Cisco Firepower 1000 Series

Enterprise Firewall

Next-Generation Firewall

Contents

Cisco Firepower 1000 Series Appliances

The Cisco Firepower® 1000 Series is a family of four threat-focused Next-Generation Firewall (NGFW) security platforms that deliver business resiliency through superior threat defense. It offers exceptional sustained performance when advanced threat functions are enabled. The 1000 Series' throughput range addresses use cases from the small office, home office, remote branch office to the Internet edge. The 1000 Series platforms run Cisco Firepower Threat Defense (FTD) and Cisco® Adaptive Security Appliance (ASA) software.

Model overview

Cisco Firepower 1000 Series summary

Model	NGFW	Next-Generation Intrusion Prevention System (NGIPS)	Interfaces
FPR-1010	650 Mbps	650 Mbps	8 x RJ45
FPR-1120	1.5 Gbps	1.5 Gbps	8 x RJ45, 4 x SFP
FPR-1140	2.2 Gbps	2.2 Gbps	8 x RJ45, 4 x SFP
FPR-1150	3 Gbps	3 Gbps	8 x RJ45, 2 x SFP, 2 x 10G SFP+

Detailed performance specifications and feature highlights

Table 1. Performance specifications and feature highlights for Cisco Firepower 1000 with the Cisco Firepower Threat Defense image

Features	1010	1120	1140	1150
Throughput: Firewall (FW) + Application Visibility and Control (AVC) (1024B)	650 Mbps	1.5 Gbps	2.2 Gbps	3 Gbps
Throughput: FW + AVC + Intrusion Prevention System (IPS) (1024B)	650 Mbps	1.5 Gbps	2.2 Gbps	3 Gbps

Features	1010	1120	1140	1150
Maximum concurrent sessions, with AVC	100K	200K	400K	600K
Maximum new connections per second, with AVC	6K	15K	22K	28K
Transport Layer Security (TLS)	150 Mbps	700 Mbps	1 Gbps	1.4 Gbps
Throughput: NGIPS (1024B)	650 Mbps	1.5 Gbps	2.2 Gbps	3 Gbps
IPSec VPN throughput (1024B TCP w/Fastpath)	300 Mbps	1 Gbps	1.2 Gbps	1.4 Gbps
Maximum VPN Peers	75	150	400	800
Cisco Firepower Device Manager (local management)	Yes	Yes	Yes	Yes
Centralized management	Centralized configuration, logging, monitoring, and reporting are performed by the Management Center or alternatively in the cloud with Cisco Defense Orchestrator			
AVC	Standard, supporting more than 4000 applications, as well as geolocations, users, and websites			
AVC: OpenAppID support for custom, open-source application detectors	Standard			
Cisco Security Intelligence	Standard, with IP, URL, and DNS threat intelligence			
Cisco Firepower NGIPS	Available; can passively detect endpoints and infrastructure for threat correlation and Indicators of Compromise (IoC) intelligence			
Cisco Advanced Malware Protection (AMP) for Networks	Available; enables detection, blocking, tracking, analysis, and containment of targeted and persistent malware, addressing the attack continuum both during and after attacks. Integrated threat correlation with Cisco AMP for Endpoints is also optionally available			
Cisco AMP Threat Grid sandboxing	Available			
URL filtering: number of categories	More than 80			
URL filtering: number of URLs categorized	More than 280 million			
Automated threat feed and IPS signature updates	Yes: class-leading Collective Security Intelligence (CSI) from the Cisco Talos® group (https://www.cisco.com/c/en/us/products/security/talos.html)			
Third-party and open-source ecosystem	Open API for integrations with third-party products; Snort® and OpenAppID community resources for new and specific threats			

Features	1010	1120	1140	1150
High availability and clustering	Active/standby			
Cisco Trust Anchor Technologies	Cisco Firepower 1000 Series platforms include Trust Anchor Technologies for supply chain and software image assurance. Please see the section below for additional details			

Note: Performance will vary depending on features activated, and network traffic protocol mix, and packet size characteristics. Performance is subject to change with new software releases. Consult your Cisco representative for detailed sizing guidance.

Table 2. ASA Performance and capabilities on Firepower 1000 appliances

Features	1010	1120	1140	1150
Stateful inspection firewall throughput1	2 Gbps	4.5 Gbps	6 Gbps	7.5 Gbps
Stateful inspection firewall throughput (multiprotocol)2	1.4 Gbps	2.5 Gbps	3.5 Gbps	4.5 Gbps
Concurrent firewall connections	100,000	200,000	400,000	600,000
Firewall latency (UDP 64B microseconds)	–	–	–	–
New connections per second	25,000	75,000	100,000	150,000
IPsec VPN throughput (450B UDP L2L test)	500 Mbps	1 Gbps	1.2 Gbps	1.7 Gbps
Maximum VPN Peers	75	150	400	800
Security contexts (included; maximum)	NA	2; 5	2; 5	2; 25
High availability	Active/standby	Active/active and Active/standby	Active/active and Active/standby	Active/active and Active/standby
Clustering	–			
Scalability	VPN Load Balancing			
Centralized management	Centralized configuration, logging, monitoring, and reporting are performed by Cisco Security Manager or alternatively in the cloud with Cisco Defense Orchestrator			
Adaptive Security Device Manager	Web-based, local management for small-scale deployments			

Performance testing methodologies LINK

1. Throughput measured with 1500B 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.

Hardware specifications

Table 3.   Cisco Firepower 1000 Series hardware specifications

Features	1010	1120	1140	1150
Dimensions (H x W x D)	1.82 x 7.85 x 8.07 in.	1.72 x 17.2 x 10.58 in.	1.72 x 17.2 x 10.58 in.	1.72 x 17.2 x 10.58 in.
Form factor (rack units)	DT	1RU	1RU	1RU
Integrated I/O	8 x RJ-45 (Includes 2 POE+ capable ports)	8 x RJ-45, 4 x SFP	8 x RJ-45, 4 x SFP	8 x RJ-45, 2 x 1Gbps SFP, 2 x 1/10Gbps SFP+
Integrated network management ports	1 x 10M/100M/1GBASE-T Ethernet port (RJ-45)	1 x 10M/100M/1GBASE-T Ethernet port (RJ-45)	1 x 10M/100M/1GBASE-T Ethernet port (RJ-45)	1 x 10M/100M/1GBASE-T Ethernet port (RJ-45)
Serial port	1 x RJ-45 console	1 x RJ-45 console	1 x RJ-45 console	1 x RJ-45 console
USB	1 x USB 3.0 Type-A (500mA)	1 x USB 3.0 Type-A (500mA)	1 x USB 3.0 Type-A (500mA)	1 x USB 3.0 Type-A (500mA)
Storage	1 x 200 GB	1 x 200 GB	1 x 200 GB	1 x 200 GB
Power supply configuration	+12V and -53.5V	+12V	+12V	+12V
AC input voltage	100 to 240V AC	100 to 240V AC	100 to 240V AC	100 to 240V AC
AC maximum input current	< 2A at 100V, < 1A at 240V	< 2A at 100V, < 1A at 240V	< 2A at 100V, < 1A at 240V	< 2A at 100V, < 1A at 240V
AC maximum output power	115W (55W of +12V and 60W of -53.5V)	100W	100W	100W
AC frequency	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz
AC efficiency	>88% at 50% load	>85% at 50% load	>85% at 50% load	>85% at 50% load
Redundancy	None	None	None	None
Fans	None	1 integrated fan[2]	1 integrated fan[2]	1 integrated fan[2]
Noise	0 dBA	31.7 dBA @ 25C, 56.8 dBA at highest system performance	34.2 dBA @ 25C, 56.8 dBA at highest system performance	34.2 dBA @ 25C, 56.8 dBA at highest system performance

Features	1010	1120	1140	1150
Rack mountable	Yes. Separate kit must be ordered.	Yes. Fixed mount brackets included (2-post).	Yes. Fixed mount brackets included (2-post).	Yes. Fixed mount brackets included (2-post).
Weight	3 lb (1.36 kg)	8 lb (3.63 kg)	8 lb (3.63 kg)	8 lb (3.63 kg)
Temperature: operating	32 to 104°F (0 to 40°C)	32 to 104°F (0 to 40°C)	32 to 104°F (0 to 40°C)	32 to 104°F (0 to 40°C)
Temperature: nonoperating	–13 to 158°F (–25 to 70°C)	–13 to 158°F (–25 to 70°C)	–13 to 158°F (–25 to 70°C)	–13 to 158°F (–25 to 70°C)
Humidity: operating	90% noncondensing	90% noncondensing	90% noncondensing	90% noncondensing
Humidity: nonoperating	10 to 90% noncondensing	10 to 90% noncondensing	10 to 90% noncondensing	10 to 90% noncondensing
Altitude: operating	9843 ft (max) 3000 m (max)	9843 ft (max) 3000 m (max)	9843 ft (max) 3000 m (max)	9843 ft (max) 3000 m (max)
Altitude: nonoperating	15,000 ft (max)	15,000 ft (max)	15,000 ft (max)	15,000 ft (max)

Table 4.   Cisco Firepower 1000 Series regulatory, safety, and EMC compliance

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

Specification	Description
EMC: immunity	- EN55024 - CISPR24 - EN300386 - KN24 - TVCN 7317 - EN-61000-4-2, EN-61000-4-3, EN-61000-4-4, EN-61000-4-5, EN-61000-4-6, EN-61000-4-8, EN61000-4-11

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