

## Cisco ASA with FirePOWER Services

Meet the industry's first adaptive, threat-focused next-generation firewall (NGFW) designed for a new era of threat and advanced malware protection. Cisco® ASA with FirePOWER Services delivers integrated threat defense for the entire attack continuum - before, during, and after an attack. How? By combining the proven security capabilities of the Cisco ASA firewall with the industry-leading Sourcefire® threat and Advanced Malware Protection (AMP) features together in a single device. The solution uniquely extends the capabilities of the Cisco ASA 5500-X Series Next-Generation Firewalls beyond what today's NGFW solutions are capable of. Whether you need protection for a small or mid-sized business, a distributed enterprise, or a single data center, Cisco ASA with FirePOWER Services provides the needed scale and context in a NGFW solution.

### Superior Multilayered Protection

Cisco ASA with FirePOWER Services brings distinctive threat-focused next-generation security services to the Cisco ASA 5500-X Series Next-Generation Firewalls. It provides comprehensive protection from known and advanced threats, including protection against targeted and persistent malware attacks (Figure 1). Cisco ASA is the world's most widely deployed, enterprise-class stateful firewall. Cisco ASA with FirePOWER Services features these comprehensive capabilities:

- Site-to-site and remote access VPN and advanced clustering provide highly secure, high-performance access and high availability to help ensure business continuity.
- Granular Application Visibility and Control (AVC) supports more than 4,000 application-layer and risk-based controls that can launch tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.
- The industry-leading Cisco ASA with FirePOWER next-generation IPS (NGIPS) provides highly effective threat prevention and full contextual awareness of users, infrastructure, applications, and content to detect multivector threats and automate defense response.
- Reputation- and category-based URL filtering offer comprehensive alerting and control over suspicious web traffic and enforce policies on hundreds of millions of URLs in more than 80 categories.
- AMP provides industry-leading breach detection effectiveness, sandboxing, a low total cost of ownership, and superior protection value that helps you discover, understand, and stop malware and emerging threats missed by other security layers.

**Figure 1.** Cisco ASA with FirePOWER Services: Key Security Features



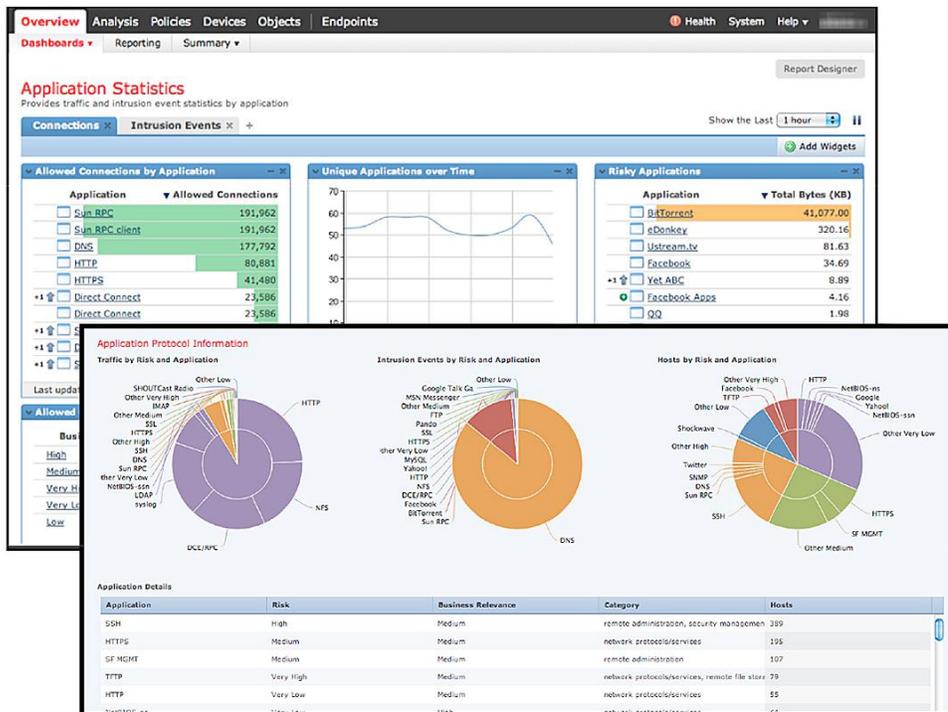
### Unprecedented Network Visibility

Cisco ASA with FirePOWER Services is centrally managed by the Cisco Firepower Management Center (formerly known as Cisco FireSIGHT Management Center), which provides security teams with comprehensive visibility into and control over activity within the network. Such visibility includes users, devices, communication between virtual machines, vulnerabilities, threats, client-side applications, files, and web sites. Holistic, actionable indications of compromise (IoCs) correlate detailed network and endpoint event information and provide further visibility into malware infections. Cisco's enterprise-class management tools help administrators reduce complexity with unmatched visibility and control across NGFW deployments. Cisco Firepower Management Center also provides content awareness with malware file trajectory that aids infection scoping and root cause determination to speed time to remediation.

Cisco Security Manager provides scalable and centralized network operations workflow management. It integrates a powerful suite of capabilities; including policy and object management, event management, reporting, and troubleshooting for Cisco ASA firewall functions when utilizing Cisco Firepower Management Center.

For local, on-device management including deployments for small and midsized businesses, Cisco Adaptive Security Device Manager (ASDM) 7.3.x provides, access control and advanced threat defense management. ASDM V 7.3.x provides an enhanced user interface that provides quick views on trends and the ability to drill down for further analysis.

**Figure 2.** Cisco Firepower Management Center: Intuitive High-Level and Detailed Drill-Down Dashboards



## Reduced Costs and Complexity

Cisco ASA with FirePOWER Services incorporates an integrated approach to threat defense, reducing capital and operating costs and administrative complexity. It smoothly integrates with the existing IT environment, work stream, and network fabric. The appliance family is highly scalable, performs at up to multigigabit speeds, and provides consistent and robust security across branch, Internet edge, and data centers in both physical and virtual environments.

With Cisco Firepower Management Center, administrators can streamline operations to correlate threats, assess their impact, automatically tune security policy, and easily attribute user identities to security events. Cisco Firepower Management Center continually monitors how the network is changing over time. New threats are automatically assessed to determine which ones can affect your business. Responses are then focused on remediation and network defenses are adapted to changing threat conditions. Critical security activities such as policy tuning are automated, saving time and effort, while protections and countermeasures are maintained in an optimal state.

Cisco Firepower Management Center integrates easily with third-party security solutions through the eStreamer API to streamline operation workflows and fit existing network fabrics.

Table 1 highlights the best-in-class features and benefits of Cisco ASA with FirePOWER Services.

**Table 1.** Features and Benefits of Cisco ASA with FirePOWER Services

Feature	Benefits
<b>Next-generation firewall</b>	Industry's first threat-focused NGFW; provides ASA firewall functionality, advanced threat protection, and advanced breach detection and remediation combined in a single device
<b>Proven ASA firewall</b>	Rich routing, stateful firewall, Network Address Translation, and dynamic clustering for high-performance, highly secure, and reliable access with Cisco AnyConnect® VPN
<b>Market-leading NGIPS</b>	Superior threat prevention and mitigation for both known and unknown threats
<b>Advanced malware protection</b>	Detection, blocking, tracking, analysis, and remediation to protect the enterprise against targeted and persistent malware attacks
<b>Full contextual awareness</b>	Policy enforcement based on complete visibility of users, mobile devices, client-side applications, communication between virtual machines, vulnerabilities, threats, and URLs
<b>Application control and URL filtering</b>	Application-layer control (over applications, geolocations, users, websites) and ability to enforce usage and tailor detection policies based on custom applications and URLs
<b>Enterprise-class management</b>	Dashboards and drill-down reports of discovered hosts, applications, threats, and indications of compromise for comprehensive visibility
<b>Streamlined operations automation</b>	Lower operating cost and administrative complexity with threat correlation, impact assessment, automated security policy tuning, and user identification
<b>Purpose-built, scalable</b>	Highly scalable security appliance architecture that performs at up to multigigabit speeds; consistent and robust security across small office, branch offices, Internet edge, and data centers in either physical and virtual environments
<b>On-device management</b>	Simplifies advanced threat defense management for small and medium sized business with small scale deployments
<b>Remote Access VPN</b>	Extends secure corporate network access beyond corporate laptops to personal mobile devices, regardless of physical location; support for Cisco AnyConnect Secure Mobility Solution, with granular, application-level VPN capability, as well as native Apple iOS and Android VPN clients
<b>Site-to-site VPN</b>	Protect traffic, including VoIP and client-server application data, across the distributed enterprise and branch offices
<b>Integrated wireless access</b>	Integrated Wi-Fi is available in the desktop form factor (ASA 5506W-X) for compact and simplified small office deployments
<b>Ruggedized form factor</b>	A ruggedized model (ASA 5506H-X), designed specifically for extreme environmental conditions, is available for critical infrastructure and control network applications
<b>Third-party technology ecosystem</b>	Open API that enables the third-party technology ecosystem to integrate with existing customer work streams
<b>Integration with Snort and OpenAppID</b>	Open source security integration with Snort and OpenAppID for access to community resources and ability to easily customize security to address new and specific threats and applications quickly
<b>Collective Security intelligence (CSI)</b>	Unmatched security and web reputation intelligence provides real-time threat intelligence and security protection

## Product Performance and Specifications

Table 2 details the NGFW capabilities and capacities of the Cisco ASA with FirePOWER Services for Cisco ASA 5500-X Series.

**Table 2.** Cisco ASA 5500-X with FirePOWER Services Capabilities and Capacities

Feature	Cisco ASA 5506-X w/ FirePOWER Services	Cisco ASA 5506W-X w/ FirePOWER Services	Cisco ASA 5506H-X w/ FirePOWER Services	Cisco ASA 5508-X w/ FirePOWER Services	Cisco ASA 5516-X w/ FirePOWER Services	Cisco ASA 5512-X w/ FirePOWER Services	Cisco ASA 5515-X w/ FirePOWER Services	Cisco ASA 5525-X w/ FirePOWER Services	Cisco ASA 5545-X w/ FirePOWER Services	Cisco ASA 5555-X w/ FirePOWER Services
<b>Throughput: Application Control (AVC)</b>	250 Mbps	250 Mbps	250 Mbps	450 Mbps	850 Mbps	300 Mbps	500 Mbps	1,100 Mbps	1,500 Mbps	1,750 Mbps
<b>Throughput: Application Control (AVC) and IPS</b>	125 Mbps	125 Mbps	125 Mbps	250 Mbps	450 Mbps	150 Mbps	250 Mbps	650 Mbps	1,000 Mbps	1,250 Mbps
<b>Maximum concurrent sessions</b>	20,000; 50000 <sup>1</sup>	20,000; 50000 <sup>1</sup>	50000	100,000	250,000	100,000	250,000	500,000	750,000	1,000,000
<b>Maximum New Connections per second</b>	5,000	5,000	5,000	10,000	20,000	10,000	15,000	20,000	30,000	50,000
<b>Supported applications</b>	More than 3,000									
<b>URL categories</b>	80+									
<b>Number of URLs categorized</b>	More than 280 million									
<b>Centralized configuration, logging, monitoring, and reporting</b>	Multi-device Cisco Security Manager (CSM) and Cisco Firepower Management Center									
<b>On-Device Management</b>	ASDM (version 7.3 or higher required)					ASDM				

<sup>1</sup> Higher specifications are associated with the Security Plus license.

Table 3 compares the features and capacities of the different ASA 5500-X Series Next-Generation Firewalls for small offices, branch locations, and Internet edge deployments.

**Table 3.** Cisco ASA 5500-X Series Next-Generation Firewalls

Feature	Cisco ASA 5506-X w/ FirePOWER Services	Cisco ASA 5506W-X w/ FirePOWER Services	Cisco ASA 5506H-X w/ FirePOWER Services	Cisco ASA 5508-X w/ FirePOWER Services	Cisco ASA 5516-X w/ FirePOWER Services	Cisco ASA 5512-X w/ FirePOWER Services	Cisco ASA 5515-X w/ FirePOWER Services	Cisco ASA 5525-X w/ FirePOWER Services	Cisco ASA 5545-X w/ FirePOWER Services	Cisco ASA 5555-X w/ FirePOWER Services
Stateful inspection throughput (maximum <sup>1</sup> )	750 Mbps	750 Mbps	750 Mbps	1 Gbps	1.8 Gbps	1 Gbps	1.2 Gbps	2 Gbps	3 Gbps	4 Gbps
Stateful inspection throughput (multiprotocol <sup>2</sup> )	300 Mbps	300 Mbps	300 Mbps	500 Mbps	900 Mbps	500 Mbps	600 Mbps	1 Gbps	1.5 Gbps	2 Gbps
Triple Data Encryption Standard/Advanced Encryption Standard (3DES/AES) VPN throughput <sup>3</sup>	100 Mbps	100 Mbps	100 Mbps	175 Mbps	250 Mbps	200 Mbps	250 Mbps	300 Mbps	400 Mbps	700 Mbps
Users/nodes	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
IPsec site-to-site VPN peers	10; 50 <sup>4</sup>	10; 50 <sup>4</sup>	50	100	300	250	250	750	2500	5000
Cisco Cloud Web Security users	For detailed sizing guidance see the <a href="#">CWS Connector Sizing for ASA 5500 and ASA 5500-X</a>									
Cisco AnyConnect Plus/Apex VPN maximum simultaneous connections <sup>5</sup>	50 <sup>5</sup>	50 <sup>5</sup>	50 <sup>5</sup>	100 <sup>5</sup>	300 <sup>5</sup>	250 <sup>5</sup>	250 <sup>5</sup>	750 <sup>5</sup>	2500 <sup>5</sup>	5000 <sup>5</sup>
Virtual interfaces (VLANs)	5; 30 <sup>4</sup>	5; 30 <sup>4</sup>	30	50	100	50; 100	100	200	300	500
Security contexts <sup>5</sup> (included; maximum)	N/A	N/A	N/A	2; 5	2; 5	0,0; 2,5	2;5	2; 20	2; 50	2; 100
High availability <sup>4</sup>	Requires Security Plus License; Active/Standby	Requires Security Plus License; Active/Standby	Active/Standby	Active/Active and Active/Standby	Active/Active and Active/Standby	Requires Security Plus License; Active/Active and Active/Standby	Active/Active and Active/Standby	Active/Active and Active/Standby	Active/Active and Active/Standby	Active/Active and Active/Standby
Integrated Wireless Access Point (See Cisco AP 702 datasheet for WiFi technical details)	N/A	Wireless Bands a/b/g/n; Max n wifi throughput 54 Mbps; internal antenna only; local management or centralized via Cisco WLC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Feature	Cisco ASA 5506-X w/ FirePOWER Services	Cisco ASA 5506W-X w/ FirePOWER Services	Cisco ASA 5506H-X w/ FirePOWER Services	Cisco ASA 5508-X w/ FirePOWER Services	Cisco ASA 5516-X w/ FirePOWER Services	Cisco ASA 5512-X w/ FirePOWER Services	Cisco ASA 5515-X w/ FirePOWER Services	Cisco ASA 5525-X w/ FirePOWER Services	Cisco ASA 5545-X w/ FirePOWER Services	Cisco ASA 5555-X w/ FirePOWER Services
<b>Expansion slot</b>	N/A	N/A	N/A	N/A	N/A	1 interface card	1 interface card	1 interface card	1 interface card	1 interface card
<b>User-accessible Flash slot</b>	No	No	No	No	No	No	No	0	-	0
<b>USB 2.0 ports</b>	USB port type 'A', High Speed 2.0	2	2	2	2	2				
<b>Integrated I/O</b>	8 x 1 Gigabit Ethernet (GE)	8 x 1GE	4 x 1GE	8 x 1GE	8 x 1GE	6 GE copper	6 GE copper	8 GE copper	8 GE copper	8 GE copper
<b>Expansion I/O</b>	N/A	N/A	N/A	N/A	N/A	6 GE copper or 6 GE Small Form-Factor Pluggable (SFP)	6 GE copper or 6 GE SFP			
<b>Dedicated management port</b>	Yes (To be shared with FirePOWER Services), 10/100/1000	Yes (To be shared with FirePOWER Services), 10/100/1000	Yes (To be shared with FirePOWER Services), 10/100/1000	Yes (To be shared with FirePOWER Services), 10/100/1000	Yes (To be shared with FirePOWER Services), 10/100/1000	Yes (1 GE)	Yes (1 GE)	Yes (1 GE)	Yes (1 GE)	Yes (1 GE)
<b>Serial ports</b>	1 RJ-45 and Mini USB console	1 RJ-45 console	1 RJ-45 console	1 RJ-45 console	1 RJ-45 console	1 RJ-45 console				
<b>Solid-state drive</b>	50 GB mSata <sup>6</sup>	50 GB mSata <sup>6</sup>	50 GB mSata tested for heat	80 GB mSata <sup>6</sup>	100 GB mSata <sup>5</sup>	1 slot, 120 GB multi-line configurat or self-encrypting drive (MLC SED)	1 slot, 120 GB MLC SED	1 slot, 120 GB MLC SED	2 slots, RAID 1	2 slots, RAID 1
<b>Memory</b>	4 GB	4 GB	4 GB	8 GB	8 GB	4 GB	8 GB	8 GB	12 GB	16 GB
<b>System flash</b>	8 GB	4 GB	8 GB	8 GB	8 GB	8 GB				
<b>System bus</b>	Multibus architecture	Multibus architecture	Multibus architecture	Multibus architecture	Multibus architecture					
<b>Operating Parameters</b>										
<b>Temperature</b>	32 to 104°F (0 to 40 °C)	32 to 104°F (0 to 40 °C)	-4 to 140°F (-20 to 60 °C)	32 to 104°F (0 to 40 °C)	32 to 104°F (0 to 40 °C)	23 to 104°F (-5 to 40°C)	23 to 104°F (-5 to 40°C)	23 to 104°F (-5 to 40°C)	23 to 104°F (-5 to 40°C)	23 to 104°F (-5 to 40°C)
<b>Relative humidity</b>	90 percent noncondensing	90 percent noncondensing	95 percent noncondensing	10 to 90 percent noncondensing	10 to 90 percent noncondensing	10 to 90 percent noncondensing	10 to 90 percent noncondensing	90 percent	90 percent	90 percent
<b>Altitude</b>	Designed and tested for 0 to 10,000 ft (3048 m)	Designed and tested for 0 to 10,000 ft (3048 m)	Designed and tested for 0 to 10,000 ft (3050 m)	Designed and tested for 0 to 10,000 ft (3048 m)	Designed and tested for 0 to 10,000 ft (3048 m)	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 10,000 ft (3050 m)	Designed and tested for 0 to 10,000 ft (3050 m)	Designed and tested for 0 to 10,000 ft (3050 m)

Feature	Cisco ASA 5506-X w/ FirePOWER Services	Cisco ASA 5506W-X w/ FirePOWER Services	Cisco ASA 5506H-X w/ FirePOWER Services	Cisco ASA 5508-X w/ FirePOWER Services	Cisco ASA 5516-X w/ FirePOWER Services	Cisco ASA 5512-X w/ FirePOWER Services	Cisco ASA 5515-X w/ FirePOWER Services	Cisco ASA 5525-X w/ FirePOWER Services	Cisco ASA 5545-X w/ FirePOWER Services	Cisco ASA 5555-X w/ FirePOWER Services
<b>Acousticnoise</b>	Fanless 0 dBA	Fanless 0 dBA	Fanless 0 dBA	41.6 A-weighted decibels (dBA) type	41.6 dBA type	64.2 dBA max	64.2 dBA max	64.2 dBA max	67.9 dBA max	67.9 dBA max
				67.2 dBA max	67.2 dBA max					
<b>Non-operating Parameters</b>										
<b>Temperature</b> <sup>7</sup>	-13 to 158°F (-25 to 70°C)	-13 to 158°F (-25 to 70°C)	-40 to 185°F (-40 to 85°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)	-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)
<b>Relative humidity</b>	10 to 90 percent noncondensing	10 to 90 percent noncondensing	10 to 95 percent noncondensing	10 to 90 percent noncondensing	10 to 90 percent noncondensing	10 to 90 percent noncondensing	10 to 90 percent noncondensing	10 to 90 percent	10 to 90 percent	10 to 90 percent
<b>Altitude</b>	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 15,000 ft (4572 m)	Designed and tested for 0 to 15,000 ft (4572 m)
<b>Power Input (per power supply)</b>										
<b>AC range line voltage</b>	External, 90 to 240 volts alternating current (VAC)	External, 90 to 240 volts alternating current (VAC)	External, 90 to 240 volts alternating current (VAC)	External, 90 to 240 volts alternating current (VAC)	External, 90 to 240 volts alternating current (VAC)	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC
<b>AC normal line voltage</b>	90 to 240 VAC	90 to 240 VAC	90 to 240 VAC	91 to 240 VAC	92 to 240 VAC	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC
<b>AC current</b>	N/A	N/A	N/A	0.25AC amps	0.25AC amps	4.85A	4.85A	4.85A	5A, 100 to 120V 2.5A, 200 to 240V	5A, 100 to 120V 2.5A, 200 to 240V
<b>AC frequency</b>	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz					
<b>Dual-power supplies</b>	None	None	None	None	None	None	None	None	Yes	Yes
<b>DC domestic line voltage</b>	N/A	N/A	N/A	N/A	N/A	-40.5 to 56 volts direct current (VDC) (-48 VDC nominal)	-40.5 to 56 VDC (-48 VDC nominal)	-40.5 to 56 VDC (-48 VDC nominal)	-40.5 to 56 VDC (-48 VDC nominal)	-40.5 to 56 VDC (-48 VDC nominal)
<b>DC international line voltage</b>	N/A	N/A	N/A	N/A	N/A	-55 to -72 VDC	-55 to -72 VDC	-55 to -72 VDC	-55 to -72 VDC	-55 to -72 VDC
						(-60 VDC nominal)	(-60 VDC nominal)	(-60 VDC nominal)	(-60 VDC nominal)	(-60 VDC nominal)
<b>DC current</b>	N/A	N/A	N/A	N/A	N/A	15A (maximum input)	15A (maximum input)	15A (maximum input)	15A (maximum input)	15A (maximum input)
<b>Output</b>										
<b>Steady state</b>	12V @2.5A	12V @2.5A	5V @3.6A	12V @ 3.0A	12V @ 3.0A	51W	65W	75W	86W	90W
<b>Maximum peak</b>	12V @ 5A	12V @ 5A	5V @4.4A	12V @ 5.0A	12V @ 5.0A	56W	70W	108W	125W	134W
<b>Maximum heat dissipation</b>	205 British thermal units (Btu)/hr	205 Btu/hr	75 Btu/hr	205 Btu/hr	205 Btu/hr	192 Btu/hr	239 Btu/hr	369 Btu/hr	427 Btu/hr	458 Btu/hr

Feature	Cisco ASA 5506-X w/ FirePOWER Services	Cisco ASA 5506W-X w/ FirePOWER Services	Cisco ASA 5506H-X w/ FirePOWER Services	Cisco ASA 5508-X w/ FirePOWER Services	Cisco ASA 5516-X w/ FirePOWER Services	Cisco ASA 5512-X w/ FirePOWER Services	Cisco ASA 5515-X w/ FirePOWER Services	Cisco ASA 5525-X w/ FirePOWER Services	Cisco ASA 5545-X w/ FirePOWER Services	Cisco ASA 5555-X w/ FirePOWER Services
<b>Form factor</b>	Desktop, rack mountable	Desktop, rack mountable	Desktop, rack mountable, wall mountable, DIN-Rail	1 rack unit (RU), 19-in. rack-mountable	1 rack unit (RU), 19-in. rack-mountable	1 rack unit (RU), 19-in. rack-mountable	1RU, 19-in. rack-mountable	1RU, 19-in. rack-mountable	1RU, 19-in. rack-mountable	1RU, 19-in. rack-mountable
<b>Dimensions</b>	1.72 x 7.871 x 9.23 in.	1.72 x 7.871 x 9.23 in.	2.72 x 9.05 x 9.05 in.	1.72 x 17.2 x 11.288 in.	1.72 x 17.2 x 11.288 in.	1.67 x 16.7 x 15.6 in.	1.67 x 16.7 x 15.6 in.	1.75 x 17.5 x 14.25 in.	1.67 x 16.7 x 19.1 in.	1.67 x 16.7 x 19.1 in.
<b>(H x W x D)</b>	(4.369 x 19.992 x 23.444 cm)	(4.369 x 19.992 x 23.444 cm)	(6.9 x 23.0 x 23.0 cm)	(4.369 x 43.688 x 28.672 cm)	(4.369 x 43.688 x 28.672 cm)	(4.24 x 42.9 x 39.5 cm)	(4.24 x 42.9 x 39.5 cm)	(4.45 x 20.04 x 36.20 cm)	(4.24 x 42.9 x 48.4 cm)	(4.24 x 42.9 x 48.4 cm)
<b>Weight (with AC power supply)</b>	4 lb (1.82 kg)	4 lb (1.82 kg)	7 lb (3.18 kg)	8 lb (3 kg)	8 lb (3 kg)	13.39 lb (6.07 kg)	13.39 lb (6.07 kg)	22.0 lb (10 kg)	16.82 lb (7.63 kg) with single power supply 18.86 lb (8.61 kg) with dual power supply	16.82 lb (7.63 kg) with single power supply 18.86 lb (8.61 kg) with dual power supply

<sup>1</sup> Maximum throughput measured with UDP traffic under ideal conditions.

<sup>2</sup> Multiprotocol = Traffic profile consisting primarily of TCP-based protocols/applications like HTTP, SMTP, FTP, IMAPv4, BitTorrent, and DNS.

<sup>3</sup> VPN throughput and sessions count depend on the ASA device configuration and VPN traffic patterns. These elements should be taken into consideration as part of your capacity planning.

<sup>4</sup> Higher specifications are associated with the Security Plus license.

<sup>5</sup> Separately licensed feature. For AnyConnect, licenses are purchased based on feature tier (Plus/Apex), term and authorized user license. See ordering guide below for detailed ordering instructions.

<sup>6</sup> Usable space dependent upon system software.

<sup>7</sup> Derate the maximum operating temperature 1.5°C per 1000 ft above sea level.

## Hardware Product Compliance

Current information on ASA with FirePOWER product compliance information can be found on the Cisco Product Approval Status (PAS) link:

<http://tools.cisco.com/cse/prdapp>.

If you are not registered with Cisco.com, please refer to the registration link located at: <http://tools.cisco.com/RPF/register/register.do>.

To access information please follow the below steps:

1. Select the **Product Certifications by Country** radio button select **GO**
2. Under option 2 enter **product ID** or part of it in the product name box (one at a time only) for example **FPR-C9300**
3. Under additional filter select or highlight your country of interest or keep all countries selected for full results
4. Select submit
5. Your results will be displayed. Under status select the hyperlink **Details**
6. Find your corresponding documents

## Hardware Product Performance and Specifications

### Platform Support/Compatibility

Cisco ASA with FirePOWER Services include Cisco ASA firewalling, AVC, URL filtering, NGIPS, and AMP. This unique set of capabilities is available on the Cisco ASA 5500-X Series NGFW platforms: Cisco ASA 5506-X, 5506W-X, 5506H-X, 5508-X, 5516-X, 5512-X, 5515-X, 5525-X, 5545-X, 5555-X.

Cisco ASA with FirePOWER Services software is supported on the Cisco ASA 5500-X Series of next-generation midrange security appliances running Cisco ASA Software Release 9.2.2 and later. Cisco Firepower Management Center and [Cisco Security Manager](#) are required to manage Cisco ASA with FirePOWER Services ASA 5512-X, 5515-X, 5525-X, 5545-X, 5555-X. ASDM V 7.3.x is available on-device to manage single instance deployments of Cisco ASA 5506-X, 5506W-X, 5506H-X, 5508-X, and 5516-X with FirePOWER Services.

### Cisco ASA 5500-X Series 6-Port GE Interface Cards

Cisco ASA 5500-X Series 6-port Gigabit Ethernet Interface Cards extend the I/O profile of the Cisco ASA 5500-X Series appliances\* by providing additional GE ports. The cards provide the following benefits:

- Better segmentation of network traffic into separate security zones
- Fiber-optic cable connectivity for long-distance communication
- Load sharing of traffic as well as protection against link failure through the use of EtherChannel
- Support for jumbo Ethernet frames of up to 9000 bytes
- Protection against cable failure for the most demanding active/active failover and full-mesh firewall deployments

**Note:** \*Not available on ASA 5508-X or ASA 5516-X

Table 4 lists the characteristics of the Cisco ASA 5500-X Series 6-port GE interface cards.

**Table 4.** Characteristics of Cisco ASA 5500-X Series 6-Port GE Interface Cards

Feature	Cisco ASA 5500-X Series 6-Port 10/100/1000	Cisco ASA 5500-X Series 6-Port GE SFP SX, LH, and LX
		
<b>Technical Specifications</b>		
<b>Integrated ports</b>	Six 10/100/1000BASE-T	Six GE optical SFP 1000BASE-SX, 1000BASE-LX, or 1000BASE-LH transceiver supported
<b>Environmental Operating Ranges</b>		
<b>Operating</b>		
<b>Temperature</b>	32 to 113°F (0 to 45°C)	32 to 113°F (0 to 45°C)
<b>Relative humidity</b>	5 to 95 percent noncondensing	5 to 95 percent noncondensing
<b>Nonoperating</b>		
<b>Temperature</b>	-40 to 149°F (-40 to 65°C)	-40 to 149°F (-40 to 65°C)
<b>Power consumption</b>	25W maximum	25W maximum
<b>Physical Specifications</b>		
<b>Dimensions (H x W x D)</b>	1.57 x 5.31 x 9.09 in. (3.99 x 13.49 x 23.09 cm)	1.57 x 5.31 x 9.09 in. (3.99 x 13.49 x 23.09 cm)

Feature	Cisco ASA 5500-X Series 6-Port 10/100/1000	Cisco ASA 5500-X Series 6-Port GE SFP SX, LH, and LX
<b>Weight</b>	1.00 lb (0.45 kg)	1.00 lb (0.45 kg)
<b>Regulatory and Standards Compliance</b>		
<b>Safety</b>	UL 60950, CSA C22.2 No. 60950, EN 60950 IEC 60950, AS/NZS60950	UL 60950, CSA C22.2 No. 60950, EN 60950 IEC 60950, AS/NZS60950
<b>Electromagnetic compatibility (EMC)</b>	CE marking, FCC Part 15 Class A, AS/NZS CISPR22 Class A, VCCI Class A, EN55022 Class A, CISPR22 Class A, EN61000-3-2, EN61000-3-3	CE marking, FCC Part 15 Class A, AS/NZS CISPR22 Class A, VCCI Class A, EN55022 Class A, CISPR22 Class A, EN61000-3-2, EN61000-3-3

## Ordering Information

To place an order, visit the [Cisco ordering homepage](#). Table 5 provides ordering information for Cisco ASA with FirePOWER Services.

**Table 5.** Cisco ASA with Fire POWER Services Ordering Information

The following table includes Cisco ASA FirePOWER Services bundle SKUs (including hardware and subscription) that offer a convenient mechanism for ordering both the appliances and software subscriptions in a single SKU configuration. It is the recommended mode of configuration for ordering. Standalone AMP license and subscriptions are also available to **upgrade** an existing TA or TAC subscription license. Please see the ASA with FirePOWER Services Ordering Guide for details.

<b>Cisco ASA with FirePOWER Services 5500-X Series Bundles (Hardware and Subscription)</b>	
<b>ASA 5506-X with FirePOWER Svcs. Chassis and Subs. Bundle</b>	ASA5506-FPWR-BUN
<b>ASA 5506W-X with FirePOWER Svcs. WiFi Chassis and Subs. Bundle</b>	ASA5506W-FPWR-BUN
<b>ASA 5508-X with FirePOWER Svcs. Chassis and Subs. Bundle</b>	ASA5508-FPWR-BUN
<b>ASA 5516-X with FirePOWER Svcs. Chassis and Subs. Bundle</b>	ASA5516-FPWR-BUN
<b>ASA 5512-X with FirePOWER Svcs. Chassis and Subs. Bundle</b>	ASA5512-FPWR-BUN
<b>ASA 5515-X with FirePOWER Svcs. Chassis and Subs. Bundle</b>	ASA5515-FPWR-BUN
<b>ASA 5525-X with FirePOWER Svcs. Chassis and Subs. Bundle</b>	ASA5525-FPWR-BUN
<b>ASA 5545-X with FirePOWER Svcs. Chassis and Subs. Bundle</b>	ASA5545-FPWR-BUN
<b>ASA 5555-X with FirePOWER Svcs. Chassis and Subs. Bundle</b>	ASA5555-FPWR-BUN

Product Description	Part Number
<b>Cisco ASA 5506-X Series Low-End Appliances (Hardware)</b>	
ASA 5506-X with FirePOWER services, 8GE Data, 1GE Mgmt, AC, DES	ASA5506-K8
ASA 5506-X with FirePOWER services, 8GE Data, 1GE Mgmt, AC, 3DES/AES	ASA5506-K9
ASA 5506W-A-X with FirePOWER services, WiFi for North America (NOT US), 8GE Data, 1GE Mgmt, AC, 3DES/AES	ASA5506W-A-K9
ASA 5506W-B-X with FirePOWER services, WiFi for US ONLY, 8GE Data, 1GE Mgmt, AC, 3DES/AES	ASA5506W-B-K9
ASA 5506W-E-X with FirePOWER services, WiFi for Europe, 8GE Data, 1GE Mgmt, AC, 3DES/AES	ASA5506W-E-K9
ASA 5506W-Q-X with FirePOWER services, WiFi for Japan, 8GE Data, 1GE Mgmt, AC, 3DES/AES	ASA5506W-Q-K9
ASA 5506W-Z-X with FirePOWER services, WiFi for Australia/New Zealand, 8GE Data, 1GE Mgmt, AC, 3DES/AES	ASA5506W-Z-K9
ASA 5506H-X with FirePOWER services, ruggedized, security plus, 4GE Data, 1GE Mgmt, AC, 3DES/AES	ASA5506H-SP-BUN-K9
ASA 5506H-X with FirePOWER services, ruggedized, security plus, 4GE Data, 1GE Mgmt, AC, DES	ASA5506H-SP-BUN-K8
ASA 5508-X with FirePOWER services, 8GE Data, 1GE Mgmt, AC, DES	ASA5508-K8
ASA 5508-X with FirePOWER services, 8GE Data, 1GE Mgmt, AC, 3DES/AES	ASA5508-K9
ASA 5516-X with FirePOWER services, 8GE Data, 1GE Mgmt, AC, DES	ASA5516-FPWR-K8
ASA 5516-X with FirePOWER services, 8GE Data, 1GE Mgmt, AC, 3DES/AES	ASA5516-FPWR-K9
<b>Cisco ASA 5500-X Series Midrange Appliances (Hardware)</b>	
ASA 5512-X with FirePOWER Services, 6GE data, AC, 3DES/AES, SSD	ASA5512-FPWR-K9
ASA 5515-X with FirePOWER Services, 6GE data, AC, 3DES/AES, SSD	ASA5515-FPWR-K9
ASA 5525-X with FirePOWER Services, 8GE data, AC, 3DES/AES, SSD	ASA5525-FPWR-K9
ASA 5545-X with FirePOWER Services, 8GE data, AC, 3DES/AES, 2 SSD	ASA5545-FPWR-K9
ASA 5555-X with FirePOWER Services, 8GE data, AC, 3DES/AES, 2 SSD	ASA5555-FPWR-K9
<b>Cisco ASA 5500-X Series Interface Cards</b>	
Cisco ASA Interface Card with 6 copper GE data ports for ASA 5512-X and ASA 5515-X	ASA-IC-6GE-CU-A
Cisco ASA Interface Card with 6 copper GE data ports for ASA 5525-X	ASA-IC-6GE-CU-B
Cisco ASA Interface Card with 6 copper GE data ports for ASA 5545-X and ASA 5555-X	ASA-IC-6GE-CU-C
Cisco ASA Interface Card with 6 SFP GE data ports (SX, LH, and LX) for ASA 5512-X and ASA 5515-X	ASA-IC-6GE-SFP-A
Cisco ASA Interface Card with 6 SFP GE data ports (SX, LH, and LX) for ASA 5525-X	ASA-IC-6GE-SFP-B
Cisco ASA Interface Card with 6 SFP GE data ports (SX, LH, and LX) for ASA 5545-X and ASA 5555-X	ASA-IC-6GE-SFP-C
Cisco ASA Interface Card with 6 copper GE data ports for ASA 5512-X and ASA 5515-X (spare)	ASA-IC-6GE-CU-A=
Cisco ASA Interface Card with 6 copper GE data ports for ASA 5525-X (spare)	ASA-IC-6GE-CU-B=
Cisco ASA Interface Card with 6 copper GE data ports for ASA 5545-X and ASA 5555-X (spare)	ASA-IC-6GE-CU-C=
Cisco ASA Interface Card with 6 SFP GE data ports (SX, LH, and LX) for ASA 5512-X and ASA 5515-X (spare)	ASA-IC-6GE-SFP-A=
<b>Cisco ASA 5500-X Series Accessories</b>	

Product Description	Part Number	
Cisco GE optical SFP connector, 1000BASE-SX short-wavelength transceiver (spare)	GLC-SX-MM=	
Cisco GE optical SFP connector, 1000BASE-LX/LH long-wavelength/long-haul transceiver (spare)	GLC-LH-SM=	
Cisco GE optical SFP connector, 1000BASE-SX short-wavelength transceiver, digital optical monitoring (DOM) (spare)	GLC-SX-MMD=	
Cisco GE optical SFP connector, 1000BASE-LX/LH long-wavelength/long-haul transceiver, DOM (spare)	GLC-LH-SMD=	
Cisco ASA 5512-X and 5515-X interface card (blank) (spare)	ASA-IC-A-BLANK=	
Cisco ASA 5525-X interface card slot (blank) (spare)	ASA-IC-B-BLANK=	
Cisco ASA 5545-X and 5555-X interface card slot (blank) (spare)	ASA-IC-C-BLANK=	
<b>ASA with FirePOWER Services Software Subscriptions: 3-Year Term (1-Year Service Software Bundle Subscriptions Can be Purchased as well as Individual Cisco IPS, AMP, and URL Filtering Service Software Subscriptions with 1-Year and 3-Year Terms)</b>		
Cisco ASA5506 FirePOWER IPS and Apps 3YR Subscription	L-ASA5506-TA=	L-ASA5506-TA-3Y
Cisco ASA5506 FirePOWER IPS, Apps and URL 3YR Subscription	L-ASA5506-TAC=	L-ASA5506-TAC-3Y
Cisco ASA5506 FirePOWER IPS, Apps and AMP 3YR Subscription	L-ASA5506-TAM=	L-ASA5506-TAM-3Y
Cisco ASA5506 FirePOWER IPS, Apps, AMP and URL 3YR Subscription	L-ASA5506-TAMC=	L-ASA5506-TAMC-3Y
Cisco ASA5506 FirePOWER URL Filtering 3YR Subscription	L-ASA5506-URL=	L-ASA5506-URL-3Y
Cisco ASA5506W FirePOWER IPS and Apps 3YR Subscription	L-ASA5506W-TA=	L-ASA5506-TA-3Y
Cisco ASA5506W FirePOWER IPS, Apps and URL 3YR Subscription	L-ASA5506W-TAC=	L-ASA5506-TAC-3Y
Cisco ASA5506W FirePOWER IPS, Apps and AMP 3YR Subscription	L-ASA5506W-TAM=	L-ASA5506-TAM-3Y
Cisco ASA5506W FirePOWER IPS, Apps, AMP and URL 3YR Subscription	L-ASA5506W-TAMC=	L-ASA5506-TAMC-3Y
Cisco ASA5506W FirePOWER URL Filtering 3YR Subscription	L-ASA5506W-URL=	L-ASA5506-URL-3Y
Cisco ASA5506H FirePOWER IPS and Apps 3YR Subscription	L-ASA5506H-TA=	L-ASA5506H-TA-3Y
Cisco ASA5506H FirePOWER IPS, Apps and URL 3YR Subscription	L-ASA5506H-TAC=	L-ASA5506H-TAC-3Y
Cisco ASA5506H FirePOWER IPS, Apps and AMP 3YR Subscription	L-ASA5506H-TAM=	L-ASA5506H-TAM-3Y
Cisco ASA5506H FirePOWER IPS, Apps, AMP and URL 3YR Subscription	L-ASA5506H-TAMC=	L-ASA5506H-TAMC-3Y
Cisco ASA5508 FirePOWER IPS and Apps 3YR Subscription	L-ASA5508-TA=	L-ASA5508-TA-3Y
Cisco ASA5508 FirePOWER IPS, Apps and URL 3YR Subscription	L-ASA5508-TAC=	L-ASA5508-TAC-3Y
Cisco ASA5508 FirePOWER IPS, Apps and AMP 3YR Subscription	L-ASA5508-TAM=	L-ASA5508-TAM-3Y
Cisco ASA5508 FirePOWER IPS, Apps, AMP and URL 3YR Subscription	L-ASA5508-TAMC=	L-ASA5508-TAMC-3Y
Cisco ASA5508 FirePOWER URL Filtering 3YR Subscription	L-ASA5508-URL=	L-ASA5508-URL-3Y
Cisco ASA5516 FirePOWER IPS and Apps 3YR Subscription	L-ASA5516-TA=	L-ASA5516-TA-3Y
Cisco ASA5516 FirePOWER IPS, Apps and URL 3YR Subscription	L-ASA5516-TAC=	L-ASA5516-TAC-3Y
Cisco ASA5516 FirePOWER IPS, Apps and AMP 3YR Subscription	L-ASA5516-TAM=	L-ASA5516-TAM-3Y
Cisco ASA5516 FirePOWER IPS, Apps, AMP and URL 3YR Subscription	L-ASA5516-TAMC=	L-ASA5516-TAMC-3Y
Cisco ASA5516 FirePOWER URL Filtering 3YR Subscription	L-ASA5516-URL=	L-ASA5516-URL-3Y
Cisco ASA5512 FirePOWER IPS and Apps 3YR Subscription	L-ASA5512-TA=	L-ASA5512-TA-3Y
Cisco ASA5512 FirePOWER IPS, Apps and URL 3YR Subscription	L-ASA5512-TAC=	L-ASA5512-TAC-3Y
Cisco ASA5512 FirePOWER IPS, Apps and AMP 3YR Subscription	L-ASA5512-TAM=	L-ASA5512-TAM-3Y
Cisco ASA5512 FirePOWER IPS, Apps, AMP and URL 3YR Subscription	L-ASA5512-TAMC=	L-ASA5512-TAMC-3Y
Cisco ASA5512 FirePOWER URL Filtering 3YR Subscription	L-ASA5512-URL=	L-ASA5512-URL-3Y
Cisco ASA5515 FirePOWER IPS and Apps 3YR Subscription	L-ASA5515-TA=	L-ASA5515-TA-3Y
Cisco ASA5515 FirePOWER IPS, Apps and URL 3YR Subscription	L-ASA5515-TAC=	L-ASA5515-TAC-3Y
Cisco ASA5515 FirePOWER IPS, Apps and AMP 3YR Subscription	L-ASA5515-TAM=	L-ASA5515-TAM-3Y

Product Description	Part Number	
Cisco ASA5515 FirePOWER IPS, Apps, AMP and URL 3YR Subscription	L-ASA5515-TAMC=	L-ASA5515-TAMC-3Y
Cisco ASA5515 FirePOWER URL Filtering 3YR Subscription	L-ASA5515-URL=	L-ASA5515-URL-3Y
Cisco ASA5525 FirePOWER IPS and Apps 3YR Subscription	L-ASA5525-TA=	L-ASA5525-TA-3Y
Cisco ASA5525 FirePOWER IPS, Apps and URL 3YR Subscription	L-ASA5525-TAC=	L-ASA5525-TAC-3Y
Cisco ASA5525 FirePOWER IPS, Apps and AMP 3YR Subscription	L-ASA5525-TAM=	L-ASA5525-TAM-3Y
Cisco ASA5525 FirePOWER IPS, Apps, AMP and URL 3YR Subscription	L-ASA5525-TAMC=	L-ASA5525-TAMC-3Y
Cisco ASA5525 FirePOWER URL Filtering 3YR Subscription	L-ASA5525-URL=	L-ASA5525-URL-3Y
Cisco ASA5545 FirePOWER IPS and Apps 3YR Subscription	L-ASA5545-TA=	L-ASA5545-TA-3Y
Cisco ASA5545 FirePOWER IPS, Apps and URL 3YR Subscription	L-ASA5545-TAC=	L-ASA5545-TAC-3Y
Cisco ASA5545 FirePOWER IPS, Apps and AMP 3YR Subscription	L-ASA5545-TAM=	L-ASA5545-TAM-3Y
Cisco ASA5545 FirePOWER IPS, Apps, AMP and URL 3YR Subscription	L-ASA5545-TAMC=	L-ASA5545-TAMC-3Y
Cisco ASA5545 FirePOWER URL Filtering 3YR Subscription	L-ASA5545-URL=	L-ASA5545-URL-3Y
Cisco ASA5555 FirePOWER IPS and Apps 3YR Subscription	L-ASA5555-TA=	L-ASA5555-TA-3Y
Cisco ASA5555 FirePOWER IPS, Apps and URL 3YR Subscription	L-ASA5555-TAC=	L-ASA5555-TAC-3Y
Cisco ASA5555 FirePOWER IPS, Apps and AMP 3YR Subscription	L-ASA5555-TAM=	L-ASA5555-TAM-3Y
Cisco ASA5555 FirePOWER IPS, Apps, AMP and URL 3YR Subscription	L-ASA5555-TAMC=	L-ASA5555-TAMC-3Y
Cisco ASA5555 FirePOWER URL Filtering 3YR Subscription	L-ASA5555-URL=	L-ASA5555-URL-3Y

## To Download the Software

Visit the [Cisco Software Center](#) to download Cisco ASA with FirePOWER Services Software.

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## For More Information

For more information, please visit the following links:

- Cisco ASA 5500-X Series Next-Generation Firewalls:  
<http://www.cisco.com/go/asa>.
- Cisco Security Manager:  
<http://www.cisco.com/c/en/us/products/security/security-manager/index.html>.
- Cisco Adaptive Security Device Manager:  
<http://www.cisco.com/c/en/us/products/security/adaptive-security-device-manager/index.html>.
- Cisco Security Services: [http://www.cisco.com/en/US/products/svcs/ps2961/ps2952/serv\\_group\\_home.html](http://www.cisco.com/en/US/products/svcs/ps2961/ps2952/serv_group_home.html).
- Cisco AnyConnect Secure Mobility Client  
<http://www.cisco.com/go/anyconnect>.
- Cisco AnyConnect Ordering Guide  
<http://www.cisco.com/c/dam/en/us/products/security/anyconnect-og.pdf>.



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