drive is rebuilding • Amber, flashing with one-second interval—Drive locate function activated in the software	**8**	SAS/SATA 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

Power Supply

The following table lists the specifications for each 1050-W AC power supply (Cisco part number UCSC-PSU1-1050W) used in the Secure Endpoint PC4000.

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

Description	Specification
Maximum AC input current	12.5 A peak at 100 V AC 6.0 A peak at 208 V AC
Maximum input volt amperes	1250 VA at 100 V AC
Maximum output power for each power supply	1050 W
Maximum inrush current	15 A (subcycle duration)
Maximum hold-up time	12 ms at 1050 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)
Form factor	RSP2
Input connector	IEC320 C14

Hardware Specifications

The following table lists the hardware specifications for the Secure Endpoint PC4000.

Table 3: Secure Endpoint PC4000 Hardware Specifications

Specification	
Dimensions (H x W x D)	3.4 x 16.9 x 29.5 in. (8.64 x 42.9 x 74.0 cm)
Maximum weight (fully loaded chassis)	57.5 lb (26.1 kg)
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 tr
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)

Specification	
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 spare Product IDs (PIDs) associated with the Secure Endpoint PC4000. The spare components are ones that you can order and replace yourself. If any internal components fail, you must RMA the entire chassis including the SFPs and SFP cables. Use the Cisco Returns Portal for RMA: https://www.cisco.com/c/en/us/support/returns/returns-portal.html. Remove the drives and power supplies before you send the chassis for RMA. You can view an inventory of PIDs using the Cisco Integrated Management Interface (CIMC). See Viewing Product ID (PID) Catalog Details for more information.

Table 4: Secure Endpoint PC4000 PIDs

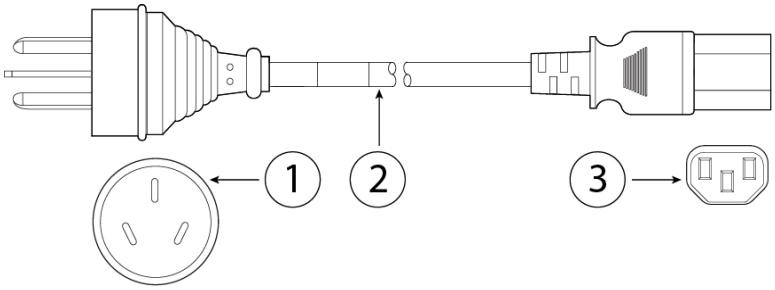
PID	Description
SEPC-AC-1050	Power supply
UCSC-PSU1-1050W=	Power supply (spare)
SEPC-SD38T6I1X-EV	3.8-TB hard disk drive
UCS-SD38T6I1X-EV=	3.8-TB hard disk drive (spare)
SEPC-SD76TBM1X-EV	7.6-TB hard disk drive
UCS-SD76TBM1X-EV=	7.6-TB hard disk drive (spare)
SEPC-SD960G63X-EP	960-GB solid state drive
UCS-SD960G63X-EP=	960-GB solid state drive (spare)
UCSC-RAILB-M6	Rail kit
UCSC-RAILB-M6=	Rail kit (spare)

Power Cord Specifications

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.

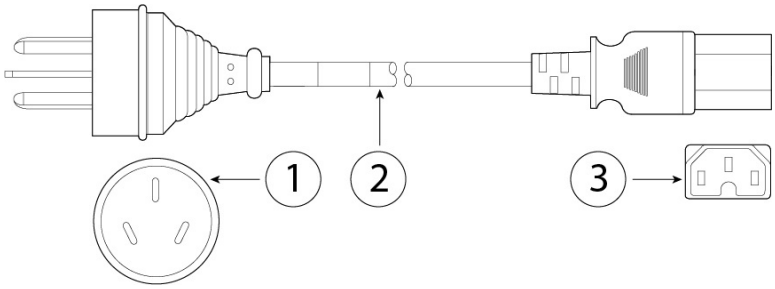
The following power cords and jumper cords are supported.

Figure 8: Argentina (CAB-250V-10A-AR)



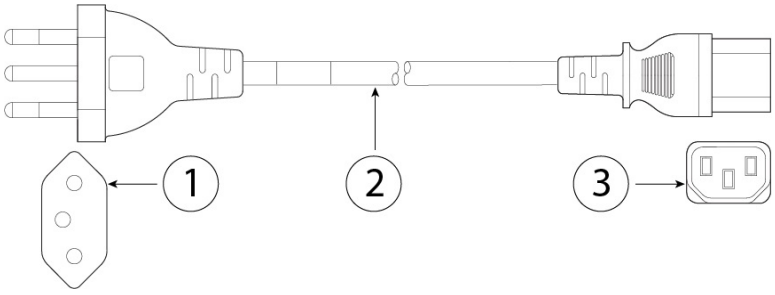
1	Plug: IRAM 2073	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		—

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



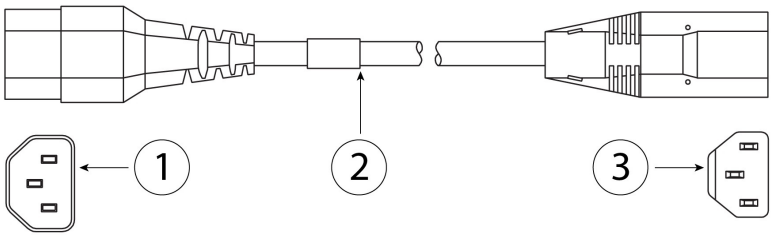
1	Plug: A.S. 3112-2000	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C15		—

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



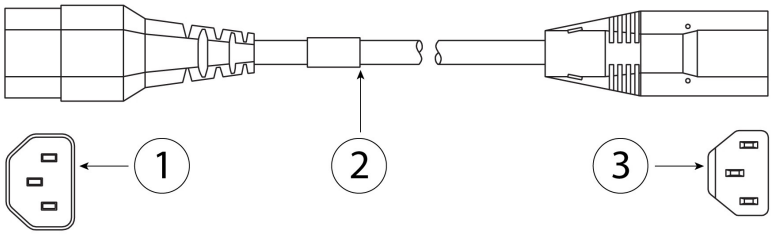
1	Plug: NBR 14136	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		—

Figure 11: Cabinet Jumper (CAB-C13-C14-2M)



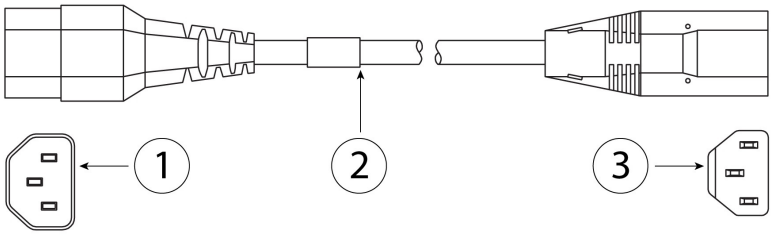
1	Plug: SS10A	**2**	Cord set rating: 10A, 250V
3	Connector: HS10S, C-13 to C-14		—

Figure 12: Cabinet Jumper (CAB-C13-C14-AC)



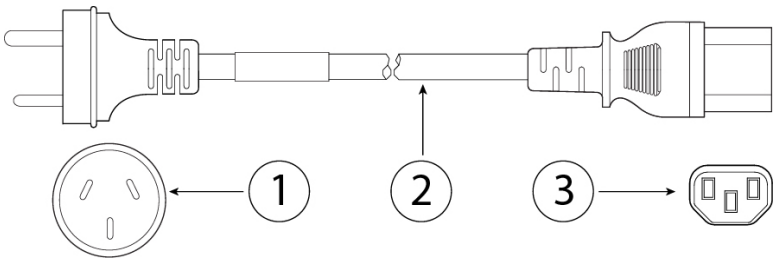
1	Plug: SS10A	**2**	Cord set rating: 10 A, 250 V
3	Connector: HS10S, C-13 to C-14 (recessed receptacle)		—

Figure 13: Cabinet Jumper (CAB-C13-CBN)



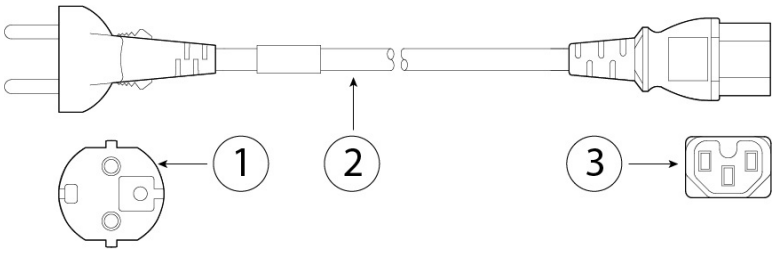
1	Plug: SS10A	**2**	Cord set rating: 10 A, 250 V
3	Connector: HS10S, C-13 to C-14		—

Figure 14: China (CAB-250V-10A-CH)



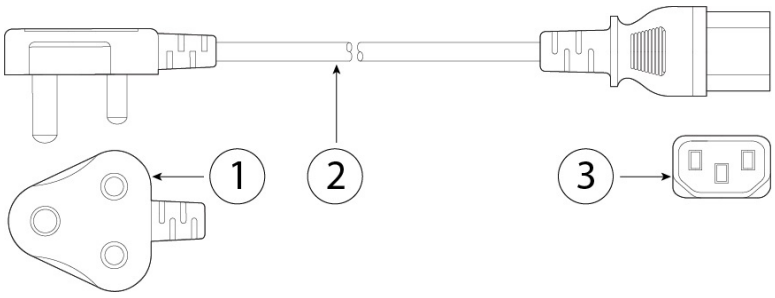
1	Plug: GB2099.1/2008	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		—

Figure 15: Europe (CAB-9K10A-EU)



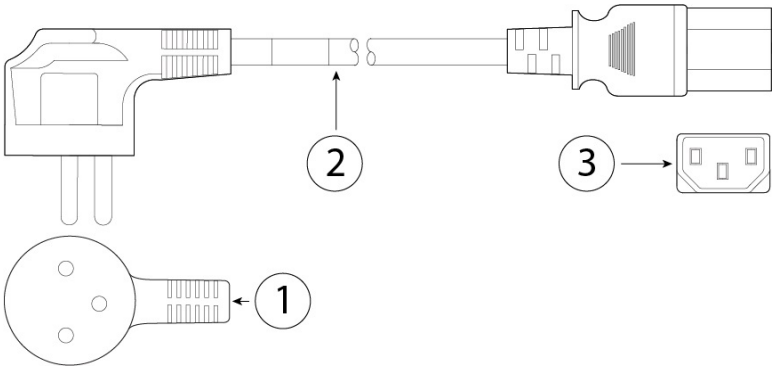
1	Plug: CEE 7/7 (M2511)	**2**	Cord set rating: 10 A/16 A, 250 V
3	Connector: IEC 60320/C15 (VSCC 15)		—

Figure 16: India (CAB-250V-10A-ID)



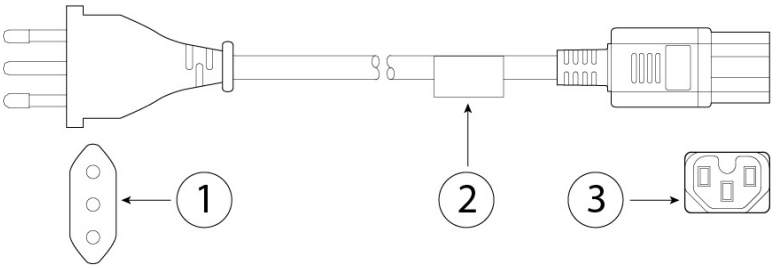
1	Plug: IS 6538-1971	**2**	Cord set rating: 16 A, 250 V
3	Connector: IEC 60320-C13		—

Figure 17: Israel (CAB-250V-10A-IS)



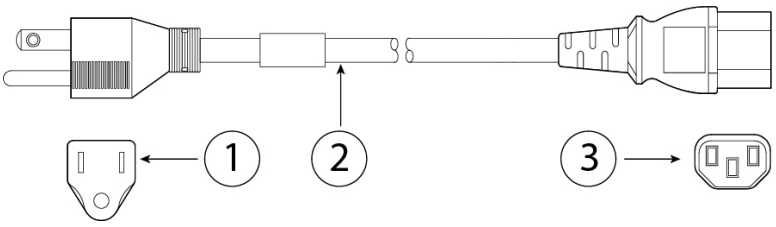
1	Plug: SI-32	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320-C13		—

Figure 18: Italy (CAB-9K10A-IT)



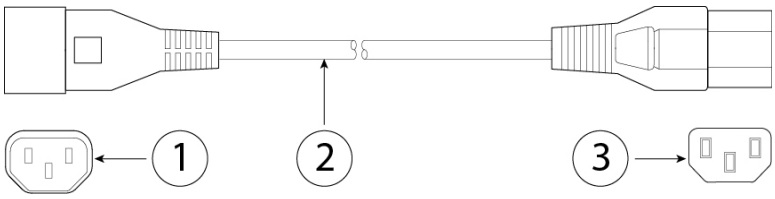
1	Plug: CEI 23-16/VII (I/3G)	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C15 (EN 60320/C15M)		—

Figure 19: Japan (CAB-JPN-3PIN)



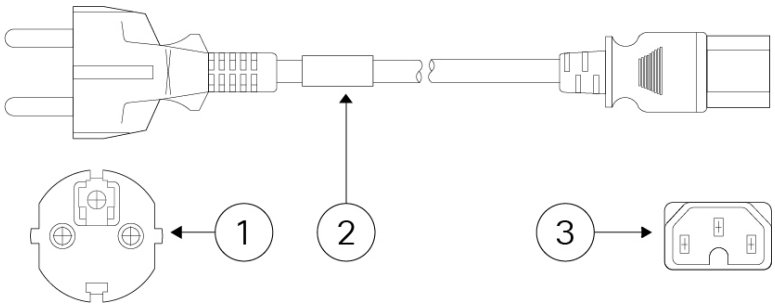
1	Plug: JIS 8303	**2**	Cord set rating: 12 A, 125 V
3	Connector: IEC 60320/C13		—

Figure 20: Japan (CAB-C13-C14-2M-JP)



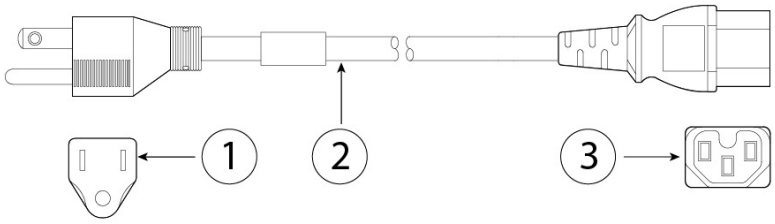
1	Plug: EN 60320-2-2/E	**2**	Cord set rating: 10 A, 250 V
3	Connector: EN 60320/C13 to C14		—

Figure 21: Korea (CAB-9K10S-KOR)



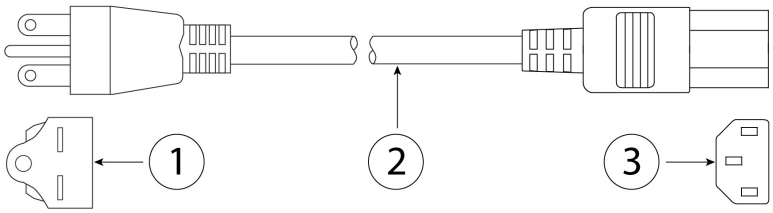
1	Plug: EL211 (KSC 8305)	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C15		—

Figure 22: North America (CAB-9K12A-NA)



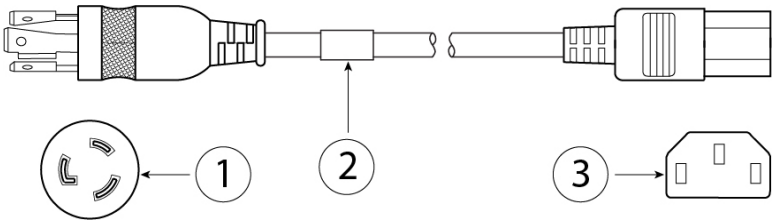
1	Plug: NEMA5-15P	**2**	Cord set rating: 13 A, 125 V
3	Connector: IEC 60320/C15		—

Figure 23: North America (CAB-N5K6A-NA)



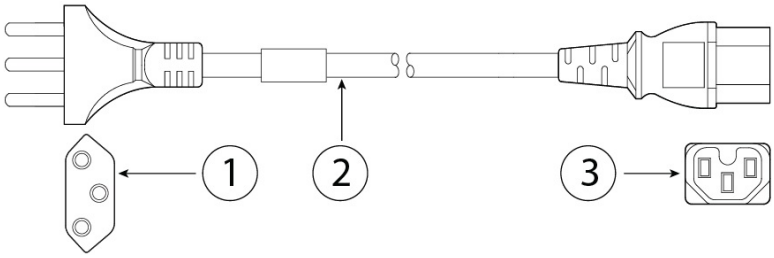
1	Plug: NEMA6-15P	**2**	Cord set rating: 10 A, 125 V
3	Connector: IEC 60320/C13		—

Figure 24: North America (CAB-AC-L620-C13)



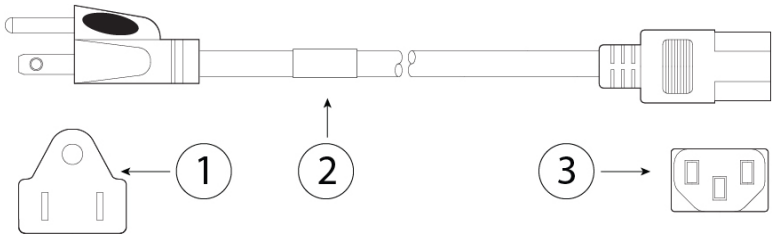
1	Plug: NEMA L6-20 (molded twist lock)	**2**	Cord set rating: 13 A, 250 V
3	Connector: IEC 60320/C13		—

Figure 25: Switzerland (CAB-9K10A-SW)



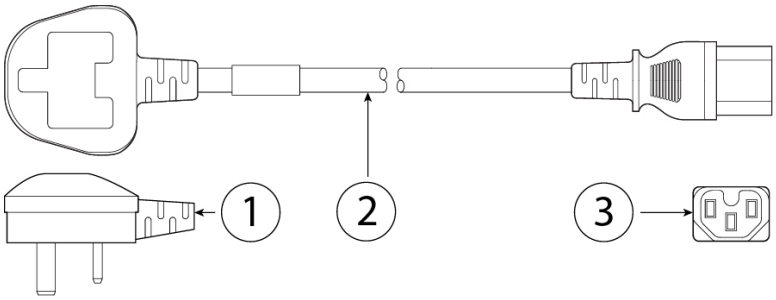
1	Plug: SEV 1011 (MP232-R)	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C15		—

Figure 26: Taiwan (CAB-ACTW)



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

Figure 27: United Kingdom (CAB-9K10A-UK)



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