

Cisco Firepower 1000 Series

Cisco Secure Firewall ASA

Cisco Secure Firewall Threat Defense (FTD)



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Cisco Firepower 1000 Series Appliances

The Cisco Firepower® 1000 Series is a family of firewall platforms that delivers business resiliency, management ease-of-use, and threat defense. They offer exceptional sustained performance when advanced threat functions are enabled. 1000 Series addresses use cases from small offices to remote branches. 1000 Series platforms run Cisco Threat Defense (FTD) or Cisco ASA software.

Model overview



Cisco Firepower 1000 Series summary

Model	Throughput: Threat Defense Software	IPS Throughput	Interfaces
FPR-1010	890 Mbps	900 Mbps	8 x RJ45
FPR-1120	2.3 Gbps	2.6 Gbps	8 x RJ45, 4 x SFP
FPR-1140	3.3 Gbps	3.5 Gbps	8 x RJ45, 4 x SFP
FPR-1150	5.3 Gbps	6.1 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 Threat Defense (FTD) image

Features	1010/1010E	1120	1140	1150
Throughput: Firewall (FW) + Application Visibility and Control (AVC) (1024B)	890 Mbps	2.3 Gbps	3.3 Gbps	5.3 Gbps
Throughput: FW + AVC + Intrusion Prevention System (IPS) (1024B)	880 Mbps	2.3 Gbps	3.3 Gbps	4.9 Gbps
Maximum concurrent sessions, with AVC	100K	200K	400K	600K
Maximum new connections per second, with AVC	6K	15K	22K	28K
Transport Layer Security (TLS)	195 Mbps	850 Mbps	1.2 Gbps	1.4 Gbps
Throughput: NGIPS (1024B)	900 Mbps	2.6 Gbps	3.5 Gbps	6.1 Gbps
IPSec VPN throughput (1024B TCP w/Fastpath)	400 Mbps	1.2 Gbps	1.4 Gbps	2.4 Gbps
Maximum VPN Peers	75	150	400	800
Cisco Device Manager (local management)	Yes	Yes	Yes	Yes
Centralized management	Centralized configuration, logging, monitoring, and reporting are performed by the Threat Defense Manager (FMC) or, alternatively, from 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 IPS	Available; can passively detect endpoints and infrastructure for threat correlation and Indicators of Compromise (IoC) intelligence			
Cisco Malware Defense 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 Malware Analytics 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			
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	1010/1010E	1120	1140	1150
Stateful inspection firewall throughput ¹	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	1010E	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	Compact (Desktop, wall-mount)		Rack mount, 1U	Rack mount, 1U	Rack mount, 1U
Network interfaces	8 x 1000BASE-T		8 x 1000BASE-T 4 x SFP	8 x RJ-45 4 x SFP	8 x RJ-45 2 x SFP 2 x SFP+
Power over Ethernet	2 ports PoE+ (IEEE 802.3at)	N/A	N/A	N/A	N/A
Management interfaces	1x 1000BASE-T 1x Serial console (RJ-45)		1x 1000BASE-T 1x Serial console (RJ-45)	1x 1000BASE-T 1x Serial console (RJ-45)	1x 1000BASE-T 1x Serial console (RJ-45)
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	External power supply, AC input		Integrated, single AC input	Integrated, single AC input	Integrated, single AC input
AC input voltage	100 to 240V AC		100 to 240V AC	100 to 240V AC	100 to 240V AC
AC maximum current draw	< 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 power draw	115W	55W	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
Fans	None		1 integrated fan	1 integrated fan	1 integrated fan
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
Rack mounting	Via optional rack mount kit		2-post mounting Brackets included.	2-post mounting Brackets included.	2-post mounting Brackets included.
Weight	3 lb (1.4 kg)		8 lb (3.6 kg)	8 lb (3.6 kg)	8 lb (3.6 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	9,843 ft (max) 3,000 m (max)		9,843 ft (max) 3,000 m (max)	9,843 ft (max) 3,000 m (max)	9,843 ft (max) 3,000 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 style="list-style-type: none"> • UL 60950-1 • CAN/CSA-C22.2 No. 60950-1 • EN 60950-1 • IEC 60950-1 • AS/NZS 60950-1 • GB4943
EMC: emissions	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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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Document history

New or Revised Topic	Described In	Date
Product Performance numbers updated	Series Summary Table and Table 1	July 14, 2021
Added 1010E	Table 1 , Table 3	