Overview

Features

The Cisco Secure Firewall 3100 is a standalone modular security services platform that includes the Secure Firewall 3105, 3110, 3120, 3130, and 3140.

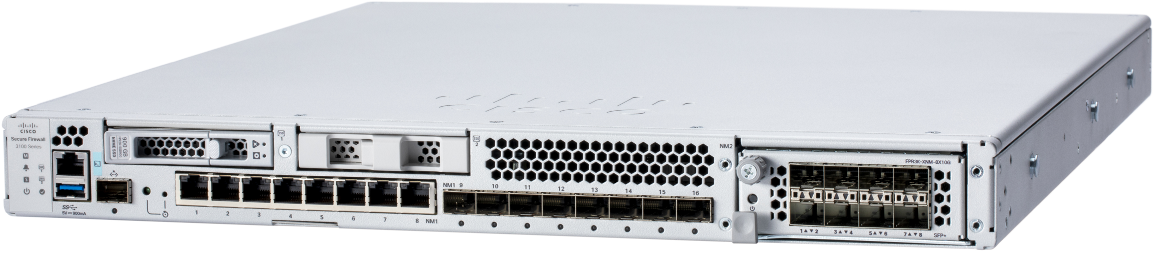
See Product ID Numbers, on page 38 for a list of the product IDs (PIDs) associated with the 3100 series.

The Secure Firewall 3100 supports Cisco Secure Firewall Threat Defense and Cisco Secure ASA software. See the Cisco Secure Firewall Threat Defense Compatibility Guide and the Cisco Secure Firewall ASA Compatibility guide, which provide Cisco software and hardware compatibility, including operating system and hosting environment requirements, for each supported version.

Note The Secure Firewall 3105 is first supported in Cisco Secure Firewall Threat Defense 7.3 and Cisco Secure Firewall ASA 9.19 and later.

The following figure shows the Secure Firewall 3100.

Figure 1: Secure Firewall 3100



The following table lists the features for the Secure Firewall 3100.

Table 1: Secure Firewall 3100 Features

Feature	3105	3110	3120	3130	3140
Form factor	1 RU Fits a standard 19-inch (48.3-cm) square-hole rack				
Rack mount	(Optional) Two 2-post mount brackets and/or two slide rails 4-post Electronic Industries Association (EIA)-310-D rack **Note** We recommend that you order the slide rails for your Secure Firewall 3100.				
Airflow	Front to rear (I/O side to non-I/O side) Cold aisle to hot aisle				
System memory	64 GB		128 GB	128 GB	256 GB
Management port	One 1/10-Gbps small form-factor pluggable (SFP) port See Supported Transceivers, on page 28 for a list of SFPs supported on the fixed, management, and network module ports.				
Console port	One RJ-45 serial port				
USB port	USB 3.1 Type A (900 mA) port				
Network ports	8 RJ-45 ports and 8 SFP+ fixed ports Named Ethernet 1/1 through 1/16				

Feature	3105	3110	3120	3130	3140
Network module ports	• Eight 1/10/25-Gbps SFP ports • Four 40-Gbps QSFP ports • Two 100-Gbps QSFP ports • Eight 10/100/1000BaseT ports (hardware bypass) • Six 1/10/25-Gbps SFP ports (hardware bypass)				
Network module slots	One **Note** Hot-swapping of identical modules is supported, but if you replace a network module with another type, you must reboot the system so that the new network module is recognized.				
Network modules	• 8-port 1-Gbps/10-Gbps SFP+ (FPR3K-XNM-8X10G) • 6-port 1-Gbps SFP SX multimode hardware bypass (FPR3K-XNM-6X1SXF) • 6-port 10-Gbps SFP SR multimode hardware bypass (FPR3K-XNM-6X10SRF) • 6-port 10-Gbps SFP LR single mode hardware bypass (FPR3K-XNM-6X10LRF) • 8-port 10/100/1000Base-T hardware bypass (FPR3K-XNM-8X1GF)			• 8-port 1-Gbps/10-Gbps/25-Gbps SFP+ (FPR3K-XNM-8X25G) • 8-port 1-Gbps/10-Gbps SFP+ (FPR3K-XNM-8X10G) • 4-port 40-Gbps QSFP+ (FPR3K-XNM-4X40G) • 6-port 1-Gbps SFP SX multimode hardware bypass(FPR3K-XNM-6X1SXF) • 6-port 10-Gbps SFP SR multimode hardware bypass (FPR3K-XNM-6X10SRF) • 6-port 10-Gbps SFP LR single mode hardware bypass (FPR3K-XNM-6X10LRF) • 6-port 25-Gbps SFP SR multimode hardware bypass (FPR3K-XNM-6X25SRF) • 6-port 25-Gbps SFP LR single mode hardware bypass (FPR3K-XNM-6X25LRF) • 8-port 10/100/1000Base-T hardware bypass (FPR3K-XNM-8X1GF) • 2-port 100-Gbps QSFP+ (FPR3K-XNM-2X1000G)	

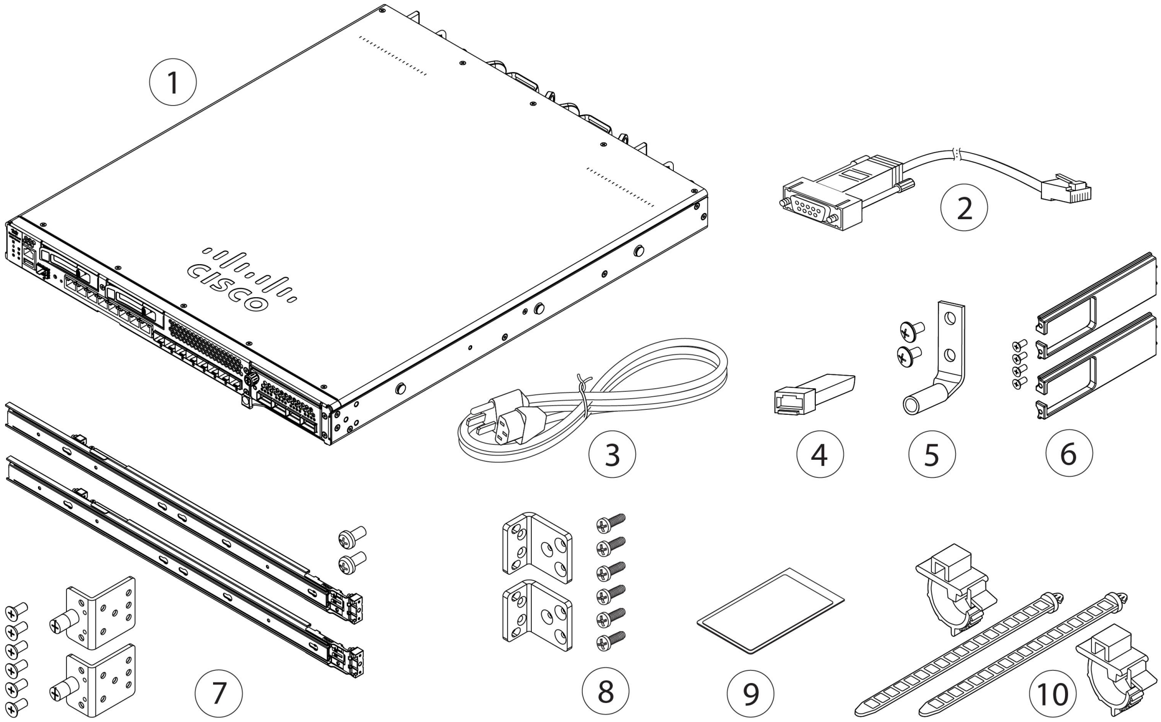
Feature	3105	3110	3120	3130	3140
AC power supply	Two power supply slots Ships with one 400-W AC power supply module Hot-swappable			Two power supply slots Ships with two 400-W AC power supply modules Hot-swappable	
DC power supply	Yes (optional) Hot-swappable				
Redundant power	No **Note** Yes, if you order an extra power supply.			Yes **Note** Ships with two power supplies.	
Fans	Two dual fan module slots (3 + 1) **Note** The dual fan modules are hot-swappable.				
Storage	Two Nonvolatile Memory Express (NVMe) SSD slots Ships with one 900-GB SSD installed in slot 1. You can order a second RAID1 SSD for slot 2. The RAID1 SSD is preconfigured for RAID1. **Note** Slot 2 is reserved for the optional software RAID1 configuration. **Note** Hot-swapping is supported with 2 SSDs. However, you must enter a CLI command to remove one disk from the RAID before hot swapping. See the CLI configuration guide for your software for the procedure.				
Pullout asset card	Displays the serial number and a QR code that points to the low touch provisioning (LTP) guide.				
Grounding lug	On rear panel				
Power switch	On rear panel				
Reset button	Resets the system to factory default without requiring serial console access **Note** The reset button is recessed. Press with a pin and hold longer than 5 seconds to set the system back to the factory default.				

Package Contents

The following figure shows the package contents for the Secure Firewall 3100. The contents are subject to change and your exact contents contain additional or fewer items depending on whether you order the optional parts. See Product ID Numbers for a list of PIDs associated with the package contents.

Note There are two sets of four screws that you can use to secure the chassis to your rack. Chose the screws that fit your rack.

Figure 2: Secure Firewall 3100 Package Contents



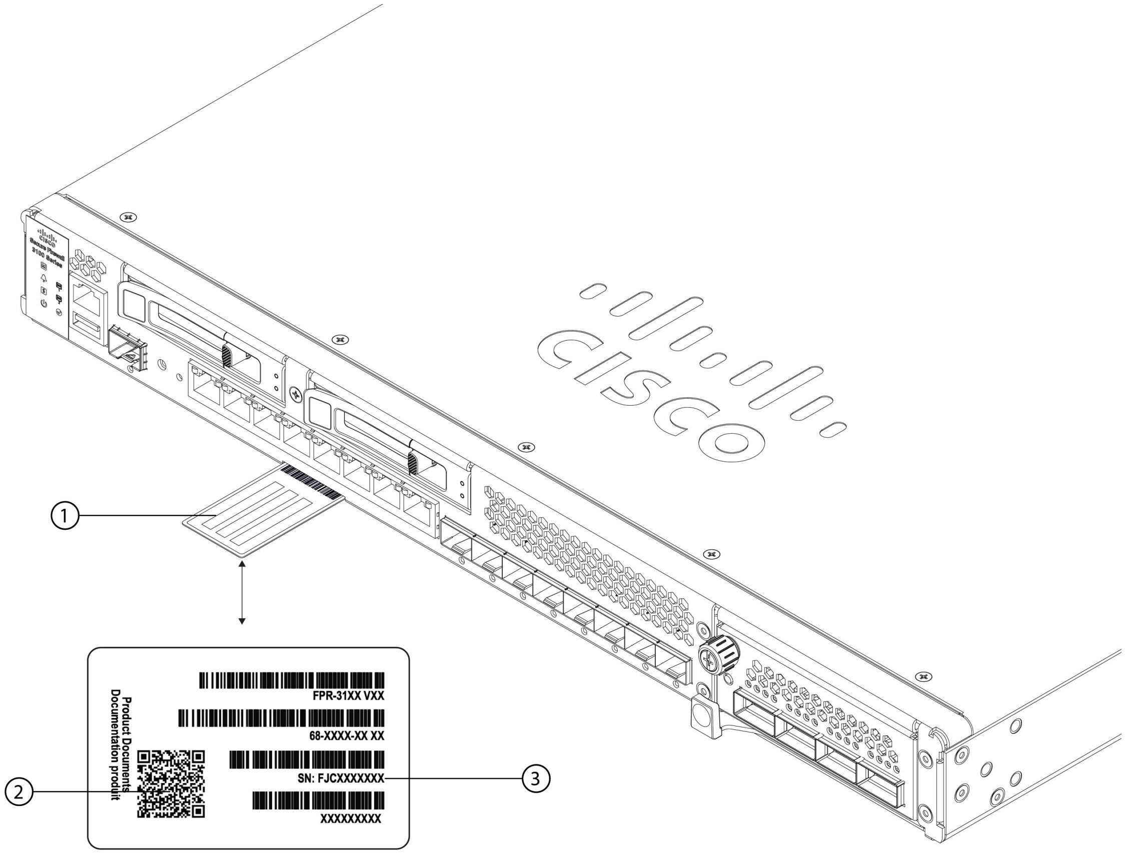
1	Secure Firewall 3100 chassis	**2**	Console cable RJ-45 to DB-9 Optional; in package if ordered
3	One or two country-specific power cords Optional; in package if ordered See Power Cord Specifications, on page 41 for a list of supported power cords.	**4**	SFP transceiver (Optional; in package if ordered)

5	One ground lug kit • One #6 AWG, 90 degree, #10 post ground lug • Two 10-32 x 0.38-inch Phillips screws	**6**	Cable management bracket kit • Two cable management brackets • Four 8-32 x 0.375-inch Phillips screws (Optional; in package if ordered)
7	Two slide rails Slide rail accessories kit: • Two slide rail locking brackets • Six 8-32 x 0.302-inch slide rail locking bracket Phillips screws • Two M3 x 0.5 x 6-mm Phillips screws (Optional; in package if ordered)	**8**	Rack-mount bracket kit: • Two rack-mount brackets • Six 8-32 x 0.375-inch Phillips screws for securing the brackets to the chassis (Optional; in package if ordered)
9	*Cisco Secure Firewall 3100* This document has links to the hardware installation guide, regulatory and safety information guide, and warranty and licensing information. It also contains a QR code and URL 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, the getting started guide, and the zero-touch provisioning guide.	**10**	Two power supply module tie wraps and clamps

Serial Number and Digital Documentation Portal QR Code

The pullout asset card on the front panel of your Secure Firewall 3100 chassis contains the chassis serial number and the Digital Documentation Portal QR code, which points to the getting started guide, the regulatory and compliance guide, the zero-touch deployment guide, and the hardware installation guide.

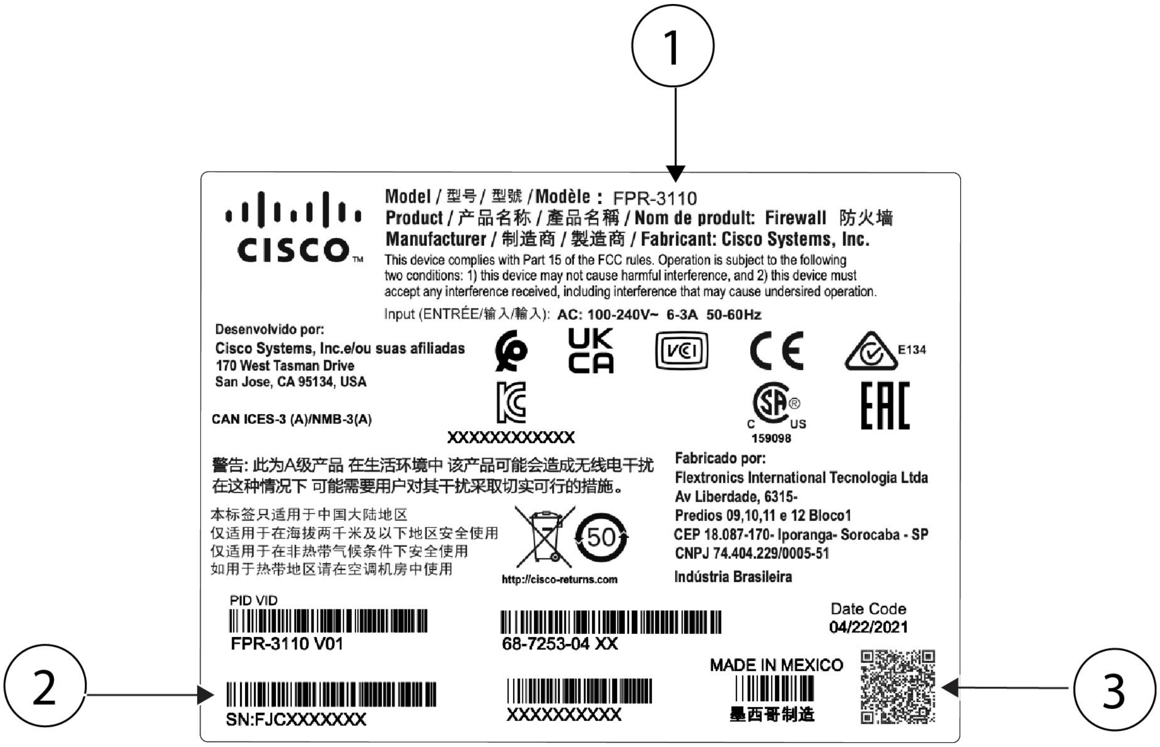
Figure 3: Pullout Asset Card



1	Pullout asset tag	2	Documentation Portal QR code
3	Chassis serial number		—

The compliance label on the bottom of the chassis contains the chassis serial number, regulatory compliance marks, and the Digital Documentation Portal QR code that points to the guides listed above. The following figure shows an example compliance label found on the bottom of the chassis.

Figure 4: Example Compliance Label



Model / 型号 / 型號 /Modèle : FPR-3110
Product / 产品名称 / 產品名稱 / Nom de produit: Firewall 防火墙
Manufacturer / 制造商 / 製造商 / Fabricant: Cisco Systems, Inc.
This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undersired operation.
Input (ENTRÉE/输入/輸入): AC: 100-240V~ 6-3A 50-60Hz

Desenvolvido por:
Cisco Systems, Inc.e/ou suas afiliadas
170 West Tasman Drive
San Jose, CA 95134, USA

CAN ICES-3 (A)/NMB-3(A)

XXXXXXXXXXXX

E134

C US
159098

警告: 此为A级产品 在生活环境中 该产品可能会造成无线电干扰
在这种情况下 可能需要用户对其干扰采取切实可行的措施。

本标签只适用于中国大陆地区
仅适用于在海拔两千米及以下地区安全使用
仅适用于在非热带气候条件下安全使用
如用于热带地区请在空调机房中使用

50
http://cisco-returns.com

Fabricado por:
Flextronics International Tecnologia Ltda
Av Liberdade, 6315-
Predios 09,10,11 e 12 Bloco1
CEP 18.087-170- Iporanga- Sorocaba - SP
CNPJ 74.404.229/0005-51
Indústria Brasileira

PID VID
FPR-3110 V01

68-7253-04 XX

Date Code
04/22/2021

MADE IN MEXICO
墨西哥制造

SN:FJCXXXXXXX

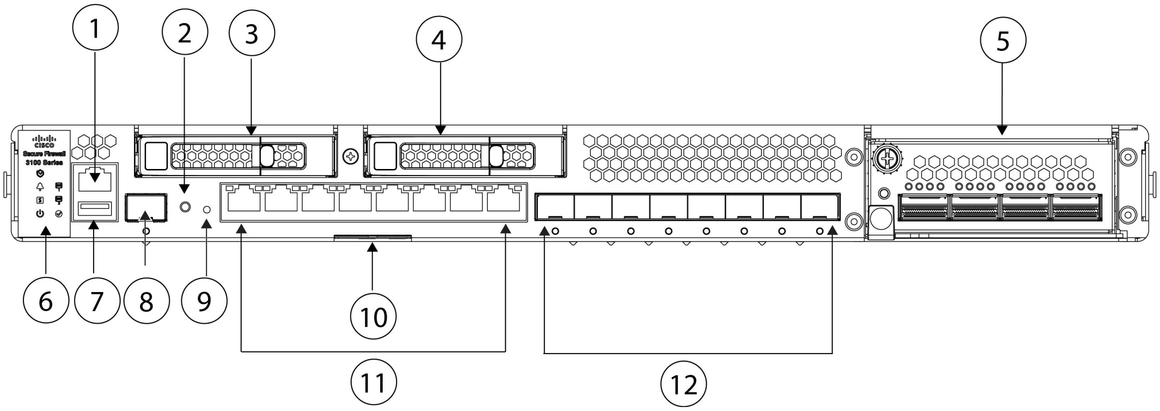
XXXXXXXXXX

1	Chassis model number	**2**	Chassis serial number
3	Documentation Portal QR code		—

Front Panel

The following figure shows the front panel of the Secure Firewall 3100. See Front Panel LEDs, on page 11 for a description of the LEDs.

Figure 5: Secure Firewall 3100 Front Panel



1	RJ-45 console port	**2**	Recessed factory reset button
3	SSD-1	**4**	SSD-2
5	Network module (NM-2)	**6**	System LEDs
7	Type A USB 3.1 port	**8**	Gigabit Ethernet management port: • Secure Firewall Threat Defense—Management 0 (also referred to as Management 1/1 and Diagnostic 1/1) • ASA—Management 1/1
9	Reset button LED	**10**	Pullout asset card with chassis serial number, getting started guide QR code, and LTP QR code
11	Eight fixed RJ-45 ports (NM-1) RJ-45 ports named Ethernet 1/1 through 1/8 left to right; for a list of supported SFPs, see Supported Transceivers, on page 28.	**12**	Eight fixed SFP+ ports (NM-1) SFP+ ports named Ethernet 1/9 through 1/16 left to right; for a list of supported SFPs, see Supported Transceivers, on page 28.

Management Port

The Secure Firewall 3100 chassis management port is a 1/10-Gbps SFP port.

RJ-45 Console Port

The Secure Firewall 3100 chassis has a standard RJ-45 console port. You can use the CLI to configure your 3100 through the RJ-45 serial console port by using a terminal server or a terminal emulation program on a computer.

The RJ-45 (8P8C) port supports RS-232 signaling to an internal UART controller. The console port does not have any hardware flow control, and does not support a remote dial-in modem. The baud rate is 9600. You can use the standard cable found in your accessory kit to convert the RJ-45 to DB-9 if necessary.

Type A USB 3.1 Port

You can use the external Type A USB port to attach a data-storage device. The external USB drive identifier is `usb:`. The Type A USB port supports the following:

- Hot swapping
- USB drive formatted with FAT32
- Boot kickstart image from ROMMON for discovery recovery purposes
- Copy files to and from workspace:/ and volatile:/ within local-mgmt. The most relevant files are:
  - Core files
  - Ethanalyzer packet captures
  - Tech-support files
  - Security module log files
- Platform bundle image upload using **download image usbA:**

The Type A USB port does *not* support Cisco Secure Package (CSP) image upload support.

Network Ports

The Secure Firewall 3100 chassis has a network module slot that supports the following network modules:

- 8-port 1/10-Gbps SFP
- 8-port 1/10/25-Gbps SFP
- 6-port 1-Gbps SFP SX multimode hardware bypass
- 6-port 10-Gbps SFP SR multimode hardware bypass
- 6-port 10-Gbps SFP LR single mode hardware bypass
- 6-port 25-Gbps SFP SR multimode hardware bypass
- 6-port 25-Gbps SFP LR single mode hardware bypass
- 8-port 10/100/1000Base-T hardware bypass; first supported on FTD 7.2.1 and ASA 9.18.2
- 2-port 100-Gbps QSFP; first supported on FTD 7.6 and ASA 9.22
- 4-port 40-Gbps QSFP; first supported on FTD 7.2.1 and ASA 9.18.2

Note The 4-port 40-Gbps, 8-port 25-Gbps, and 2-port 100-Gbps network modules are supported only on the 3130 and 3140.

Factory Reset Button

The Secure Firewall 3100 chassis has a recessed reset button that resets the system to the factory default. All previous configuration is erased after pressing the button down for five seconds. The following occurs:

- ROMMON NVRAM is cleared and returned to default.
- All extra images are removed; the current running image remains.
- FXOS logs, core files, SSH keys, certificates, FXOS configuration, and Apache configuration are removed.

Note If power is lost between when you pushed the reset button and when the reset process is complete, the process stops and you have to push the button again after the system powers back on.

For More Information

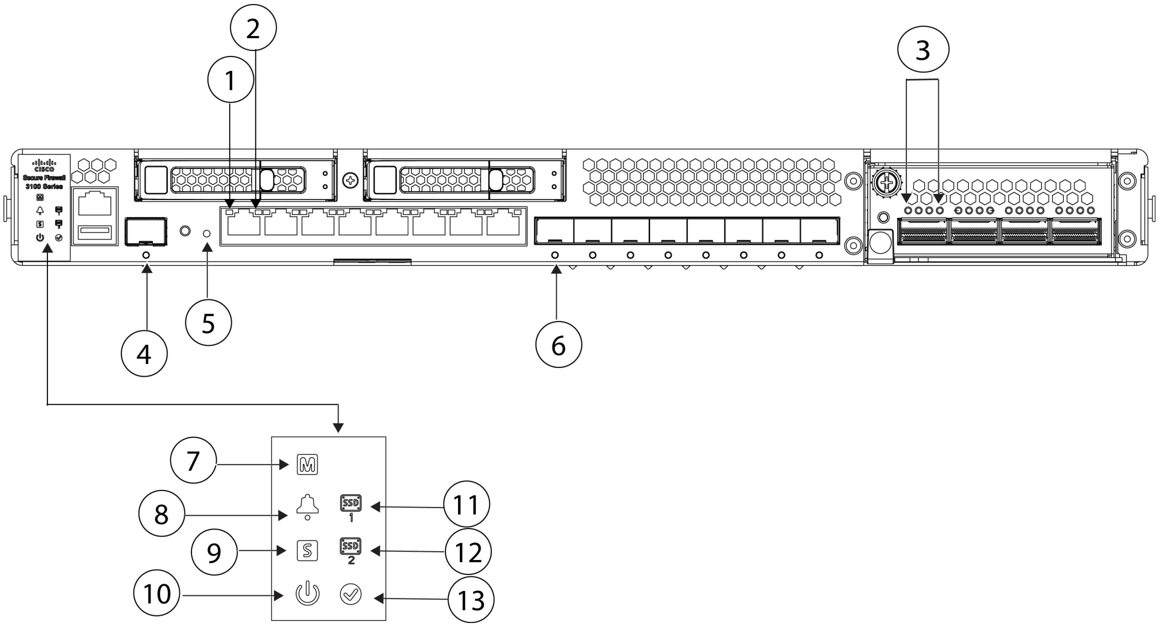
- See Remove and Replace the SSD for the procedure for removing a replacing the SSD.
- See Install, Remove, and Replace the Network Module for the procedure for installing network modules.
- See 8-Port 1/10/25-Gbps Network Module, on page 15 for more information about the network module.
- See 6-Port 1-Gbps SX/10-Gbps SR/10-Gbps LR/25-Gbps SR/25-Gbps LR Network Module with Hardware Bypass, on page 21 for more information about the network module.

- See 8-Port 10/100/1000Base-T Network Module with Hardware Bypass, on page 19 for more information about the network module.
- See 4-Port 40-Gbps Network Module, on page 16 for more information about the network module.

Front Panel LEDs

The following figure shows the Secure Firewall 3100 front panel LEDs.

Figure 6: Secure Firewall 3100 Front Panel LEDs



1	RJ-45 Copper Port Link Status	2	RJ-45 Copper Port Activity Status
	• Off—No link. • Green—Link is up.		• Off—No activity • Green, flashing—The number of flashes determines the link speed; 1 flash=10 Mbps, 2=100 Mbps, 3=1 Gbps.
3	**Network Module 2 Port Status**	4	**Management Port Status**
	• Green—Port is enabled, the link partner is detected. • Amber—Port is enabled, but the link partner is not detected. • Green, flashing—Port is enabled; network activity is detected.		The 1/10-Gbps management port has a bicolor LED under the SFP cage that indicates link/activity/fault: • Off—No SFP. • Green—Link up. • Green, flashing—Network activity. • Amber—SFP present, but no link.

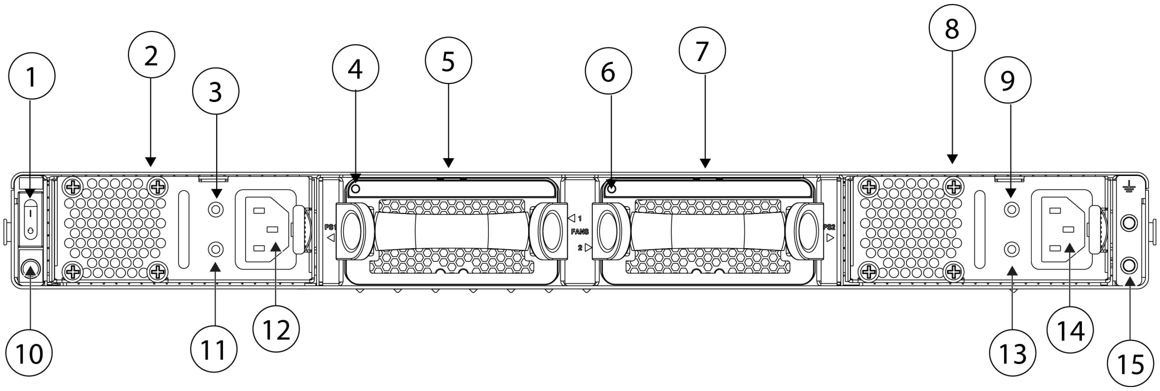
5	**Factory Reset Button Status** • Green, flashing—Flashes 5 seconds after you depress the button. • Off—Reset is complete.	6	**Fiber Port Link/Activity Status** Each fiber port has one dual color LED under the SFP cage. • Off—No SFP. • Green—Link up. • Green, flashing—Network activity at >1G is detected. • Amber—No link or network failure.
7	**Managed Status** • Green, flashing slowly (twice in 5 seconds)—Cloud is connected. • Green and amber, flashing—Cloud connection failure. • Green—Cloud is disconnected. **Note** See the Easy Deployment Guide for Cisco Secure Firewall Threat Defense with Cisco Security Cloud Control for more information on zero touch provisioning (ZTP).	8	**Alarm Status** • Off—No alarms. • Amber—Environmental error. • Green—Status is ok.
9	**System Status** • Off—System has not booted up yet. • Green, flashing quickly—System is booting up. • Green—Normal system function. • Amber—System boot up has failed. • Amber, flashing—Alarm condition, system needs service or attention and may not boot properly.	10	**Power Status** • Off—Input power is not detected. If the AC power cord is plugged in, and the LED on the power supply is blinking green, standby power is still on. • Green, flashing—The system has detected a power switch toggle event, and initiated the shutdown sequence. If the power switch is in the OFF position, the system powers off after shutdown is completed. Do not remove the AC or DC power source while this LED is blinking so that the system has time to perform a graceful shutdown. • Amber—The system is powering up (before the BIOS boots). This takes one to five seconds at most. • Green—The system is fully powered up.

11	**SSD 1 Status** • Off—The SSD is not present. • Green—The SSD is present; no activity. • Green, flashing—The SSD is active. • Amber—The SSD has a problem or failure.	12	**SSD 2 Status** • Off—The SSD is not present. • Green—The SSD is present; no activity. • Green, flashing—The SSD is active. • Amber—The SSD has a problem or failure.
13	**Activity Status** (Role of a high-availability pair) • Off—The unit is not configured or enabled in a high-availability pair. • Green—The unit is in active mode. • Amber—The unit is in standby mode.		—

Rear Panel

The following figure shows the rear panel of the Secure Firewall 3100.

Figure 7: Secure Firewall 3100 Rear Panel



1	Power on/off switch	**2**	Power supply module (PSU-1)
3	Power supply module FAIL LED (PSU-1)	**4**	Fan module LED (FAN-1)
5	Fan module (FAN-1)	**6**	Fan module LED (FAN-2)
7	Fan module (FAN-2)	**8**	Power supply module (PSU-2)
9	Power supply module FAIL LED (PSU-2)	**10**	Chassis power LED **Note** This power LED has the same behavior as the front panel LED. See Front Panel LEDs, on page 11 for more information.

11	Power supply module OK LED (PSU-1)	**12**	Power supply module connector (PSU-1)
13	Power supply module OK LED (PSU-2)	**14**	Power supply module connector (PSU-2)
15	Two-post grounding pad **Note** The two-post grounding lug and two screws are included in the accessory kit.		—

Power Switch

The power switch is located to the left of power supply module 1 on the rear of the chassis. It is a toggle switch that controls power to the system. If the power switch is off but the power cord is plugged in and the power supply is flashing green, the system is in standby position, and only the 3.3-V standby power is enabled from the power supply module. The 12-V main power is OFF. When the switch is in the ON position, the 12-V main power is turned on and the system boots.

Before you move the power switch to the OFF position, use the **shutdown** commands so that the system can perform a graceful shutdown. This may take several minutes to complete. After the graceful shutdown is complete, the console displays `It is safe to power off now.` Wait until the front panel PWR LED flashes momentarily and is off before removing AC power.

See Front Panel LEDs, on page 11 for the PWR LED description. See the FXOS Configuration Guide for more information on using the **shutdown** commands.

Caution If you remove the system power cords before the graceful shutdown is complete, disk corruption can occur. You can move the power switch to OFF before the shutdown. The system ignores it.

Note After removing power from the chassis by unplugging the power cord, wait at least 10 seconds before turning power back ON. You want to keep the system power off, including the standby power, for 10 seconds.

For More Information

- See Remove and Replace the Power Supply Module for the procedure for removing and replacing the power supply module in the Secure Firewall 3100.
- See Remove and Replace the Dual Fan Module for the procedure for removing and replacing the dual fan module in the Secure Firewall 3100.
- See Ground the Chassis for the procedure for using the grounding lug to ground the chassis.
- See Power Supply Modules, on page 24 for a description of the power supply module LEDs.
- See Dual Fan Modules, on page 26 for a description of the fan LEDs.

8-Port 1/10/25-Gbps Network Module

The Secure Firewall 3100 chassis has one network module slot named NM-2. Network modules are optional, removable I/O modules that provide either additional ports or different interface types. The network module plugs into the chassis on the front panel. See Front Panel, on page 8 for the location of the network module slot on the chassis.

FPR3K-XNM-8X10G supports 1 Gbps and 10 Gbps full-duplex Ethernet traffic per port and is supported on all Secure Firewall 3100s. FPR3K-XNM-8X25G supports 1 Gbps, 10 Gbps, or 25 Gbps full-duplex Ethernet traffic per port and is supported *only* on the 3130 and 3140.

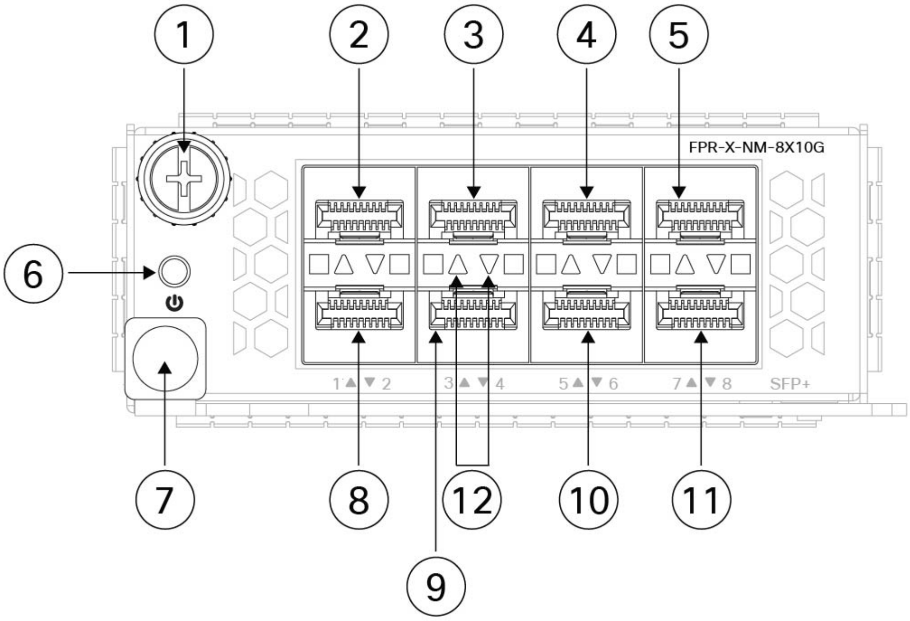
See Supported Transceivers, on page 28 for a list of supported SFPs for this network module.

The top ports are numbered from left to right—Ethernet 2/1, Ethernet 2/3, Ethernet 2/5, and Ethernet 2/7. The bottom ports are numbered from left to right—Ethernet 2/2, Ethernet 2/4, Ethernet 2/6, and Ethernet 2/8 (see the figure below). Up arrows are the top ports and down arrows are the bottom ports (see the figure below). This network module supports SFP/SFP+/SFP28 transceivers.

Note The hardware and the system support hot swapping if you are replacing a network module with the same type of network module. You must first disable the network port and then reenable it after replacement. If you replace the 8-port 1/10/25-Gbps network module with another supported network module, you must reboot the chassis so that the new network module is recognized. See the configuration guide for your operating system for the detailed procedures for managing network modules.

The following figure shows the front panel of the 1/10-Gbps and 1/10/25-Gbps network module.

Figure 8: 8-Port 1/10-Gbps (FPR3K-XNM-8X10G) and 8-Port 1/10/25-Gbps (FPR3K-XNM-8X25G) Network Module



1	Captive screw	**2**	Ethernet 2/1

3	Ethernet 2/3	**4**	Ethernet 2/5
5	Ethernet 2/7	**6**	Power on LED
7	Ejector handle	**8**	Ethernet 2/2
9	Ethernet 2/4	**10**	Ethernet 2/6
11	Ethernet 2/8	**12**	Network activity LEDs The up arrows represent the top ports and the down arrows represent the bottom ports. • Off—No SFP. • Amber—No link or network failure. • Green—Link up. • Green, flashing—Network activity.

4-Port 40-Gbps Network Module

The Secure Firewall 3100 chassis has one network module slot named NM-2. Network modules are optional, removable I/O modules that provide either additional ports or different interface types. The network module plugs into the chassis on the front panel. See Front Panel, on page 8 for the location of the network module slot on the chassis.

The FPR3K-XNM-4X40G supports 40-Gbps operation and is supported on the 3130 and 3140. This network module provides full-duplex Ethernet traffic per port. The 40-Gbps network module has four QSFP+ ports. The 40-Gbps ports are numbered left to right, Ethernet 2/1 through Ethernet 2/4. See Supported Transceivers, on page 28 for the list of Cisco-supported transceivers.

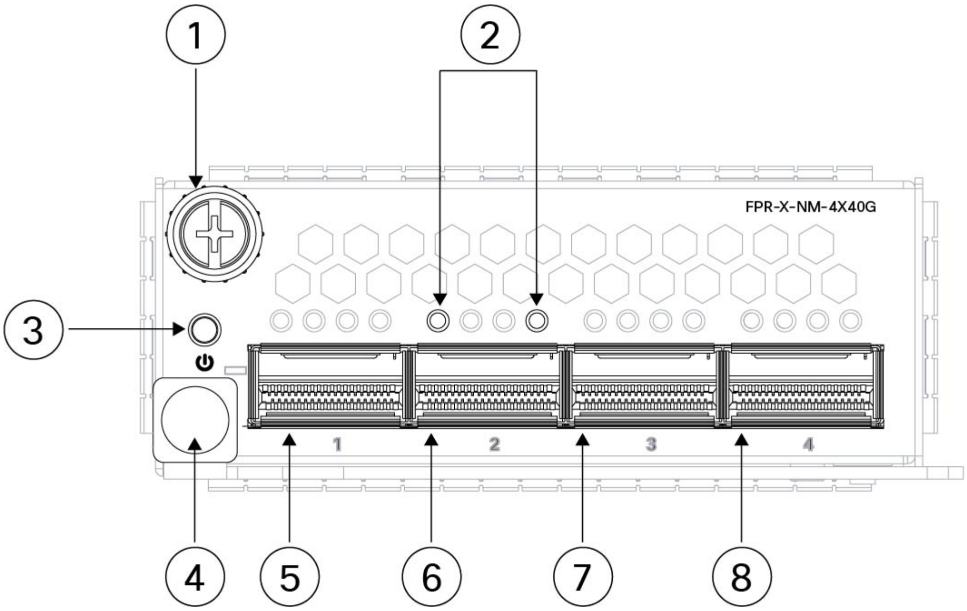
You can break each of the four 40-Gbps ports into four 10-Gbps ports using the supported breakout cables (see Supported Transceivers, on page 28 for a list of the breakout cables). With the four-port 40-Gbps network module, you now have 16 10-Gbps interfaces. The added interfaces are Ethernet 2/1/1 through Ethernet 2/1/4.

Note The hardware and the system support hot swapping if you are replacing a network module with the same type of network module. If you replace the 4-port 40-Gbps network module with another supported network module, you must reboot the chassis so that the new network module is recognized. See the configuration guide for your operating system for the detailed procedures for managing network modules.

Note Although you can install the 4-port 40-Gbps network in the Secure Firewall 3105, 3110, and 3120, the software does not recognize it because it is not supported.

The following figure shows the front panel of the 4-port 40-Gbps network module.

Figure 9: 4-Port 40-Gbps Network Module (FPR3K-XNM-4X40G)



1	Captive screw	**2**	Network activity LEDs The up arrows represent the top ports and the down arrows represent the bottom ports. • Off—No SFP. • Amber—No link or a network failure. • Green—Link is up. • Green, flashing—Network activity.
3	Power on LED	**4**	Ejector handle
5	Ethernet 2/1	**6**	Ethernet 2/2
7	Ethernet 2/3	**8**	Ethernet 2/4

2-Port 100-Gbps Network Module

The Secure Firewall 3100 chassis has one network module slot named NM-2. Network modules are optional, removable I/O modules that provide either additional ports or different interface types. The network module plugs into the chassis on the front panel. See Front Panel, on page 8 for the location of the network module slot on the chassis.

The FPR3K-XNM-2X100G supports 40/100-Gbps operation and is supported on the 3130 and 3140. This network module has two QSFP/QSFP28 ports and provides full-duplex Ethernet traffic per port. The maximum bandwidth supported is 200 Gbps full duplex, where each port operates at 100 Gbps. The 100-Gbps ports are numbered left to right, Ethernet 2/1 through Ethernet 2/2. See Supported Transceivers, on page 28 for a list of supported SFPs for this network module

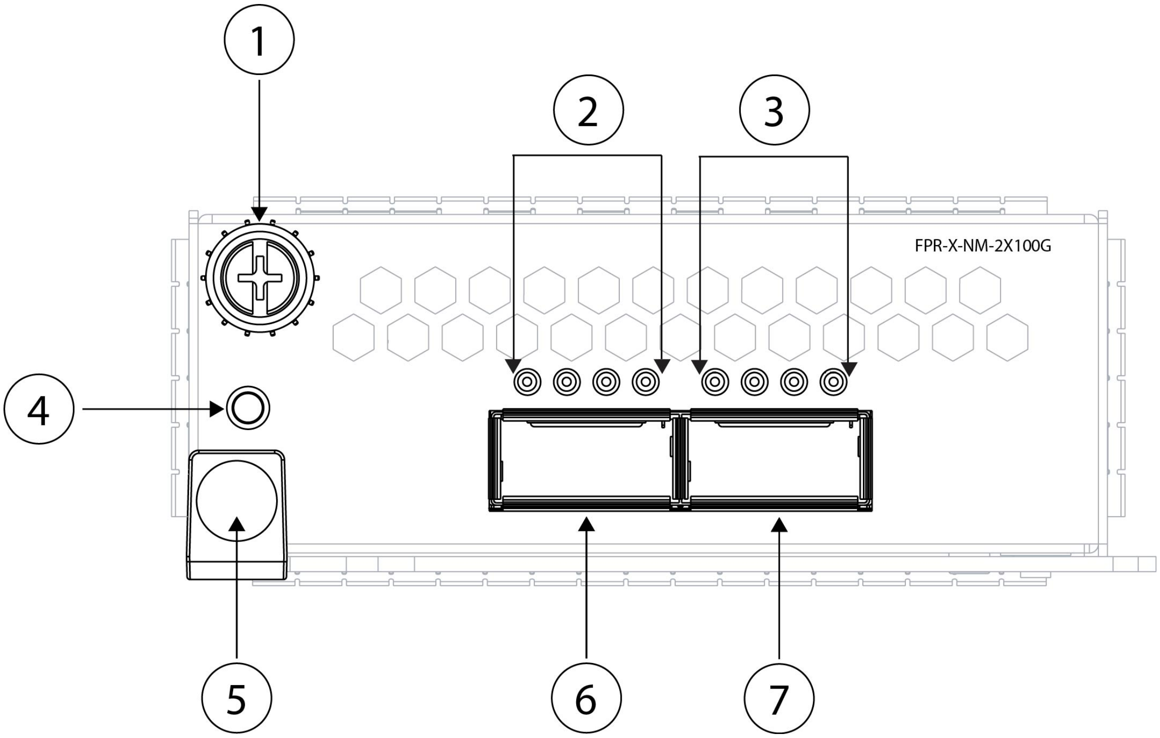
The network module has two 100-Gbps ports named E2/1 and E2/2. You can break each 100-Gbps port into four 10-Gbps or four 25-Gbps ports using the supported breakout cables. For E2/1 the new interfaces are named E2/1/1, E2/1/2, E2/1/3 and E2/1/4. For E2/2 the new interfaces are named E2/1/2, E2/2/2, E2/2/3, and E2/2/4.

Note The hardware and the system support hot swapping if you are replacing a network module with the same type of network module. If you replace the 100-Gbps network module with another supported network module, you must reboot the chassis so that the new network module is recognized. See the configuration guide for your operating system for the detailed procedures for managing network modules.

Note Although you can install the 2-port 100-Gbps network module in the Secure Firewall 3105, 3110, and 3120, the software does not recognize it because it is not supported.

The following figure shows the front panel of the 2-port 100-Gbps network module.

Figure 10: 2-Port 100-Gbps Network Module (FPR3K-XNM-2X100G)



1	Captive screw	**2**	Network activity LEDs • Off—No SFP. • Amber—No link or a network failure. • Green—Link is up. • Green, flashing—Network activity.
3	Network activity LEDs • Off—No SFP. • Amber—No link or a network failure. • Green—Link is up. • Green, flashing—Network activity.	**4**	Power on LED
5	Ejector handle	**6**	Ethernet 2/1
7	Ethernet 2/2		—

8-Port 10/100/1000Base-T Network Module with Hardware Bypass

The Secure Firewall 3100 chassis has one network module slot named NM-2. Network modules are optional, removable I/O modules that provide either additional ports or different interface types. The network module plugs into the chassis on the front panel. See Front Panel, on page 8 for the location of the network module slot on the chassis.

FPR3K-XNM-8X1GF is an 8-port 10/100/1000Base-T hardware bypass network module. The eight ports are numbered from top to bottom, left to right. Ports 1 and 2, 3 and 4, 5 and 6, and 7 and 8 are paired for hardware bypass mode. In hardware bypass mode, data is not processed by the Secure Firewall 3100 but is routed to the paired port.

Hardware bypass (also known as fail-to-wire) is a physical layer (Layer 1) bypass that allows paired interfaces to go into bypass mode so that the hardware forwards packets between these port pairs without software intervention. Hardware bypass provides network connectivity when there are software or hardware failures. Hardware bypass is useful on ports where the secure firewall is only monitoring or logging traffic. The hardware bypass network modules have a switch that is capable of connecting the two ports when needed.

Note Hardware bypass is only supported with threat defense, although you can use these modules in nonbypass mode in threat defense or ASA.

Hardware bypass is supported only on a fixed set of ports. You can pair Port 1 with Port 2, Port 3 with Port 4, but you cannot pair Port 1 with Port 4 for example.

When the appliance switches from normal operation to hardware bypass or from hardware bypass back to normal operation, traffic may be interrupted for several seconds. A number of factors can affect the length of the interruption; for example, behavior of the link partner such as how it handles link faults and debounce timing; spanning tree protocol convergence; dynamic routing protocol convergence; and so on. During this time, you may experience dropped connections.

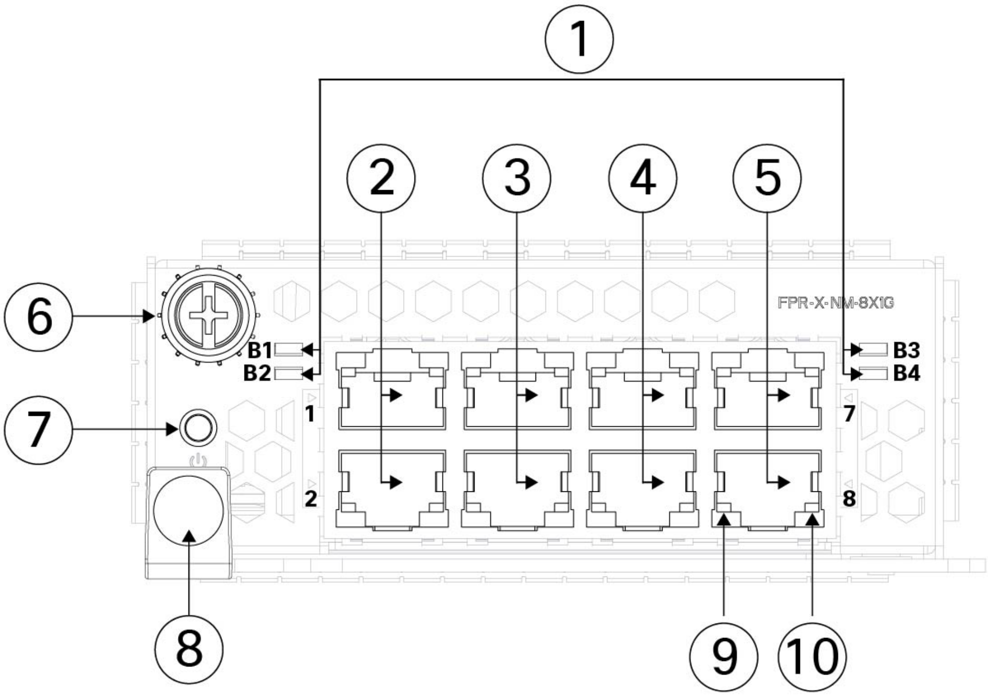
Note If you have an inline interface set with a mix of hardware bypass and nonhardware bypass interfaces, you cannot enable hardware bypass on this inline interface set. You can only enable hardware bypass on an inline interface set if all the pairs in the inline set are valid hardware bypass pairs.

The hardware and the system support hot swapping if you are replacing a network module with the same type of network module. If you replace the 8-port 10/100/1000Base-T network module with another supported network module, you must reboot the chassis so that the new network module is recognized. See the configuration guide for your operating system for the detailed procedures for managing network modules.

Make sure you have the correct firmware package and software version installed to support this network module. See the configuration guide for your software for the procedures for updating the firmware package and verifying the software version. See the Cisco Secure Firewall Threat Defense Compatibility Guide and the Cisco Secure Firewall ASA Compatibility guide, which provide Cisco software and hardware compatibility, including operating system and hosting environment requirements, for each supported version.

The following figure shows the front panel of the 8-port 10/100/1000Base-Tnetwork module.

Figure 11: 8-Port 10/100/1000Base-T Network Module (FPR3K-XNM-8X1GF)



1	Bypass LEDs B1 through B4 • Green—In standby mode. • Amber, flashing—Port is in hardware bypass mode, failure event.	**2**	Ethernet 2/1 and Ethernet 2/2 Ports 1 and 2 are paired together to form a hardware bypass pair. LED B1 applies to this paired port.
3	Ethernet 2/3 and Ethernet 2/4 Ports 3 and 4 are paired together to form a hardware bypass pair. LED B2 applies to this paired port.	**4**	Ethernet 2/5 and Ethernet 2/6 Ports 5 and 6 are paired together to form a hardware bypass pair. LED B3 applies to this paired port.
5	Ethernet 2/7 and Ethernet 2/8 Ports 7 and 8 are paired together to form a hardware bypass pair. LED B4 applies to this paired port.	**6**	Captive screw
7	Power LED	**8**	Handle
9	Left Port LED • Unlit—No connection or port is not in use. • Green—Link up. • Green, flashing—Network activity.	**10**	Right Port LED • Unlit—No connection or port is not in use. • Green—Link up. • Green, flashing—Network activity.

6-Port 1-Gbps SX/10-Gbps SR/10-Gbps LR/25-Gbps SR/25-Gbps LR Network Module with Hardware Bypass

The Secure Firewall 3100 chassis has one network module slot named NM-2. Network modules are optional, removable I/O modules that provide either additional ports or different interface types. The network module plugs into the chassis on the front panel. See Front Panel, on page 8 for the location of the network module slot on the chassis.

The FPR3K-XNM-6X1SXF, FPR3K-XNM-6X10SRF, FPR3K-XNM-6X10LRF, FPR3K-XNM-6X25SRF, and FPR3K-XNM-6X25LRF hardware bypass network modules have six ports that are numbered from top to bottom, left to right. Pair ports 1 and 2, 3 and 4, and 5 and 6 to form hardware bypass paired sets. In hardware bypass mode, data is not processed by the Secure Firewall 3100 but is routed to the paired port. This network module has built-in SFP transceivers. Hot swapping and field replacement of transceivers are not supported.

Hardware bypass (also known as fail-to-wire) is a physical layer (Layer 1) bypass that allows paired interfaces to go into bypass mode so that the hardware forwards packets between these port pairs without software intervention. Hardware bypass provides network connectivity when there are software or hardware failures. Hardware bypass is useful on ports where the secure firewall is only monitoring or logging traffic. The hardware bypass network modules have a switch that is capable of connecting the two ports when needed. This hardware bypass network module has built-in SFPs.

Note Hardware bypass is only supported with threat defense, although you can use these modules in nonbypass mode in threat defense or ASA.

Hardware bypass is supported only on a fixed set of ports. You can pair Port 1 with Port 2, Port 3 with Port 4, but you cannot pair Port 1 with Port 4 for example.

Note When the appliance switches from normal operation to hardware bypass or from hardware bypass back to normal operation, traffic may be interrupted for several seconds. A number of factors can affect the length of the interruption; for example, behavior of the link partner such as how it handles link faults and debounce timing; spanning tree protocol convergence; dynamic routing protocol convergence; and so on. During this time, you may experience dropped connections.

Note If you have an inline interface set with a mix of hardware bypass and nonhardware bypass interfaces, you cannot enable hardware bypass on this inline interface set. You can only enable hardware bypass on an inline interface set if all the pairs in the inline set are valid hardware bypass pairs.

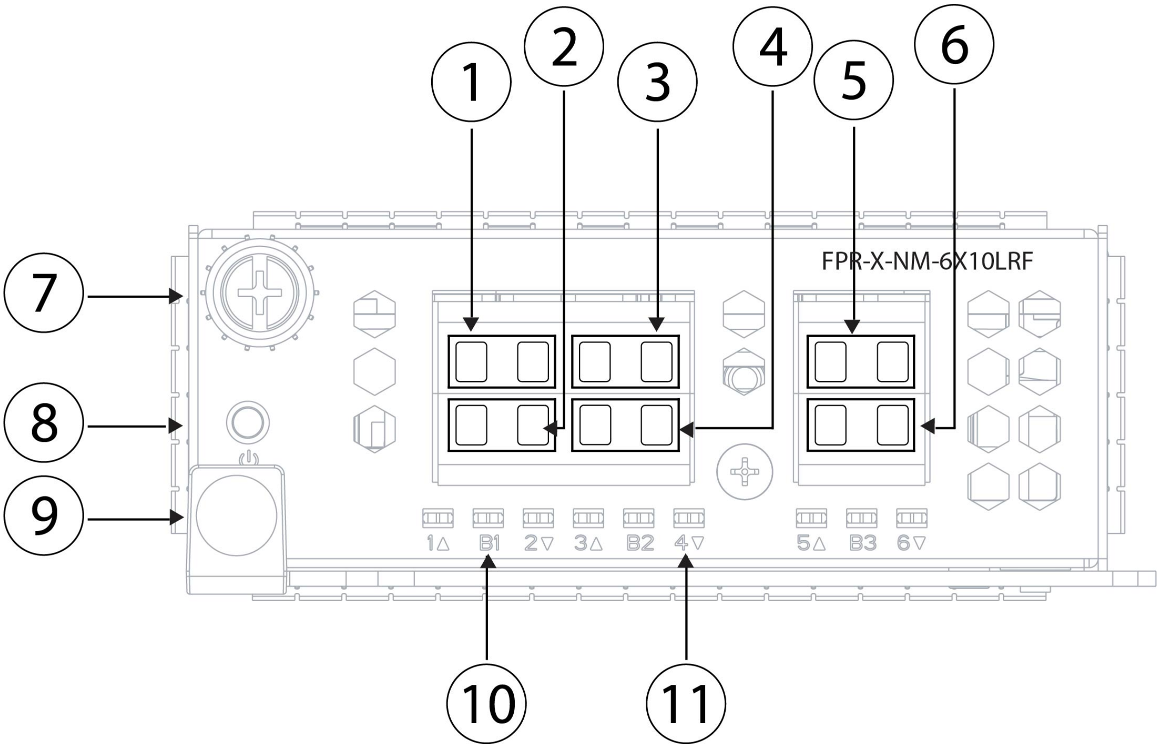
Note The 6-port 1-Gbps SX/10-Gbps SR/10-Gbps LR/25-Gbps SR/25-Gbps LR network module is supported beginning with Cisco Secure Threat Defense Version 7.2.3 and Cisco Secure ASA Version 9.18.2.

Note The hardware and the system support hot swapping if you are replacing a network module with the same type of network module. If you replace the 6-port 1/10/25-Gbps network module with another supported network module, you must reboot the chassis so that the new network module is recognized. See the configuration guide for your operating system for the detailed procedures for managing network modules.

Note Make sure you have the correct firmware package and software version installed to support this network module. See the configuration guide for your software for the procedure to verify your firmware package and software version. See the Cisco Secure Firewall Threat Defense Compatibility Guide and the Cisco Secure Firewall ASA Compatibility guide, which provide Cisco software and hardware compatibility, including operating system and hosting environment requirements, for each supported version

The following figure shows the front panel of the 6-port 1/10/25-Gbps network module.

Figure 12: 6-Port 1/10/25-Gbps Network Module (FPR3K-XNM-6X1SXF, FPR3K-XNM-6X10SRF, FPR3K-XNM-6X10LRF, FPR3K-XNM-6X25SRF, and FPR3K-XNM-6X25LRF)



1	Port 1 Ethernet 2/1 Ports 1 and 2 are paired together to form a hardware bypass pair.	**2**	Port 2 Ethernet 2/2 Ports 1 and 2 are paired together to form a hardware bypass pair.
3	Port 3 Ethernet 2/3 Ports 3 and 4 are paired together to form a hardware bypass pair.	**4**	Port 4 Ethernet 2/4 Ports 3 and 4 are paired together to form a hardware bypass pair.
5	Port 5 Ethernet 2/5 Ports 5 and 6 are paired together to form a hardware bypass pair.	**6**	Port 6 Ethernet 2/6 Ports 5 and 6 are paired together to form a hardware bypass pair.
7	Captive screw	**8**	Power LED

9	Handle ejector	**10**	Bypass LEDs B1 through B3: • Off—Bypass mode is disabled. • Green—Port is in standby mode. • Amber, flashing—Port is in hardware bypass mode, failure event.
11	Six network activity LEDs: • Amber—No connection, or port is not in use, or no link or network failure. • Green—Link up, no network activity. • Green, flashing—Network activity.		—

Power Supply Modules

See Product ID Numbers, on page 38 for a list of the PIDs associated with the Secure Firewall 3100 power supply modules.

Note You *cannot* mix AC and DC power supply modules in the chassis.

Note After removing power from the chassis by unplugging the power cord, wait at least 10 seconds before turning power back ON. You want to keep the system power off, including the standby power, for 10 seconds.

Attention Make sure that one power supply module is always active.

Note The system power requirements are lower than the power supply module capabilities. See the following table.

AC Power Supply

The dual power supplies can supply up to 800-W power across the input voltage range. The load is shared when both power supply modules are plugged in and running at the same time.

Note The system does not consume more than the capacity of one power supply module, so it always operate in full redundancy mode when two power supply modules are installed.

Table 2: AC Power Supply Module Hardware Specifications

Input voltage	100 to 240 VAC
Maximum input current	<3 A at 200 VAC <6 A at 100 VAC
Maximum output power	400 W
Frequency	50 to 60 Hz
Efficiency	85% at 50% load
Redundancy	1+1 redundancy with dual power supply modules

DC Power Supply

The power supplies can supply up to 800 W power across the input voltage range. The load is shared when both power supply modules are plugged in and running at the same time.

Note The system does not consume more than the capacity of one power supply module, so it always operate in full redundancy mode when two power supply modules are installed.

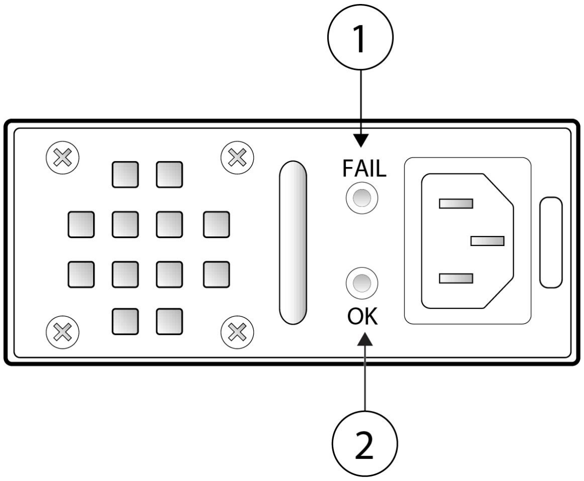
Table 3: DC Power Supply Module Hardware Specifications

Input voltage	-48 to -60 VDC
Maximum input current	< 15 A at -48 V
Redundancy	1+1 redundancy with dual power supply modules
Efficiency	> 88% at 50% load

Power Supply Module LEDs

The following figure shows the bicolor power supply LEDs on the power supply module. The figure shows the AC power supply module. The DC power supply module has the same LEDs.

Figure 13: Power Supply Module LEDs



1	**Amber FAIL LED** Fail LED Status: • Off—No fault detected. • Amber, flashing—Fault warning, power supply may still work but could fail due to high temperature, failing fan, or over current. • Amber—Fault detected; power supply not working properly. Includes over voltage, over current, over temperature, and fan failure.	2	**Green OK LED** OK LED Status: • Off—Input power not present. • Green, flashing—Input power present, but system is not powered up (power switch is off). • Green—The power supply module is enabled and running.

For More Information

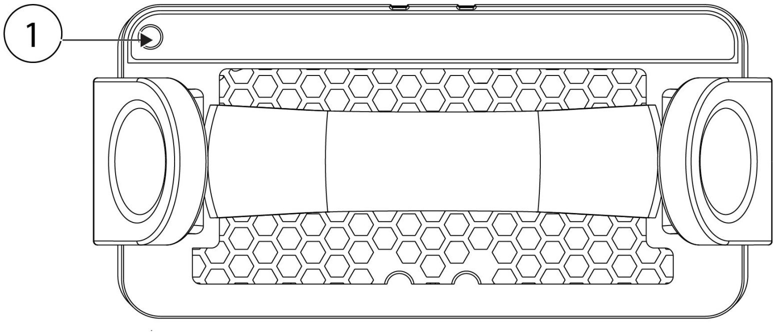
- See Remove and Replace the Power Supply Module for the procedure for removing and replacing the power supply module in the Secure Firewall 3100.

Dual Fan Modules

The Secure Firewall 3100 has two fan modules that provide 3 + 1 redundancy. Each fan module has two fans and each fan has two independent fan rotors. The fan rotors are monitored individually, and this gives 8 fan rotors per system. When one fan rotor fails, all others spin at maximum speed so that the system continues to function. The dual fan modules are hot-swappable and installed in the rear of the chassis.

The following figure shows the location of the fan LED on the fan module.

Figure 14: Fan LED



1	Two-color LED

The fan module has one two-color LED, which is located on the upper left corner of the fan.

- Off—The environmental subsystem is not active yet.
- Green—Fan running normally. It may take up to one minute for the LED status to turn green after power is on.
- Amber—One fan has failed. The system can continue to operate normally, but fan service is required.
- Amber, flashing—Two or more fans have failed. Immediate attention is required.

For More Information

- See Product ID Numbers, on page 38 for a list of the PIDs associated with the Secure Firewall 3100 fans.
- See Remove and Replace the Dual Fan Module for the procedure for removing and replacing the dual fan modules.

SSDs

The Secure Firewall 3100 has two SSD slots that each hold one NVMe 900-GB SSD. By default the Secure Firewall 3100 ships with one 900-GB SSD installed in slot 1. The second SSD slot is reserved for software RAID1. The RAID1 SSD is shipped already configured. If you have two SSDs installed, they form a RAID when you boot up.

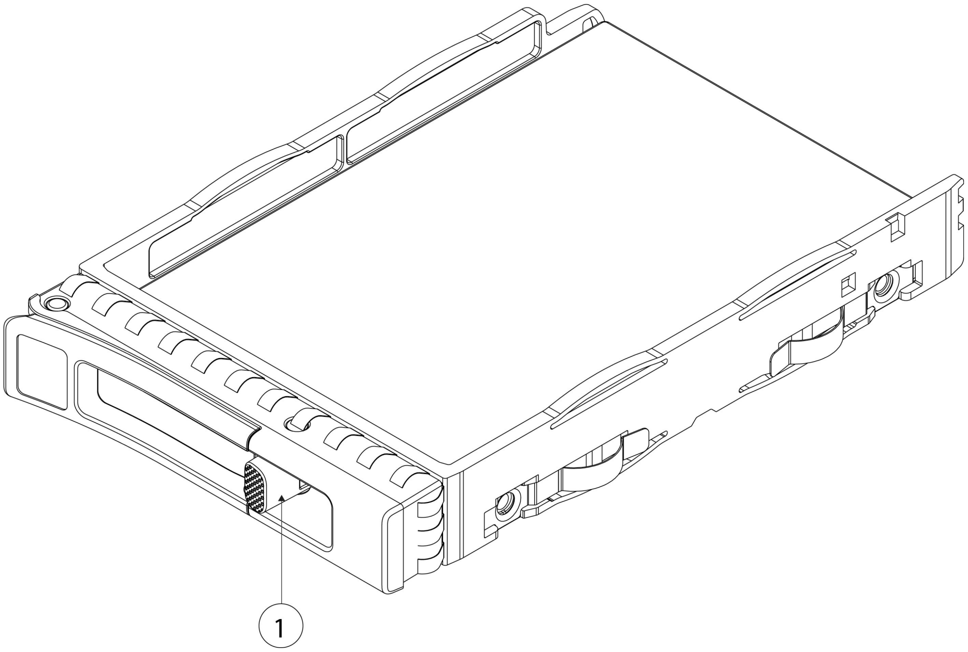
Hot swapping is supported. With two SSDs, you can swap SSD-1 without powering off the chassis. However, you must issue the **raid remove-secure local disk** command to remove SSD-2 from the RAID configuration before hot swapping. Otherwise, you can lose data. If you remove and replace the RAID1 SSD, you must add it again to the RAID1 configuration using the **raid add local-disk 1|2** command. The SSD drive identifiers are `disk0:` and `disk1:`.

Caution If you have only one SSD, you cannot remove it while the firewall is powered on.

Caution You cannot swap SSDs between different platforms. For example, you cannot use a 2100 series SSD in a 3100 series model. If you are swapping SSDs between two Secure Firewall 3100s, use the **remove-secure local disk** command, otherwise sometimes the SED (self-encrypting drive) gets locked. If you get an error message that the SED is locked, you can enter the PSID and the system clears the SED and creates a new set of keys. To avoid this situation, especially if you do not know what the PSIDs are, always use the **remove-secure local disk** when removing SSDs. See Hot Swap an SSD on the Secure Firewall 3100/4200 for the procedures for safely removing an SSD.

See Product ID Numbers, on page 38 for a list of the PIDs associated with the Secure Firewall 3100 SSDs.

Figure 15: SSD



1	SSD release tab		—

For More Information

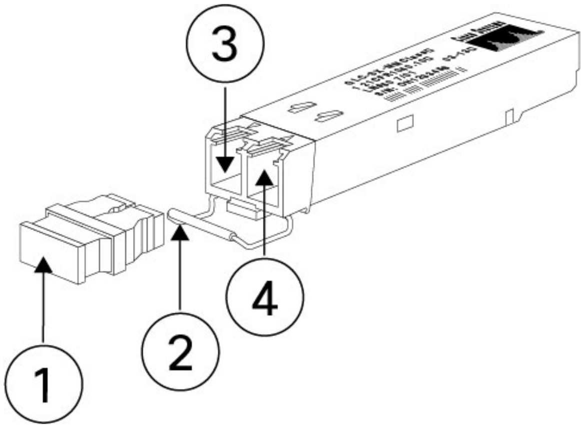
- See Front Panel LEDs, on page 11 for the location and description of the SSD LEDs on the front panel.
- See Remove and Replace the SSD for the procedure for removing and replacing the SSD.
- See the configuration guide for your software for the procedures for removing and adding an SSD from the RAID1 configuration.

Supported Transceivers

The SFP/SFP+/QSFP+ transceiver is a bidirectional device with a transmitter and receiver in the same physical package. It is a hot-swappable optical or electrical (copper) interface that plugs into the SFP/SFP+/QSFP+ ports on the fixed ports and the network module ports, and provides Ethernet connectivity.

See Cisco SFP Modules for Gigabit Ethernet Applications Data Sheet for more information.

Figure 16: SFP Transceiver



1	Dust plug	**2**	Bail clasp
3	Receive optical bore	**4**	Transmit optical bore

Safety Warnings

Take note of the following warnings:

Warning **Statement 1055**—Class 1/1M Laser

Invisible laser radiation is present. Do not expose to users of telescopic optics. This applies to Class 1/1M laser products.

Warning **Statement 1056**—Unterminated Fiber Cable

Invisible laser radiation may be emitted from the end of the unterminated fiber cable or connector. Do not view directly with optical instruments. Viewing the laser output with certain optical instruments, for example, eye loupes, magnifiers, and microscopes, within a distance of 100 mm, may pose an eye hazard.

Warning **Statement 1057**—Hazardous Radiation Exposure

Use of controls, adjustments, or performance of procedures other than those specified may result in hazardous radiation exposure.

Warning Use appropriate ESD procedures when inserting the transceiver. Avoid touching the contacts at the rear, and keep the contacts and ports free of dust and dirt. Keep unused transceivers in the ESD packing that they were shipped in.

Caution Although non-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 third-party SFP transceiver.

The following table lists the SFPs that are supported on the Secure Firewall 3105 fixed ports.

Table 4: FPR3105 Fixed Ports

Port Type	Transceiver PID	First Supported Release
Fixed SFP/SFP+ ports	• GLC-TE • GLC-SX-MMD • GLC-LH-SMD • GLC-EX-SMD • GLC-ZX-SMD • GLC-GE-100FX • SFP-10G-SR • SFP-10G-SR-S • SFP-10G-LR • SFP-10G-LR-S • SFP-10G-ER • SFP-10G-ER-S • SFP-10G-ZR • SFP-10G-ZR-S • SFP-H10GB-CUxM • SFP-H10GB-ACUxM • SFP-10G-AOCxM	Threat Defense 7.3/ASA 9.20

The following table lists the SFPs that are supported on the Secure Firewall 3105 management ports.

Table 5: FPR3105 Management Ports

Port Type	Transceiver PID	First Supported Release
Management SFP/SFP+ ports	• GLC-TE • GLC-SX-MMD • GLC-LH-SMD • GLC-EX-SMD • GLC-ZX-SMD • GLC-GE-100FX • SFP-10G-SR • SFP-10G-SR-S • SFP-10G-LR • SFP-10G-LR-S • SFP-10G-ER • SFP-10G-ER-S • SFP-10G-ZR • SFP-10G-ZR-S • SFP-H10GB-CUxM • SFP-H10GB-ACUxM • SFP-10G-AOCxM	Threat Defense 7.3/ASA 9.20

The following table lists the SFPs supported on the Secure Firewall 3110, 3120, 3130, and 3140 fixed ports.

Table 6: FPR3110, FPR3120, FPR3130, and FPR3140 Fixed Ports

Port Type	Transceiver PID	First Supported Release
Fixed SFP/SFP+ ports	• GLC-TE • GLC-SX-MMD • GLC-LH-SMD • GLC-EX-SMD • GLC-ZX-SMD • GLC-GE-100FX • SFP-10G-SR • SFP-10G-SR-S • SFP-10G-LR • SFP-10G-LR-S • SFP-10G-ER • SFP-10G-ER-S • SFP-10G-ZR • SFP-10G-ZR-S • SFP-H10GB-CUxM • SFP-H10GB-ACUxM • SFP-10G-AOCxM	Threat Defense 7.1/ASA 9.17

The following table lists SFPs that are supported on the Secure Firewall 3130 and 3140 fixed ports.

Table 7: FPR3130 and FPR3140 Fixed Ports

Port Type	Transceiver PID	First Supported Release
Fixed SFP28 ports	• SFP-25G-SR-S • SFP-10/25G-CSR-S • SFP-10/25G-LR-S • SFP-H25-CUxM • SFP-25G-A0CxM	Threat Defense 7.1/ASA 9.17

The following table lists the SFPs that are supported on the Secure Firewall 3110, 3120, 3130, and 3140 management ports.

Table 8: FPR3110, FPR3120, FPR3130, and FPR3140 Management Ports

Port Type	Transceiver PID	First Supported Release
Management SFP/SFP+ ports	• GLC-TE • GLC-SX-MMD • GLC-LH-SMD • GLC-EX-SMD • GLC-ZX-SMD • GLC-GE-100FX • SFP-10G-SR • SFP-10G-SR-S • SFP-10G-LR • SFP-10G-LR-S • SFP-10G-ER • SFP-10G-ER-S • SFP-10G-ZR • SFP-10G-ZR-S • SFP-H10GB-CUxM • SFP-H10GB-ACUxM • SFP-10G-AOCxM	Threat Defense 7.1/ASA 9.17

The following table lists the SFPs that are supported on the 8-port 10-Gbps network module.

Table 9: FPR3105 8-Port 10-Gbps Network Module

Port Type	Transceiver PID	First Supported Release
FPR3K-XNM-8X10G	• GLC-TE • GLC-SX-MMD • GLC-LH-SMD • GLC-EX-SMD • GLC-ZX-SMD • GLC-GE-100FX • SFP-10G-SR • SFP-10G-SR-S • SFP-10G-LR • SFP-10G-LR-S • SFP-10G-ER • SFP-10G-ER-S • SFP-10G-ZR • SFP-10G-ZR-S • SFP-H10GB-CUxM • SFP-H10GB-ACUxM • SFP-10G-AOCxM	Threat Defense 7.3/ASA 9.20
	• SFP-10G-T-X	Threat Defense 7.6/ASA 9.22

The following table lists the SFPs that are supported on the 8-port 10-Gbps network module.

Table 10: FPR3110, FPR3120, FPR3130, and FPR3140 8-Port 10-Gbps Network Module

Port Type	Transceiver PID	First Supported Release
FPR3K-XNM-8X10G	• GLC-TE • GLC-SX-MMD • GLC-LH-SMD • GLC-EX-SMD • GLC-ZX-SMD • GLC-GE-100FX • SFP-10G-SR • SFP-10G-SR-S • SFP-10G-LR • SFP-10G-LR-S • SFP-10G-ER • SFP-10G-ER-S • SFP-10G-ZR • SFP-10G-ZR-S • SFP-H10GB-CUxM • SFP-H10GB-ACUxM • SFP-10G-AOCxM	Threat Defense 7.1/ASA 9.17
	• SFP-10G-T-X	Threat Defense 7.6/ASA 9.22

The following table lists the SFPs that are supported on the 8-port 25-Gbps network module.

Table 11: FPR3130 and FPR3140 8-Port 25-Gbps Network Module

Port Type	Transceiver PID	First Supported Release
FPR3K-XNM-8X25G	• GLC-TE • GLC-SX-MMD • GLC-LH-SMD • GLC-EX-SMD • GLC-ZX-SMD • GLC-GE-100FX • SFP-10G-SR • SFP-10G-SR-S • SFP-10G-LR • SFP-10G-LR-S • SFP-10G-ER • SFP-10G-ER-S • SFP-10G-ZR • SFP-10G-ZR-S • SFP-H10GB-CUxM • SFP-H10GB-ACUxM • SFP-10G-AOCxM	Threat Defense 7.1/ASA 9.17
	• SFP-10G-T-X	Threat Defense 7.6/ASA 9.22
	• SFP-25G-SR-S • SFP-10/25G-CSR-S • SFP-10/25G-LR-S • SFP-H25-CUxM • SFP-25G-AOCxM	Threat Defense 7.1/ASA 9.17

The following table lists the SFPs that are supported on the 4-port 40-Gbps network module.

Table 12: FPR3130 and FPR3140 4-Port 40-Gbps Network Module

Port Type	Transceiver PID	First Supported Release
FPR3K-XNM-4X40G	• QSFP-40G-SR4 • QSFP-40G-SR4-S • QSFP-40G-CSR4 • QSFP-40G-SR-BD • QSFP-40G-LR4-S • QSFP-40G-LR4 • WSP-Q40GLR4L • QSFP-H40G-CUxM • QSFP-4SFP10G-CUxM • QSFP-H40G-ACUxM • QSFP-4X10G-ACUxM • QSFP-H40G-AOCxM • QSFP-4X10G-AOCxM	Threat Defense 7.1/ASA 9.17

The following table lists the SFPs that are supported on the 2-port 100-Gbps network module.

Table 13: FPR3130 and FPR3140 2-Port 100-Gbps Network Module

Port Type	Transceiver PID	First Supported Release
FPR3K-XNM-2X100G	• QSFP-100G-SR4-S • QSFP-100G-LR4-S • QSFP-40/100G-SRBD • QSFP-100G-AOCxM • QSFP-100G-CUxM • QSFP-4SFP25G-CUxM • QSFP-100G-FR-S • QSFP-100G-DR-S • QSFP-40/100-SRBD	Threat Defense 7.4/ASA 9.20
	• QSFP-100G-LR-S • QSFP-100G-SM-SR • QSFP-100G-SR1.2	Threat Defense 7.6/ASA 9.22

Hardware Specifications

The following table contains hardware specifications for the Secure Firewall 3100.

Specification	3105	3110	3120	3130	3140
Chassis dimensions (H x W x D)	1.75 x 17 x 20 inches (4.4 x 43.3 x 50.8 cm)				
Network module dimensions (H x W x D)	1.5 x 3.7 x 10.5 inches (4.39 x 9.4 x 26.67 cm)				
Chassis component weights	Network Module: 1.6 lb (.73 kg) SSD: 0.25 lb (.11 kg) Power supply module: 2 lb (.91 kg) Fan module: 0.5 lb (.23)				
Chassis weight	23 lb (10.5 kg) 1 power supply module, 1 network module, 2 dual fan modules, 1 SSD			25 lb (11.4 kg) 2 power supply modules, 1 network module, 2 dual fan modules, 1 SSD	
System power	100/240 VAC 6 A (at 100 VAC), 50 to 60 Hz				
Temperature	Operating: 32 to 104°F (-0 to 40°C) Nonoperating: -4 to 149°F (-20 to 65°C) maximum altitude is 40,000 ft				
Humidity	Operating: 5 to 85% noncondensing Nonoperating: 5 to 90% noncondensing				
Altitude	Operating: 10,000 ft maximum Nonoperating: 40,000 ft maximum				
Sound pressure	65 dBA @ 77°F (25°C) typical 74 dBA maximum				
Sound power	72 dB (typical) 80 dB (maximum)				

Product ID Numbers

The following table lists the product IDs (PIDs) associated with the Secure Firewall 3100. All of the PIDs in the table are field-replaceable. If you need to get a return material authorization (RMA) for any component, see Cisco Returns Portal for more information.

Note See the **show inventory** command in the Cisco Secure Firewall Threat Defense Command Reference or the Cisco Secure Firewall ASA Series Command Reference to display a list of the PIDs for your Secure Firewall 3100.

Table 14: Secure Firewall 3100 PIDs

PID	Description
Chassis	
FPR3105-ASA-K9	Cisco Secure Firewall 3105 ASA chassis 1 RU
FPR3110-ASA-K9	Cisco Secure Firewall 3110 ASA chassis 1 RU
FPR3120-ASA-K9	Cisco Secure Firewall 3120 ASA chassis 1 RU
FPR3130-ASA-K9	Cisco Secure Firewall 3130 ASA chassis 1 RU
FPR3140-ASA-K9	Cisco Secure Firewall 3140 ASA chassis 1 RU
FPR3105-NGFW-K9	Cisco Secure Firewall 3105 next generation firewall chassis 1 RU
FPR3110-NGFW-K9	Cisco Secure Firewall 3110 next generation firewall chassis 1 RU
FPR3120-NGFW-K9	Cisco Secure Firewall 3120 next generation firewall chassis 1 RU
FPR3130-NGFW-K9	Cisco Secure Firewall 3130 next generation firewall chassis 1 RU
FPR3140-NGFW-K9	Cisco Secure Firewall 3140 next generation firewall chassis 1 RU
Accessories	
FPR3K-ACY-KIT	Accessory kit that ships with the chassis
FPR3K-ACY-KIT=	Accessory kit (spare)
FPR3K-PWR-AC-400	400-W AC power supply
FPR3K-PWR-AC-400=	400-W AC power supply (spare)
PWR-CC1-400WDC	400-W DC power supply
PWR-CC1-400WDC=	400-W DC power supply (spare)
FPR3K-PSU-BLANK	Power supply blank slot cover
FPR3K-PSU-BLANK=	Power supply blank slot cover (spare)

PID	Description
FPR3K-SSD900	900 GB SSD
FPR3K-SSD900=	900 GB SSD (spare)
FPR3K-SSD-BLANK	SSD blank slot carrier
FPR3K-SSD-BLANK=	SSD blank slot carrier (spare)
FPR3K-FAN	Dual fan module
FPR3K-FAN=	Dual fan module (spare)
FPR3K-SLIDE-RAILS	Slide rail kit
FPR3K-SLIDE-RAILS=	Slide rail kit (spare)
FPR3K-CBL-MGMT	Cable management brackets
FPR3K-CBL-MGMT=	Cable management brackets (spare)
FPR3K-BRKT	Rack-mount brackets
FPR3K-BRKT=	Rack-mount brackets (spare)
FPR3K-FIPS-KIT=	FIPS opacity shield kit (spare)
Network Modules	
FPR3K-XNM-6X1SXF	6-port 1-Gbps SFP hardware bypass network module, SX multimode
FPR3K-XNM-6X1SXF=	6-port 1-Gbps SFP hardware bypass network module, SX multimode (spare)
FPR3K-XNM-6X10SRF	6-port 10-Gbps SFP hardware bypass network module, SR multimode
FPR3K-XNM-6X10SRF=	6-port 10-Gbps SFP hardware bypass network module, SR multimode (spare)
FPR3K-XNM-6X10LRF	6-port 10-Gbps SFP hardware bypass network module, LR single mode
FPR3K-XNM-6X10LRF=	6-port 10-Gbps SFP hardware bypass network module, LR single mode (spare))
FPR3K-XNM-6X25SRF	6-port 25-Gbps SFP hardware bypass network module, SR multimode
FPR3K-XNM-6X25SRF=	6-port 25-Gbps SFP hardware bypass network module, SR multimode (spare)
FPR3K-XNM-6X25LRF	6-port 25-Gbps SFP hardware bypass network module, LR single mode

PID	Description
FPR3K-XNM-6X25LRF=	6-port 25-Gbps SFP hardware bypass network module, LR single mode (spare)
FPR3K-XNM-8X1GF	8-port 10/100/1000Base-10 hardware bypass network module
FPR3K-XNM-8X1GF=	8-port 10/100/1000Base-10 hardware bypass network module (spare)
FPR3K-XNM-8X10G	8-port 1/10-Gbps SFP+ network module
FPR3K-XNM-8X10G=	8-port 1/10-Gbps SFP+ network module (spare)
FPR3K-XNM-8X25G	8-port 1/10/25-Gbps QSFP network module
FPR3K-XNM-8X25G=	8-port 1/10/25-Gbps QSFP network module (spare)
FPR3K-XNM-4X40G	4-port 40-Gbps QSFP+ network module
FPR3K-XNM-4X40G=	4-port 40-Gbps QSFP+ network module (spare)
FPR3K-X-NM-2X100G	2-port 200-Gbps QSFP/QSFP28 network module
FPR3K-X-NM-2X100G=	2-port 200-Gbps QSFP/QSFP28 network module (spare)
FPR3K-NM-BLANK	Network module blank slot cover
FPR3K-NM-BLANK=	Network module blank slot cover (spare)

Power Cord Specifications

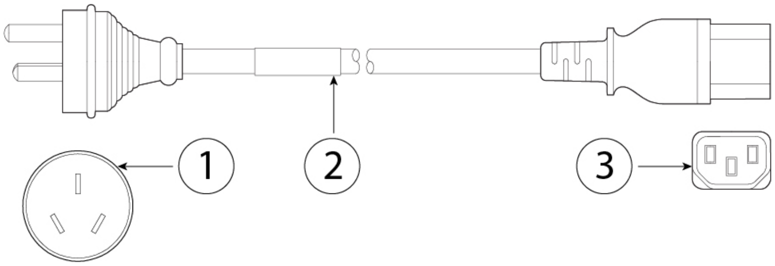
Each power supply has a separate power cord. Standard power cords or jumper power cords are available for connection to the secure firewall. The jumper power cords for use in racks are available as an optional alternative to the standard power cords.

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 or jumper power cords provided with the Secure 3100 are supported.

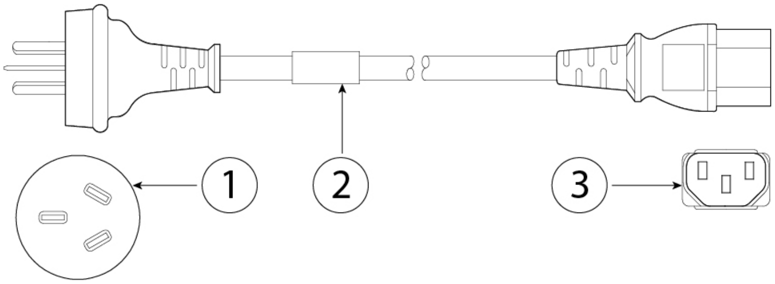
The following power cords are supported.

Figure 17: Argentina (CAB-ACR)



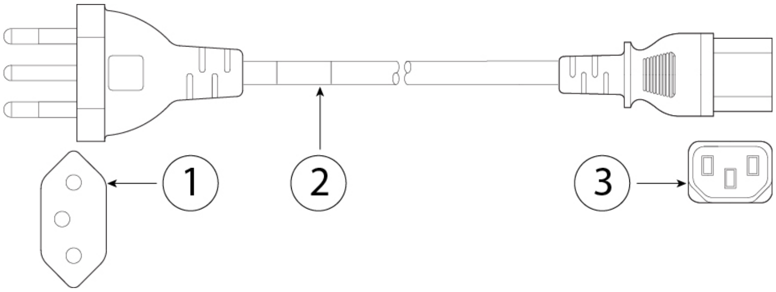
1	Plug: EL 219/IRAM 2073	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 2.5 m

Figure 18: Australia (CAB-ACA)



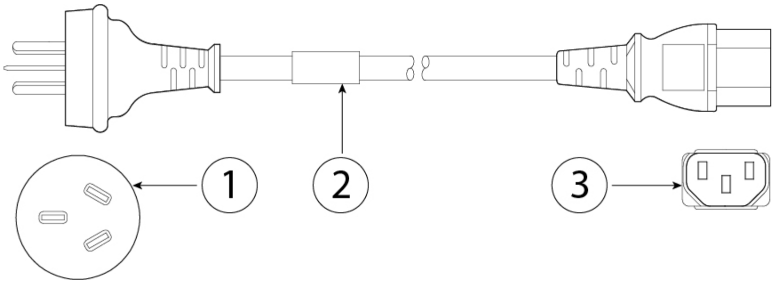
1	Plug: A.S. 3112	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 2.5 m

Figure 19: Brazil (CAB-C13-ACB)



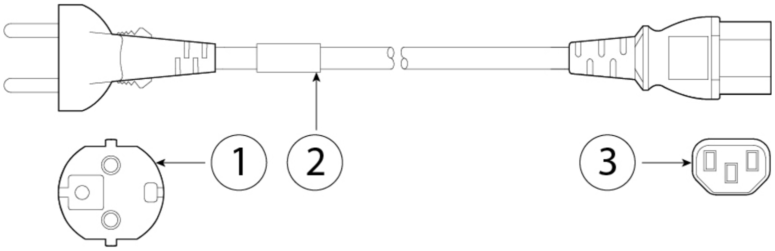
1	Plug: NBR 14136	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 2.1 m

Figure 20: China (CAB-ACC)



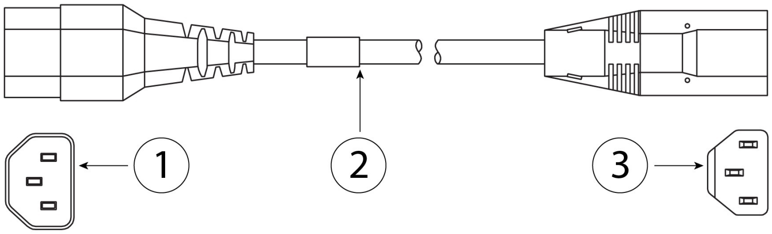
1	Plug: GB2099.1-2008	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 2.5 m

Figure 21: Europe (CAB-ACE)



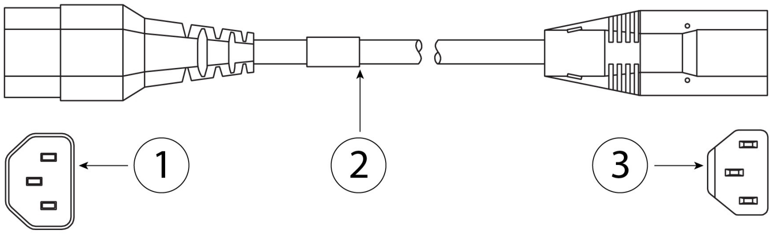
1	Plug: CEE 7 VII	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 1.5 m

Figure 22: India Jumper (CAB-C13-C14-3M-IN)



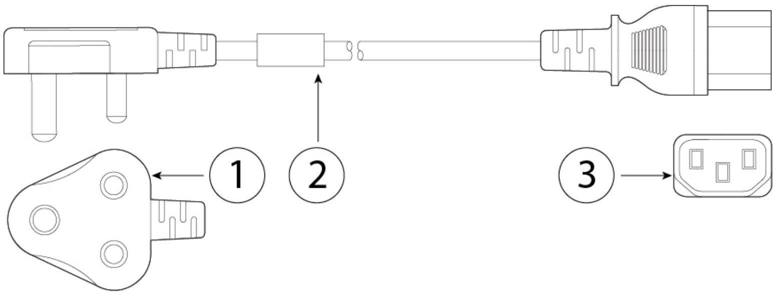
1	IEC 60320/C14G	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 3 m

Figure 23: India Jumper (CAB-C13-C14-IN)



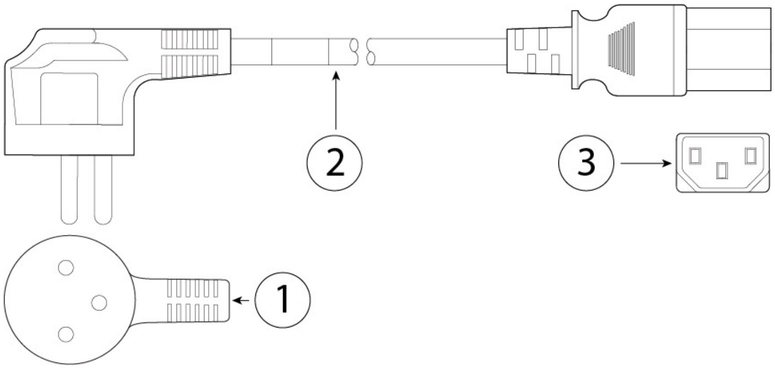
1	IEC 60320/C14G	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 1.4 m

Figure 24: India (PWR-CORD-IND-D)



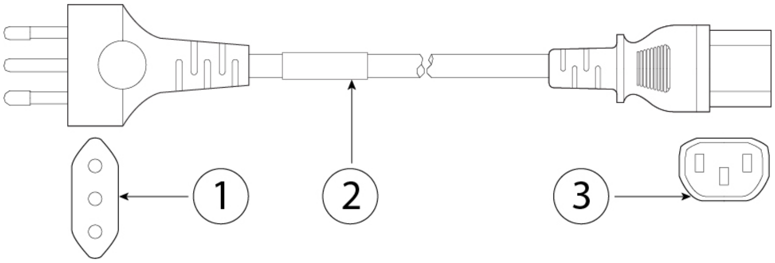
1	Plug: IS 6538-1971	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 1.8 m

Figure 25: Israel (CAB-250V-10A-IS)



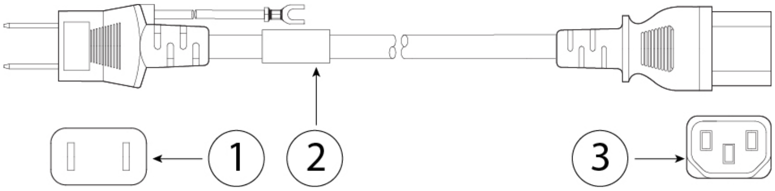
1	Plug: SI-32	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 2.5 m

Figure 26: Italy (CAB-ACI)



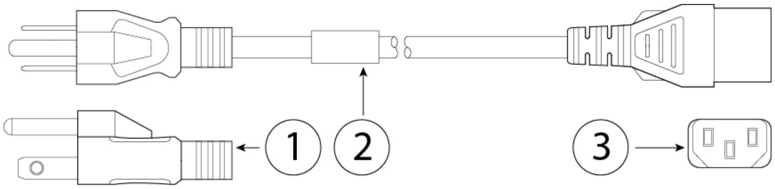
1	Plug: CEI 23-16	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 2.5 m

Figure 27: Japan (CAB-JPN)



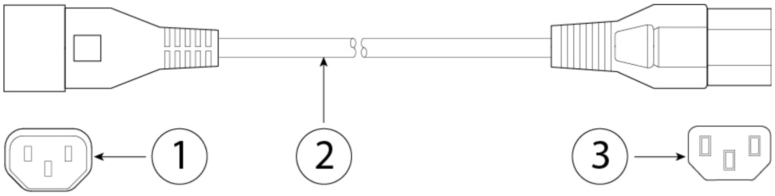
1	Plug: JIS C8303	**2**	Cord set rating: 12 A, 125 V
3	Connector: IEC 60320/C13		Cord length: 2.5 m

Figure 28: Japan (CAB-JPN-3PIN)



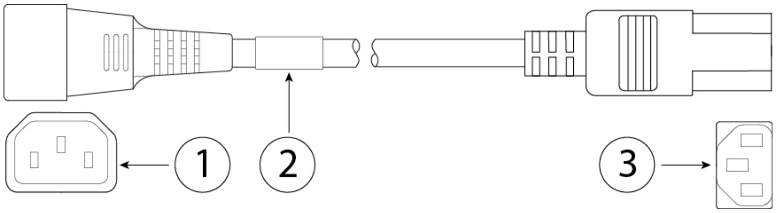
1	Plug: JIS C8303/JIS C8306	**2**	Cord set rating: 12 A, 125 V
3	Connector: IEC 60320/C13		Cord length: 2.3 m

Figure 29: Japan (CAB-C13-C14-2M-JP) PSE Mark



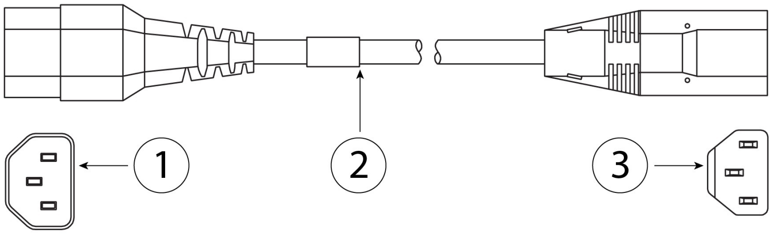
1	IEC 60320-2-2/E	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 2 m

Figure 30: Jumper (CAB-C13-C14-2M)



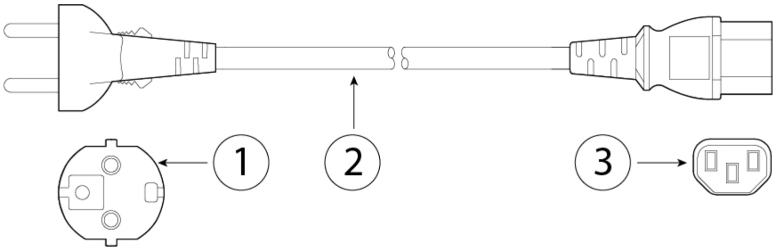
1	IEC 60320/C14G	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 2.5 m

Figure 31: Cabinet Jumper (CAB-C13-CBN)



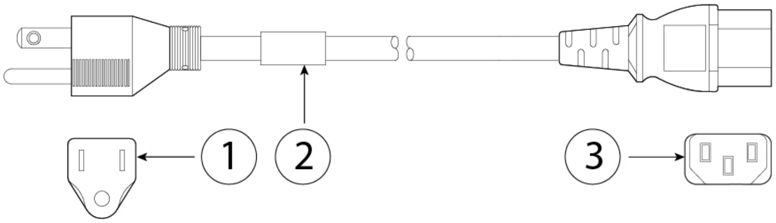
1	IEC 60320-2-2/E	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 0.7 m

Figure 32: Korea (CAB-AC-C13-KOR)



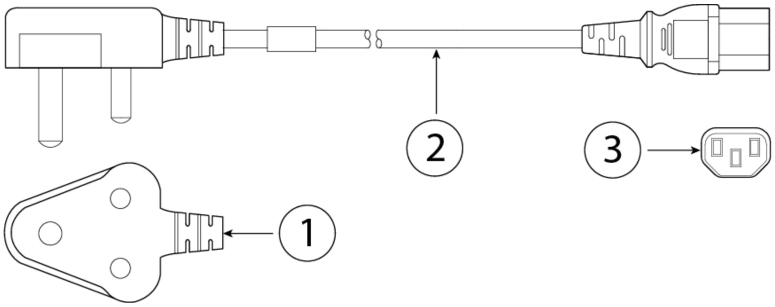
1	Plug: KSC 8305	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 1.8 m

Figure 33: North America (CAB-AC)



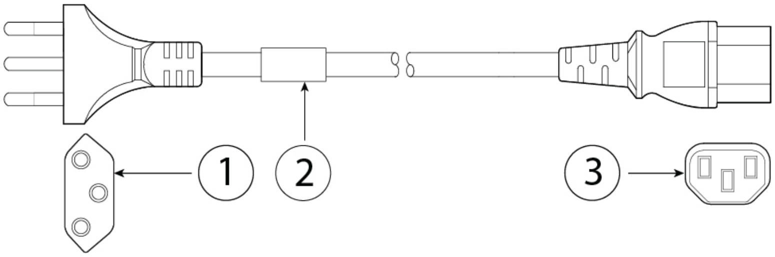
1	Plug: NEMA 5-15P	**2**	Cord set rating: 10 A, 125 V
3	Connector: IEC 60320/C13		Cord length: 2.1 m

Figure 34: South Africa (CAB-ACSA)



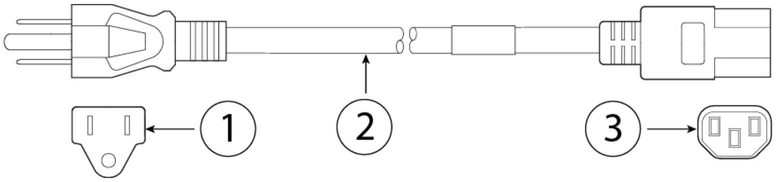
1	Plug: SABS 164/1	**2**	Cord set rating: 16 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 1.8 m

Figure 35: Switzerland (CAB-ACS)



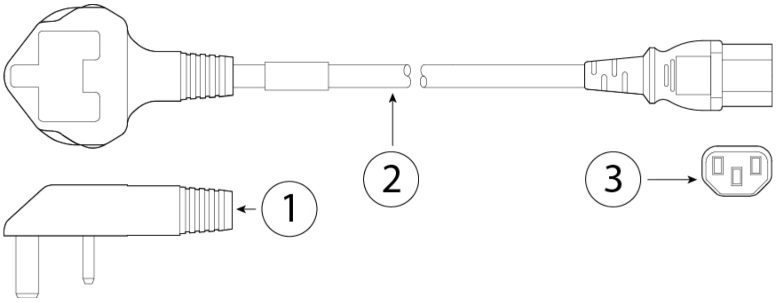
1	Plug: SEV 1011	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 2.5 m

Figure 36: Taiwan (CAB-ACTW)



1	Plug: CNS10917	**2**	Cord set rating: 10 A, 125 V
3	Connector: IEC 60320/C13		Cord length: 2.29 m

Figure 37: United Kingdom (CAB-ACU)



1	Plug: BS1363A/SS145	**2**	Cord set rating: 10 A, 250 V
3	Connector: IEC 60320/C13		Cord length: 2.5 m