Cisco Firepower 9300 Security Appliance

The Cisco Firepower™ 9300 is a scalable, carrier-grade platform designed for service providers and others requiring low latency and exceptional throughput, such as high-performance computing centers and high-frequency transactional environments. With tightly integrated, threat-centric security services from Cisco and its partners, Firepower 9300 lowers integration costs and supports the realization of highly secure, open, and programmable networks.

Product Overview

Cisco Firepower 9300, the appliance component of Cisco's scalable and agile security services portfolio, offers a highly secure platform to deliver integrated security services. Cisco's vision is that consistent security policies should be applied to workloads and data flows across physical, virtual, and cloud environments. This approach tightly integrates leading Cisco and complementary partner security services to facilitate intelligent and high-performance security. It is specifically designed to protect the Cisco® Evolved Programmable Network, Cisco Evolved Services Platform and Cisco Application Centric Infrastructure architectures.

The Firepower 9300 solution for open and programmable networks eliminates much of the costly integration that organizations have had to do themselves.

The Firepower 9300 includes Cisco ASA firewalling and VPN. Application-based distributed denial-of-service (DDoS) mitigation capability with Radware DefensePro and additional best-in-class Cisco and partner security services, including Cisco Firepower Threat Defense: Next-Generation IPS (NGIPS) and Cisco Advanced Malware Protection (AMP), Application Visibility and Control (AVC) and URL Filtering will be made available going forward. Each capability is integrated to ensure consistent security policy is maintained across the network fabric, with dynamic and automated provisioning of security services.

Major Features and Benefits
Modularity

- Configurable connectivity with modular I/O
- Expandable capacity with hot-pluggable security modules
- Automated and consistent template-based security policies

Carrier Grade

- Low-latency and large flow handling with intelligent flow-offloading capabilities
- Best-in-class performance density with high throughput
- Optional NEBS-ready security modules
- Programmatic orchestration and management of security services with RESTful APIs

Multiservice Security

- Integrate multiple Cisco and partner security services into a single platform to provide intelligent and scalable security
- Stitch services dynamically based on traffic classification to apply only the necessary security services [*]
- Provide visibility and correlation of policy, traffic, and events across multiple services [*]

Firepower includes a hardware chassis that accommodates up to three security modules and offers the following features:

- Cisco ASA Software (Stateful Firewall plus VPN)
- Firepower Threat Defense comprising Advanced Malware Protection (AMP), Next-Generation IPS (NGIPS), and URL filtering [*]
- Cisco partner ecosystem security services (including Radware DefensePro DDoS attack mitigation) [*]

* Available in an upcoming release.

Performance Specifications

Table 1 summarizes the capabilities of the Firepower 9300 appliance along with those of the Firepower 9000 Series security modules.

Table 1. Capabilities and Capacities

Module Features	Cisco Firepower 9300 (Chassis populated with 3 Cisco Firepower 9000 SM-36 Modules)	Cisco Firepower 9000 SM-36 Security Module (Chassis populated with (1) module)	Cisco Firepower 9000 SM-24 Security Module (Chassis populated with (1) module)
Stateful inspection firewall throughput (maximum)[1]	240 Gbps	80 Gbps	60 Gbps
Stateful inspection firewall throughput (multiprotocol)[2]	180 Gbps	60 Gbps	40 Gbps
Concurrent firewall connections	55 million	30 million	30 million
New connections per second	1.5 million	0.8 million	0.6 million
Security contexts[3]	250	250	250
Virtual Interfaces	1024	1024	1024
Scalability	VPN clustering and load balancing, intrachassis clustering, interchassis clustering	VPN clustering and load balancing, intrachassis clustering, interchassis clustering	VPN clustering and load balancing, intrachassis clustering, interchassis clustering

[1] Maximum throughput with User Datagram Protocol (UDP) traffic measured under ideal test conditions.

[2] "Multiprotocol" refers to a traffic profile consisting primarily of TCP-based protocols and applications like HTTP, SMTP, FTP, IMAPv4, BitTorrent, and DNS.

[3] Available for the firewall feature set.

Hardware Specifications

Table 2 summarizes the specifications for the Firepower 9300 appliance. Table 3 summarizes regulatory standards compliance.

Table 2. Firepower 9300 Hardware Specifications

Specification	Description		
Dimensions (H x W x D)	5.25 x 17.5 x 32 in. (13.3 x 44.5 x 81.3 cm)		
Form factor	3 rack units (3RU), fits standard 19-in. (48.3-cm) square-hole rack		
Security module slots	3		
I/O module slots	2 (within supervisor)		
Supervisor	Cisco Firepower 9000 Supervisor with 8 x 10 Gigabit Ethernet port and 2 network module slots for I/O expansion		
Security modules	• Cisco Firepower 9000 Security Module 24 with 2 x SSDs in RAID-1 configuration • Cisco Firepower 9000 Security Module 36 with 2 x SSDs in RAID-1 configuration		
Network modules	• 8 x 10 Gigabit Ethernet Enhanced Small Form-Factor Pluggable (SFP+) network module • 4 x 40 Gigabit Ethernet Quad SFP+ network module		
Maximum number of interfaces	Up to 24 x 10 Gigabit Ethernet (SFP+) interfaces; up to 8 x 40 Gigabit Ethernet (QSFP+) interfaces with 2 network modules		
Integrated network management ports	1 x Gigabit Ethernet copper port (on supervisor)		
Serial port	1 x RJ-45 console		
USB	1 x USB 2.0		
Storage	Up to 2.4 TB (800 GB in RAID-1 configuration per security module)		
Power supplies		AC power supply	-48V DC power supply [**]
	Input voltage	100 to 120V AC 200 to 240V AC	-40V to -62V DC
	Maximum current	15.5A	
	Maximum output power	1300W at 100 to 120V input 2500W at 200 to 240V input	2500W
	Frequency	50 to 60Hz	-
	Efficiency (at 50% load)	92 percent	92 percent
	Redundancy	Redundant at 220V input	
Fans	4 hot-swappable fans		
Noise	75.5 dBa at maximum fan speed		
Rack mountable	Yes, mount rails included (4-post EIA-310-D rack)		
Weight	105 lb with one security module; 135 lb fully configured		
Temperature: operating	32^0 to 104^0F (0 to 40^0C) for SM-24 Module 50^0 to 88^0F (10^0 to 35^0C) for SM-36 Module at sea-level		
Temperature: nonoperating	-40 to 149°F (-40 to 65°C); maximum altitude is 40,000 ft		
Humidity: operating	5 to 93 percent noncondensing		
Humidity: nonoperating	5 to 93 percent noncondensing		
Altitude: operating	0 to 10,000 ft (3000 m); maximum ambient temperature decreases by 1°C per 300 m.		
Altitude: nonoperating	40,000 ft (12,000 m)		

[**] Scheduled to be supported in Q3 CY2015

Table 3. Regulatory Standards Compliance: Safety and EMC

Specification	Description
Regulatory compliance	Products comply with CE markings per directives 2004/108/EC and 2006/108/EC
Safety	- UL 60950-1 - CAN/CSA-C22.2 No. 60950-1 - EN 60950-1 - IEC 60950-1 - AS/NZS 60950-1 - GB4943
EMC: emissions	47CFR Part 15 (CFR 47) Class A (FCC Class A) - AS/NZS CISPR22 Class A - CISPR22 CLASS A - EN55022 Class A - ICES003 Class A - VCCI Class A - EN61000-3-2 - EN61000-3-3 - KN22 Class A - CNS13438 Class A - EN300386 - TCVN7189
EMC: immunity	- EN55024 - CISPR24 - EN300386 - KN24 - TVCN 7317

Ordering Information

Table 4. Product Component Ordering Guide

Part Number (Chassis)	Description
FPR-C9300-AC	Firepower 9300 AC Chassis (3RU; accommodates up to three security modules)
FPR-C9300-DC	Firepower 9300 DC Chassis (3RU; accommodates up to three security modules)
Part Number (Modules)	**Description**
FPR9K-SM-24	24 Physical Core Security Module (NEBS Ready)
FPR9K-SM-36	36 Physical Core Security Module
Software Licenses	**Description**
L-ASA-CARRIER	License to add Carrier Security Features to ASA
L-ASA-CARRIER=	License to add Carrier Security Features to ASA
L-FPR9K-ASA-SC-10	License to add 10 Security Contexts to ASA in Firepower 9000
L-FPR9K-ASA-SC-10=	License to add 10 Security Contexts to ASA in Firepower 9000
L-FPR9K-ASA	License to run Standard ASA on a Firepower 9300 module
L-FPR9K-ASA=	License to run Standard ASA on a Firepower 9300 module
L-FPR9K-ASAENCR-K9	License to enable strong encryption in ASA running on Firepower 9000

Warranty Information

Find warranty information on cisco.com at the [Product Warranties](#) page.

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For More Information

For more information about the Cisco Firepower 9000 Series Security Platform visit

- http://www.cisco.com/c/en/us/solutions/enterprise-networks/service-provider-security-solutions/

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