

Cisco ASA 5500 and ASA 5500-X Series Next-Generation Firewalls for Small Offices and Branch Locations

Cisco® ASA 5500 and ASA 5500-X Series Next-Generation Firewalls integrate the world's most proven stateful inspection firewall with a comprehensive suite of highly integrated next-generation firewall services for networks of all sizes—small and midsize businesses with one or a few locations, large enterprises, service providers, and mission-critical data centers. Cisco ASA 5500 and ASA 5500-X Series Next-Generation Firewalls deliver MultiScale™ performance with unprecedented services flexibility, including next-generation firewall capabilities, modular scalability, feature extensibility, and lower deployment and operations costs.

You need a firewall that meets small-office performance and cost needs while delivering enterprise-strength security. Cisco ASA 5500 and ASA 5500-X Series Next-Generation Firewalls were designed with this in mind. Available in a wide range of sizes and performance levels to fit your network, budget, and evolving security needs, all models deliver the same proven level of security that protects the networks of some of the largest and most security-conscious companies in the world. They also provide the visibility and control you need to take advantage of new applications and devices without compromising security.

Features and Benefits

Cisco ASA 5500 and ASA 5500-X Series Next-Generation Firewalls for small offices and branch locations protect critical assets through:

- Exceptional next-generation firewall services that provide the visibility and granular control your enterprise needs to safely take advantage of new applications and devices¹
- Application Visibility and Control (AVC) to control specific behaviors within allowed micro-applications
- Web Security Essentials (WSE) to restrict web and web application usage based on reputation of the site
- Broad and deep network security through an array of integrated cloud- and software-based next-generation firewall services backed by Cisco Security Intelligence Operations (SIO)
- Highly effective intrusion prevention system (IPS) with Cisco Global Correlation
- High-performance VPN and always-on remote access
- The ability to enable additional security services quickly and easily in response to changing needs

¹ Please contact your sales representative for availability.

Cisco ASA 5512-X and 5515-X

The Cisco ASA 5512-X and 5515-X are next-generation firewalls that combine the most widely deployed stateful inspection firewall in the industry with a comprehensive suite of next-generation network security services—for comprehensive security without compromise. They provide multiple security services and redundant power supplies and enable consistent security enforcement throughout the organization. In addition to comprehensive stateful inspection firewall capabilities, the ASA 5512-X and 5515-X optionally provide broad and deep network security through an array of integrated cloud- and software-based security services, including Application Visibility and Control (AVC), Web Security Essentials (WSE), Cisco Cloud Web Security (CWS), and the only context-aware IPS—with no need for additional hardware modules.

The ASA 5512-X and ASA 5515-X Next-Generation Firewalls are part of the ASA 5500-X Series, which is built on the same proven security platform as the rest of the ASA family of firewalls and delivers exceptional application visibility and control along with superior performance and operational efficiency. The ASA 5512-X and 5515-X are designed to meet evolving security needs by providing, among other things, innovative next-generation firewall services that make it possible to take advantage of new applications and devices without compromising security. Unlike other next-generation firewalls, the Cisco ASA 5500-X Series keeps pace with rapidly evolving needs by offering end-to-end network intelligence gained from combining the visibility from local traffic with in-depth global network intelligence using:

- [Cisco TrustSec® technology](#)
- [Cisco AnyConnect® Secure Mobility Solution for unique mobile client insight](#)
- [Cisco Security Intelligence Operations \(SIO\) for near-real-time threat information and proactive protection](#)
- [Cisco ASA Next-Generation Firewall Services](#)

With up to 1.2 Gbps of firewall throughput, 250,000 concurrent firewall connections, 15,000 connections per second, and 6 integrated Gigabit Ethernet interfaces, the ASA 5512-X and 5515-X are excellent choices for businesses requiring a high-performance, cost-effective, and extensible security solution with exceptional application visibility and control that can grow with their changing needs.

Cisco ASA 5505

The Cisco ASA 5505 is a full-featured firewall for small business, branch, and enterprise teleworker environments. The Cisco ASA 5505 delivers high-performance firewall, SSL and IPsec VPN, and rich networking services in a modular, “plug-and-play” appliance. Using the integrated graphical Cisco Adaptive Security Device Manager (ASDM), the Cisco ASA 5505 can be rapidly deployed and easily managed, enabling businesses to minimize operations costs. The Cisco ASA 5505 features a flexible 8-port 10/100 Fast Ethernet switch whose ports can be dynamically grouped to create up to three separate VLANs for home, business, and Internet traffic for improved network segmentation and security. The Cisco ASA 5505 provides two Power over Ethernet (PoE) ports, simplifying the deployment of Cisco IP phones with zero-touch secure voice over IP (VoIP) capabilities, as well as the deployment of external wireless access points for extended network mobility. A high-performance intrusion prevention and worm mitigation service is available with the addition of the Advanced Inspection and Prevention Security Services Card (AIP SSC). Multiple USB ports can be used to enable additional services and capabilities as they are needed.

As business needs grow, customers can install a Security Plus upgrade license, enabling the Cisco ASA 5505 to scale to support a higher connection capacity and up to 25 IPsec VPN users, add full DMZ support, and integrate into switched network environments through VLAN trunking support. Furthermore, this upgrade license maximizes business continuity by enabling support for redundant ISP connections and stateless Active/Standby high-availability services.

Businesses can also extend the Cisco ASA 5505 firewall's VPN service by enabling Cisco AnyConnect client and clientless VPN remote access to support various mobile workers and business partners. Cisco Secure Remote Access Solution deployments can scale to serve up to 25 AnyConnect and/or clientless VPN concurrent users on each Cisco ASA 5505 by installing an Essential or a Premium AnyConnect VPN license.

This combination of market-leading security and VPN services, advanced networking features, flexible remote management capabilities, and future extensibility makes the Cisco ASA 5505 an excellent choice for businesses requiring a best-in-class small business, branch, or enterprise teleworker security solution.

Cisco ASA 5510

The Cisco ASA 5510 delivers advanced security and networking services in an easy-to-deploy, cost-effective firewall. These services can be easily managed and monitored by the integrated Cisco ASDM application, thus reducing the overall deployment and operations costs associated with providing this high level of security. The Cisco ASA 5510 provides high-performance firewall and VPN services and five integrated 10/100 Fast Ethernet interfaces. It optionally provides high-performance intrusion prevention and worm mitigation services through the Advanced Inspection and Prevention Security Services Module (AIP SSM), or comprehensive malware protection services through the Content Security and Control Security Services Module (CSC SSM). This unique combination of services on a single platform makes the Cisco ASA 5510 an excellent choice for businesses requiring a cost-effective, extensible, DMZ-enabled security solution.

As business needs grow, customers can install a Security Plus license, upgrading two of the Cisco ASA 5510 interfaces to Gigabit Ethernet and enabling integration into switched network environments through VLAN support. This upgrade license maximizes business continuity by enabling Active/Active and Active/Standby high-availability services. Using the optional security context capabilities of the Cisco ASA 5510, businesses can deploy up to five virtual firewalls within a physical appliance to enable compartmentalized control of security policies on a departmental level. This virtualization strengthens security and reduces overall management and support costs while consolidating multiple security devices into a single appliance.

Businesses can extend their SSL and IPsec VPN capacity to support a larger number of mobile workers, remote sites, and business partners. Up to 250 AnyConnect and/or clientless VPN peers can be supported on each Cisco ASA 5510 by installing an Essential or a Premium AnyConnect VPN license; up to 250 IPsec VPN peers are supported on the base platform.

VPN capacity and resiliency can also be increased by taking advantage of the Cisco ASA 5510 firewall's integrated VPN clustering and load-balancing capabilities (available with a Security Plus license). The Cisco ASA 5510 supports up to 10 firewalls in a cluster, offering a maximum of 2500 AnyConnect and/or clientless VPN peers or 2500 IPsec VPN peers per cluster. For business continuity and event planning, the Cisco ASA 5510 can also benefit from Cisco VPN Flex licenses, which enable administrators to react to or plan for short-term "bursts" of concurrent Premium VPN remote-access users for up to two months.

Table 1 compares the features and capacities of the Cisco ASA 5500 and ASA 5500-X Series Next-Generation Firewalls for small offices and branch locations.

Table 1. Cisco ASA 5500 and ASA 5500-X Series Next-Generation Firewalls for Small Offices and Branch Locations

Feature	Cisco ASA 5505; Security Plus	Cisco ASA 5510; Security Plus	Cisco ASA 5512-X; Security Plus	Cisco ASA 5515-X
				
Stateful Inspection Throughput (Maximum) ¹	Up to 150 Mbps	Up to 300 Mbps	1 Gbps	1.2 Gbps
Stateful Inspection Throughput (Multiprotocol) ²	—	—	500 Mbps	600 Mbps
IPS Throughput ³	Up to 75 Mbps with AIP-SSC-5	Up to 150 Mbps with AIP-SSM-10 Up to 300 Mbps with AIP-SSM-20	250 Mbps (Extra hardware not required)	400 Mbps (Extra hardware not required)
Next-Generation Throughput ⁴ (Multiprotocol)	—	—	200 Mbps	350 Mbps
3DES/AES VPN Throughput ⁵	Up to 100 Mbps	Up to 170 Mbps	200 Mbps	250 Mbps
Users/Nodes	Unlimited	Unlimited	Unlimited	Unlimited
IPsec VPN Peers	25 ⁺	250	250	250
Cisco Cloud Web Security Users	25	75	100	250
Premium AnyConnect VPN Peers (Included/Maximum)	2/25	2/250	2/250	2/250
Concurrent Connections	10,000; 25,000 ⁺	50,000; 130,000 ⁺	100,000	250,000
New Connections/Second	4000	9000	10,000	15,000
Virtual Interfaces (VLANs)	3 (trunking disabled)/ 20 (trunking enabled) [*]	50; 100	50; 100	100
Security Contexts (Included/Maximum) ⁶	Not available	0,0; 2,5	0,0; 2,5	2,5
High Availability	Not supported ⁺	Not supported; Active/Active and Active/Standby ^{**}	Not supported; Active/Active and Active/Standby ^{**}	Active/Active and Active/Standby
Expansion Slot	1 SSC	1 SSM	1 interface card	1 interface card
User-Accessible Flash Slot	—	1	No	No
USB 2.0 Ports	3 (1 on front, 2 on rear)	2	2	2
Integrated I/O	8 Fast Ethernet with 2 PoE ports	5 Fast Ethernet/2 GE Copper, 3 Fast Ethernet	6 GE Copper	6 GE Copper
Expansion I/O	—	4 GE Copper or	6 GE Copper or	6 GE Copper or

¹ Maximum throughput measured with UDP traffic under ideal conditions.

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

³ Firewall traffic that does not go through the IPS service can have higher throughput.

⁴ Throughput was measured using ASA CX Software Release 9.1.1 with multiprotocol traffic profile with both AVC and WSE. Traffic logging was enabled as well.

⁵ 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.

⁶ Separately licensed feature; includes two SSL licenses with base system.

Feature	Cisco ASA 5505; Security Plus	Cisco ASA 5510; Security Plus	Cisco ASA 5512-X; Security Plus	Cisco ASA 5515-X
		4 GE SFP	6 GE SFP	6 GE SFP
Serial Ports	1 RJ-45 console	2 RJ-45, console and auxiliary	1 RJ-45 console	1 RJ-45 console
Solid State Drive	—	—	1 slot, 120 GB MLC SED	1 slot, 120 GB MLC SED
Memory	512 MB	1 GB	4 GB	8 GB
Minimum System Flash	128 MB	256 MB	4 GB	8 GB
System Bus	Multibus architecture	Multibus architecture	Multibus architecture	Multibus architecture
Operating				
Temperature	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)
Relative Humidity	5 to 95 percent noncondensing	5 to 95 percent noncondensing	10 to 90 percent noncondensing	10 to 90 percent noncondensing
Altitude	Designed and tested for 0 to 9840 ft (3000m); agency approved for 2000m	Designed and tested for 0 to 9840 ft (3000m); agency approved for 2000m	Designed and tested for 0 to 15,000 ft (4572m)	Designed and tested for 0 to 15,000 ft (4572m)
Shock	1.14 m/sec (45 in./sec) 1/2 sine input	1.14 m/sec (45 in./sec) 1/2 sine input	70G, 4.22 m/sec	70G, 4.22 m/sec
Vibration	0.41 Grms2 (3 to 500 Hz) random input	0.41 Grms2 (3 to 500 Hz) random input	0.41 Grms2 (3 to 500 Hz) random input	0.41 Grms2 (3 to 500 Hz) random input
Acoustic Noise	60 dBA max	60 dBA max	64.2 dBA max	64.2 dBA max
Nonoperating				
Temperature	–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)
Relative Humidity	5 to 95 percent noncondensing	5 to 95 percent noncondensing	10 to 90 percent noncondensing	10 to 90 percent noncondensing
Altitude	0 to 15,000 ft (4570m)	0 to 15,000 ft (4570m)	Designed and tested for 0 to 15,000 ft (4570m)	Designed and tested for 0 to 15,000 ft (4570m)
Shock	30G	30G	70G, 4.22 m/sec	70G, 4.22 m/sec
Vibration	0.41 Grms2 (3 to 500 Hz) random input	0.41 Grms2 (3 to 500 Hz) random input	1.12 Grms2 (3 to 500 Hz) random input	1.12 Grms2 (3 to 500 Hz) random input
Power				
Input (per Power Supply)				
AC Range Line Voltage	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC
AC Normal Line Voltage	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC
AC Current	1.8A	3A	4.85A	4.85A
AC Frequency	50/60 Hz	47/63 Hz	50/60 Hz	50/60 Hz
Dual-Power Supplies	None	None	None	None
DC Domestic Line Voltage	See the ASA 5500 Series Hardware Installation Guide	See the ASA 5500 Series Hardware Installation Guide	–40.5 to 56 VDC (–48 VDC nominal)	–40.5 to 56 VDC (–48 VDC nominal)
DC International Line Voltage	See the ASA 5500 Series Hardware Installation Guide	See the ASA 5500 Series Hardware Installation Guide	–55 to –72 VDC (–60 VDC nominal)	–55 to –72 VDC (–60 VDC nominal)
DC Current	See the ASA 5500 Series Hardware Installation Guide	See the ASA 5500 Series Hardware Installation Guide	15A (maximum input)	15A (maximum input)
Output				
Steady State	20W	150W	51W	65W
Maximum Peak	96W	190W	56W	70W
Maximum Heat Dissipation	72 BTU/hr	648 BTU/hr	192 BTU/hr	239 BTU/hr
Form Factor	Desktop	1 RU, 19-in. rack-mountable	1 RU, 19-in. rack-mountable	1 RU, 19-in. rack-mountable
Dimensions (H x W x D)	1.75 x 7.89 x 6.87 in. (4.45 x 20.04 x 17.45 cm)	1.75 x 17.5 x 14.25 in. (4.45 x 20.04 x 36.20 cm)	1.67 x 16.7 x 15.6 in (4.24 x 42.9 x 39.5 cm)	1.67 x 16.7 x 15.6 in (4.24 x 42.9 x 39.5 cm)

Feature	Cisco ASA 5505; Security Plus	Cisco ASA 5510; Security Plus	Cisco ASA 5512-X; Security Plus	Cisco ASA 5515-X
Weight (with AC Power Supply)	4.0 lb (1.8 kg)	20.0 lb (9.07 kg)	13.39 lb (6.07 kg)	13.39 lb (6.07 kg)
Safety	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	IEC 60950-1: 2005, 2 nd Edition EN 60950-1:2006+A11: 2009 UL 60950-1:2007, 2 nd Edition; CSA C22.2 No. 60950-1-07, 2 nd Edition	IEC 60950-1: 2005, 2 nd Edition EN 60950-1:2006+A11: 2009 UL 60950-1:2007, 2 nd Edition; CSA C22.2 No. 60950-1-07, 2 nd Edition
Electromagnetic Compatibility (EMC)	CE marking, FCC Part 15 Class B, AS/NZS CISPR22 Class B, VCCI Class B, EN55022 Class B, CISPR22 Class B, 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	CE: EN55022 2006+A1: 2007 Class A; EN55024 1998+A1:2001+A2:2003; EN61000-3-2 2009; EN61000-3-3 2008; FCC: CFR 47, Part 15 Subpart B Class A 2010, ANSI C63.4 2009; ICES-003 ISSUE 4 FEBRUARY.2004; VCCI: V-3/2011.04; C-TICK: AS/NZS CISPR 22,2009 KC: KN22 & KN24	CE: EN55022 2006+A1: 2007 Class A; EN55024 1998+A1: 2001+A2:2003; EN61000-3-2 2009; EN61000-3-3 2008; FCC: CFR 47, Part 15 Subpart B Class A 2010, ANSI C63.4 2009; ICES-003 ISSUE 4 FEBRUARY.2004; VCCI: V-3/2011.04; C-TICK: AS/NZS CISPR 22,2009 KC: KN22 & KN24
Industry Certifications	FIPS 140-2 Level 2 In process: Common Criteria EAL4+ US DoD Application-Level Firewall for Medium-Robustness Environments, and Common Criteria EAL4 for IPsec/SSL VPN	Common Criteria EAL4 US DoD Application-Level Firewall for Medium-Robustness Environments, Common Criteria EAL2 for IPS on AIP SSM-10 and -20, FIPS 140-2 Level 2, and NEBS Level 3 In process: Common Criteria EAL4+ US DoD Application-Level Firewall for Medium-Robustness Environments, and Common Criteria EAL4 for IPsec/SSL VPN	In process	In process

Cisco ASA 5500 Series IPS Security Services Processors, Modules, and Cards

The Cisco ASA 5500 Series brings a new level of integrated security performance to networks with its highly effective IPS services and multiprocessor hardware architecture. This architecture allows businesses to adapt and extend the high-performance security services profile of the Cisco ASA 5500 Series. Customers can add additional high-performance services using security services modules with dedicated security co-processors, and can custom-tailor flow-specific policies using a highly flexible policy framework. This adaptable architecture enables businesses to deploy new security services when and where they are needed, such as adding the broad range of intrusion prevention and advanced antiworm services delivered by the IPS modules via the AIP SSM and AIP SSC, or the comprehensive malware protection and content security services enabled by the CSC SSM. Further, the Cisco ASA 5500 Series architecture allows Cisco to introduce new services to address new threats, giving businesses outstanding investment protection.

The Cisco ASA 5500 Series IPS SSP, AIP SSM, and AIP SSC are inline, network-based solutions that accurately identify, classify, and stop malicious traffic before it affects business continuity for IPv4, IPv6, and hybrid IPv6 and IPv4 networks. They combine inline prevention services with innovative technologies, resulting in total confidence in the provided protection of the deployed IPS solution, without the fear of legitimate traffic being dropped. The AIP SSM and AIP SSC also offer comprehensive network protection through their unique ability to collaborate with other network security resources, providing a proactive approach to protecting the network.

Accurate inline prevention technologies provide unparalleled confidence to take preventive action on a broader range of threats without the risk of dropping legitimate traffic. These unique technologies offer intelligent, automated, contextual analysis of data and help ensure that businesses are getting the most out of their intrusion prevention solutions. Furthermore, the IPS SSP, AIP SSM, and AIP SSC use multivector threat identification to protect the network from policy violations, vulnerability exploitations, and anomalous activity through detailed inspection of traffic in Layers 2 through 7.

Table 2 details the AIP SSM and AIP SSC models that are available, and their respective performance and physical characteristics.

Table 2. Characteristics of Cisco ASA 5500 Series AIP SSM and AIP SSC Models

Feature	Cisco ASA 5500 Series AIP-SSC-5	Cisco ASA 5500 Series AIP-SSM-10	Cisco ASA 5500 Series AIP-SSM-20
			
Concurrent Threat Mitigation Throughput (Firewall + IPS Services)	75 Mbps with Cisco ASA 5505	150 Mbps with Cisco ASA 5510	300 Mbps with Cisco ASA 5510
Technical Specifications			
Memory	512 MB	1 GB	2 GB
Flash	512 MB	256 MB	256 MB
Environmental Operating Ranges			
Operating			
Temperature	32 to 104°F (0 to 40°C)		
Relative Humidity	5 to 95 percent noncondensing		
Nonoperating			
Temperature	–13 to 158°F (–25 to 70°C)		
Power Consumption	30W maximum	90W maximum	
Physical Specifications			
Dimensions (H x W x D)	0.68 x 3.55 x 5.2 in. (1.73 x 9.02 x 13.21 cm)		1.70 x 6.80 x 12.25 in. (4.32 x 17.27 x 31.12 cm)
Weight (with Power Supply)	0.42 lb (0.19 kg)		3.00 lb (1.36 kg)
Regulatory and Standards Compliance			
Safety	UL 60950, CSA C22.2 No. 60950, EN 60950 IEC 60950, AS/NZS60950		
Electromagnetic Compatibility (EMC)	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		

Cisco ASA 5500 Series Content Security and Control Module

The Cisco ASA 5500 Series CSC SSM delivers industry-leading threat protection and content control at the Internet edge, providing comprehensive antivirus, antispayware, file blocking, antispam, antiphishing, URL blocking and filtering, and content filtering services in an easy-to-manage solution. The CSC SSM bolsters the Cisco ASA 5500 Series' strong security capabilities, providing customers with additional protection of and control over the content of their business communications. The module provides additional flexibility and choice over the functioning and deployment of Cisco ASA 5500 Series firewalls. Licensing options enable organizations to customize the features and capabilities to each group's needs, with features that include advanced content services and increased user capacity. The CSC SSM ships with a default feature set that provides antivirus, antispayware, and file blocking services.

A Plus license is available for each CSC SSM at an additional charge, delivering capabilities such as antispam, antiphishing, URL blocking and filtering, and content control services. Businesses can extend the user capacity of the CSC SSM by purchasing and installing additional user licenses. A detailed listing of these options is shown in Table 3 and in the CSC SSM data sheet.

Table 3. Characteristics of Cisco ASA 5500 Series CSC SSMs

Feature	Cisco ASA 5500 Series CSC-SSM-10	Cisco ASA 5500 Series CSC-SSM-20
		
Supported Platforms	Cisco ASA 5510	Cisco ASA 5510
Standard and Optional Features		
Standard User License	50 users	500 users
Standard Feature Set	Antivirus, antispayware, file blocking	
Optional User Upgrades (Total Users)	• 100 users • 250 users • 500 users	• 750 users • 1000 users
Optional Feature Upgrades	Plus license: Adds antispam, antiphishing, URL blocking and filtering, and content control	
Technical Specifications		
Memory	1 GB	2 GB
System Flash	256 MB	256 MB
Environmental Operating Ranges		
Operating		
Temperature	32 to 104°F (0 to 40°C)	
Relative Humidity	10 to 90 percent, noncondensing	
Nonoperating		
Temperature	–13 to 158°F (–25 to 70°C)	
Power Consumption	90W maximum	
Physical Specifications		
Dimensions (H x W x D)	1.70 x 6.80 x 12.25 in. (4.32 x 17.27 x 31.12 cm)	
Weight (with Power Supply)	3.00 lb (1.36 kg)	
Regulatory and Standards Compliance		
Safety	UL 60950, CSA C22.2 No. 60950, EN 60950 IEC 60950, AS/NZS60950	
Electromagnetic Compatibility (EMC)	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	

Cisco ASA 5500 Series 4-Port Gigabit Ethernet Module

The Cisco ASA 5500 Series 4-Port Gigabit Ethernet SSM enables businesses to better segment network traffic into separate security zones, providing more granular security for their network environment. These zones can range from the Internet to internal corporate departments/sites to DMZs. This high-performance module supports both copper and optical connection options by including four 10/100/1000 copper RJ-45 ports and four SFP ports. Businesses can choose between copper or fiber ports, providing flexibility for data center, campus, or enterprise edge connectivity. The module extends the I/O profile of the Cisco ASA 5500 Series to a total of five Fast Ethernet and four Gigabit Ethernet ports on the Cisco ASA 5510. Table 4 lists the characteristics of the Cisco ASA 5500 Series 4-Port Gigabit Ethernet SSMs.

Table 4. Characteristics of Cisco ASA 5500 Series 4-Port Gigabit Ethernet SSMs

Feature	Cisco ASA 5500 Series 4-Port GE SSM
	
Technical Specifications	
Integrated LAN Ports	Four 10/100/1000BASE-T
Integrated SFP Ports	Four (Gigabit Ethernet Optical SFP 1000BASE-SX or LX/LH transceiver supported)
Environmental Operating Ranges	
Operating	
Temperature	32 to 104°F (0 to 40°C)
Relative Humidity	5 to 95 percent noncondensing
Nonoperating	
Temperature	–13 to 158°F (–25 to 70°C)
Power Consumption	25W maximum
Physical Specifications	
Dimensions (H x W x D)	1.70 x 6.80 x 12.25 in. (4.32 x 17.27 x 31.12 cm)
Weight (with Power Supply)	2.00 lb (0.91 kg)
Regulatory and Standards Compliance	
Safety	UL 60950, CSA C22.2 No. 60950, EN 60950 IEC 60950, AS/NZS60950
Electromagnetic Compatibility (EMC)	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

Cisco ASA 5500-X Series 6-Port Gigabit Ethernet Interface Cards

Cisco ASA 5500-X Series 6-port Gigabit Ethernet Interface Cards extend the I/O profile of the ASA 5512-X and ASA 5515-X 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 by using EtherChannel
- Support for Jumbo Ethernet frames of up to 9000 bytes
- Protection against cable failure for the most demanding Active/Active and full mesh firewall deployments

Table 5 lists the characteristics of the Cisco ASA 5500-X Series 6-Port Gigabit Ethernet Interface Cards.

Table 5. Characteristics of Cisco ASA 5500-X Series 6-Port Gigabit Ethernet Interface Cards

Feature	Cisco ASA 5500-X Series 6-Port 10/100/1000	Cisco ASA 5500-X Series 6-Port GE SFP SX, LH, LX
		
Technical Specifications		
Integrated Ports	Six 10/100/1000BASE-T	Six (Gigabit Ethernet Optical SFP 1000BASE-SX or -LX/LH transceiver supported)

Feature	Cisco ASA 5500-X Series 6-Port 10/100/1000	Cisco ASA 5500-X Series 6-Port GE SFP SX, LH, LX
Environmental Operating Ranges		
Operating		
Temperature	32 to 113°F (0 to 45°C)	32 to 113°F (0 to 45°C)
Relative Humidity	5 to 95 percent noncondensing	5 to 95 percent noncondensing
Nonoperating		
Temperature	–40 to 149°F (–40 to 65°C)	–40 to 149°F (–40 to 65°C)
Power Consumption	25W maximum	25W maximum
Physical Specifications		
Dimensions (H x W x D)	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)
Weight	1.00 lb (0.45 kg)	1.00 lb (0.45 kg)
Regulatory and Standards Compliance		
Safety	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
Electromagnetic Compatibility (EMC)	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 Home Page](#). Table 6 provides ordering information for the Cisco ASA 5500 Series and ASA 5500-X Next-Generation Firewall Series.

Table 6. Ordering Information

Product Name	Part Number
Cisco ASA Next-Generation Firewall Services	
Cisco ASA 5512-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, DES encryption, SSD 120G	ASA5512-SSD120-K8
Cisco ASA 5512-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, 3DES/AES encryption, SSD 120G	ASA5512-SSD120-K9
Cisco ASA 5515-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, DES encryption, SSD 120G	ASA5515-SSD120-K8
Cisco ASA 5515-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, 3DES/AES encryption, SSD 120G	ASA5515-SSD120-K9
Cisco ASA 5500 Series and ASA 5500-X Series Firewall Edition Bundles	
Cisco ASA 5505 10-User Bundle; includes 8-port Fast Ethernet switch, 10 IPsec VPN peers, 2 Premium VPN peers, Triple Data Encryption Standard/Advanced Encryption Standard (3DES/AES) license	ASA5505-BUN-K9
Cisco ASA 5505 10-User Bundle; includes 8-port Fast Ethernet switch, 10 IPsec VPN peers, 2 Premium VPN peers, Data Encryption Standard (DES) license	ASA5505-K8
Cisco ASA 5505 50-User Bundle; includes 8-port Fast Ethernet switch, 10 IPsec VPN peers, 2 Premium VPN peers, 3DES/AES license	ASA5505-50-BUN-K9
Cisco ASA 5505 Unlimited-User Bundle; includes 8-port Fast Ethernet switch, 10 IPsec VPN peers, 2 Premium VPN peers, 3DES/AES license	ASA5505-UL-BUN-K9
Cisco ASA 5505 Unlimited-User Security Plus Bundle; includes 8-port Fast Ethernet switch, 25 IPsec VPN peers, 2 Premium VPN peers, DMZ, stateless Active/Standby high availability, 3DES/AES license	ASA5505-SEC-BUN-K9
Cisco ASA 5510 Firewall Edition; includes 5 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 Premium VPN peers, 3DES/AES license	ASA5510-BUN-K9
Cisco ASA 5510 Firewall Edition; includes 5 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 Premium VPN peers, DES license	ASA5510-K8
Cisco ASA 5510 Security Plus Firewall Edition; includes 2 Gigabit Ethernet + 3 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 Premium VPN peers, Active/Standby high availability, 3DES/AES license	ASA5510-SEC-BUN-K9
Cisco ASA 5512-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, no payload encryption	ASA5512-K7
Cisco ASA 5512-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, DES encryption	ASA5512-K8
Cisco ASA 5512-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 DC power supply, DES license	ASA5512-DC-K8
Cisco ASA 5512-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, 3DES/AES encryption	ASA5512-K9
Cisco ASA 5515-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, no payload encryption	ASA5515-K7
Cisco ASA 5515-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, DES encryption	ASA5515-K8
Cisco ASA 5515-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 DC power supply, DES license	ASA5515-DC-K8

Product Name	Part Number
Cisco ASA 5515-X Firewall Edition; includes firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, 3DES/AES encryption	ASA5515-K9
Cisco ASA 5500 Series IPS Edition Bundles	
Cisco ASA 5505 50-User IPS Edition; includes AIP-SSC-5 (chassis, software, 8 Fast Ethernet interfaces, 10 IPsec VPN peers, 2 Premium VPN peers, 3DES/AES license)	ASA5505-50-AIP5-K9
Cisco ASA 5505 Unlimited-User IPS Edition; includes Security Plus License and AIP-SSC-5 (chassis, software, 8 Fast Ethernet interfaces, 25 IPsec VPN peers, 2 Premium VPN peers, DMZ support, stateless Active/Standby high availability, 3DES/AES license)	ASA5505-U-AIP5P-K9
Cisco ASA 5510 IPS Edition; includes AIP-SSM-10, firewall services, 250 IPsec VPN peers, 2 Premium VPN peers, 5 Fast Ethernet interfaces	ASA5510-AIP10-K9
Cisco ASA 5510 IPS Edition; includes Security Plus License and AIP-SSM-10 (chassis, software, 2 Gigabit Ethernet interfaces, 3 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 Premium VPN peers, Active/Active high availability, 3DES/AES license)	ASA5510-AIP10SP-K9
Cisco ASA 5510 IPS Edition; includes Security Plus License and AIP-SSM-20 (chassis, software, 2 Gigabit Ethernet interfaces, 3 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 Premium VPN peers, Active/Active high availability, 3DES/AES)	ASA5510-AIP20SP-K9
Cisco ASA 5512-X IPS Edition; includes IPS service, 250 IPsec VPN peers, 2 SSL VPN peers, firewall services, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, DES license	ASA5512-IPS-K8
Cisco ASA 5512-X IPS Edition; includes IPS service, 250 IPsec VPN peers, 2 SSL VPN peers, firewall services, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, DES license	ASA5512-IPS-K9
Cisco ASA 5515-X IPS Edition; includes IPS service, 250 IPsec VPN peers, 2 SSL VPN peers, firewall services, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, DES license	ASA5515-IPS-K8
Cisco ASA 5515-X IPS Edition; includes IPS service, 250 IPsec VPN Peers, 2 SSL VPN peers, firewall services, 6 copper Gigabit Ethernet data ports, 1 copper Gigabit Ethernet management port, 1 AC power supply, DES license	ASA5515-IPS-K9
Cisco ASA 5500 Series Content Security Edition Bundles	
Cisco ASA 5510 Content Security Edition; includes CSC-SSM-10, 50-user antivirus/antispayware with 1-year subscription, firewall services, 250 IPsec VPN peers, 2 Premium VPN peers, 3 Fast Ethernet interfaces	ASA5510-CSC10-K9
Cisco ASA 5510 Content Security Edition; includes CSC-SSM-20, 500-user antivirus/antispayware with 1-year subscription, firewall services, 250 IPsec VPN peers, 2 Premium VPN peers, 3 Fast Ethernet interfaces	ASA5510-CSC20-K9
Cisco ASA 5520 Content Security Edition; includes CSC-SSM-10, 50-user antivirus/antispayware with 1-year subscription, firewall services, 750 IPsec VPN peers, 2 Premium VPN peers, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5520-CSC10-K9
Cisco ASA 5520 Content Security Edition; includes CSC-SSM-20, 500-user antivirus/antispayware with 1-year subscription, firewall services, 750 IPsec VPN peers, 2 Premium VPN peers, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5520-CSC20-K9
Cisco ASA 5500 Series SSL/IPsec VPN Edition Bundles	
Cisco ASA 5505 SSL/IPsec VPN Edition; includes 10 IPsec VPN peers, 10 Premium VPN peers, 50 firewall users, 8-port Fast Ethernet switch	ASA5505-SSL10-K9
Cisco ASA 5505 SSL/IPsec VPN Edition; includes 25 IPsec VPN peers, 25 Premium VPN peers, 50 firewall users, 8-port Fast Ethernet switch	ASA5505-SSL25-K9
Cisco ASA 5510 SSL/IPsec VPN Edition; includes 250 IPsec VPN peers, 50 Premium VPN peers, firewall services, 3 Fast Ethernet interfaces	ASA5510-SSL50-K9
Cisco ASA 5510 SSL/IPsec VPN Edition; includes 250 IPsec VPN peers, 100 Premium VPN 100 peers, firewall services, 3 Fast Ethernet interfaces	ASA5510-SSL100-K9
Cisco ASA 5510 SSL/IPsec VPN Edition; includes 250 IPsec VPN peers, 250 Premium VPN peers, firewall services, 3 Fast Ethernet interfaces	ASA5510-SSL250-K9
Security Services Modules	
Cisco ASA Advanced Inspection and Prevention Security Services Card 5 (AIP-SSC-5)	ASA-SSC-AIP-5-K9=
Cisco ASA Advanced Inspection and Prevention Security Services Module 10 (AIP-SSM-10)	ASA-SSM-AIP-10-K9=
Cisco ASA Advanced Inspection and Prevention Security Services Module 20 (AIP-SSM-20)	ASA-SSM-AIP-20-K9=
Cisco ASA Advanced Inspection and Prevention Security Services Module 40 (AIP-SSM-40)	ASA-SSM-AIP-40-K9=

Product Name	Part Number
Cisco ASA Content Security and Control Security Services Module 10 (CSC-SSM-10) with 50-user antivirus/antispyware, 1-year subscription	ASA-SSM-CSC-10-K9=
Cisco ASA Content Security and Control Security Services Module 20 (CSC-SSM-20) with 500-user antivirus/antispyware, 1-year subscription	ASA-SSM-CSC-20-K9=
Cisco ASA 4-Port Gigabit Ethernet Security Services Module	SSM-4GE=
Interface Cards	
Cisco ASA 5512-X/5515-X 6-Port 10/100/1000 Interface Card	ASA-IC-6GE-CU-A
Cisco ASA 5512-X/5515-X 6-Port Gigabit Ethernet SFP SX, LH, LX Interface Card	ASA-IC-6GE-SFP-A
Cisco ASA 5512-X/5515-X 6-Port 10/100/1000 Interface Card (spare)	ASA-IC-6GE-CU-A=
Cisco ASA 5512-X/5515-X 6-Port Gigabit Ethernet SFP SX, LH, LX Interface Card (spare)	ASA-IC-6GE-SFP-A=
Cisco ASA 5500 Series Software	
Cisco ASA Software one-time upgrade for nonsupport customers	ASA-SW-UPGRADE=
Application Visibility and Control (AVC) Software Subscriptions	
ASA 5512-X CX Application Visibility and Control; 1-year	ASA5512-AP1Y
ASA 5512-X CX Application Visibility and Control; 1-year (eDelivery Spare)	L-ASA5512-AP1Y=
ASA 5512-X CX Application Visibility and Control; 3-year	ASA5512-AP3Y
ASA 5512-X CX Application Visibility and Control; 3-year (eDelivery Spare)	L-ASA5512-AP3Y=
ASA 5512-X CX Application Visibility and Control; 5-year	ASA5512-AP5Y
ASA 5512-X CX Application Visibility and Control; 5-year (eDelivery Spare)	L-ASA5512-AP5Y=
ASA 5515-X CX Application Visibility and Control; 1-year	ASA5515-AP1Y
ASA 5515-X CX Application Visibility and Control; 1-year (eDelivery Spare)	L-ASA5515-AP1Y=
ASA 5515-X CX Application Visibility and Control; 3-year	ASA5515-AP3Y
ASA 5515-X CX Application Visibility and Control; 3-year (eDelivery Spare)	L-ASA5515-AP3Y=
ASA 5515-X CX Application Visibility and Control; 5-year	ASA5515-AP5Y
ASA 5515-X CX Application Visibility and Control; 5-year (eDelivery Spare)	L-ASA5515-AP5Y=
Web Security Essentials (WSE) Software Subscriptions	
ASA 5512-X CX Web Security Essentials; 1-year	ASA5512-WS1Y
ASA 5512-X CX Web Security Essentials; 1-year (eDelivery Spare)	L-ASA5512-WS1Y=
ASA 5512-X CX Web Security Essentials; 3-year	ASA5512-WS3Y
ASA 5512-X CX Web Security Essentials; 3-year (eDelivery Spare)	L- ASA5512-WS3Y=
ASA 5512-X CX Web Security Essentials; 5-year	ASA5512-WS5Y
ASA 5512-X CX Web Security Essentials; 5-year (eDelivery Spare)	L-ASA5512-WS5Y=
ASA 5515-X CX Web Security Essentials; 1-year	ASA5515-WS1Y
ASA 5515-X CX Web Security Essentials; 1-year (eDelivery Spare)	L-ASA5515-WS1Y=
ASA 5515-X CX Web Security Essentials; 3-year	ASA5515-WS3Y
ASA 5515-X CX Web Security Essentials; 3-year (eDelivery Spare)	L- ASA5515-WS3Y=
ASA 5515-X CX Web Security Essentials; 5-year	ASA5515-WS5Y
ASA 5515-X CX Web Security Essentials; 5-year (eDelivery Spare)	L- ASA5515-WS5Y=
Application Visibility and Control and Web Security Essentials Bundle (AVC + WSE) Software Subscriptions	
ASA 5512-X CX AVC and Web Security Essentials; 1-year (Promotion)	ASA5512-AW1Y-PR
ASA 5512-X CX AVC and Web Security Essentials; 1-year (Promotion eDelivery Spare)	L-ASA5512-AW1Y-PR=
ASA 5512-X CX AVC and Web Security Essentials; 3-year (Promotion)	ASA5512-AW3Y-PR
ASA 5512-X CX AVC and Web Security Essentials; 3-year (Promotion eDelivery Spare)	L-ASA5512-AW3Y-PR=
ASA 5512-X CX AVC and Web Security Essentials; 5-year	ASA5512-AW5Y

Product Name	Part Number
ASA 5512-X CX AVC and Web Security Essentials; 5-year (eDelivery Spare)	L-ASA5512-AW5Y=
ASA 5515-X CX AVC and Web Security Essentials; 1-year (Promotion)	ASA5515-AW1Y-PR
ASA 5515-X CX AVC and Web Security Essentials; 1-year (Promotion eDelivery Spare)	L-ASA5515-AW1Y-PR=
ASA 5515-X CX AVC and Web Security Essentials; 3-year (Promotion)	ASA5515-AW3Y-PR
ASA 5515-X CX AVC and Web Security Essentials; 3-year (Promotion eDelivery Spare)	L-ASA5515-AW3Y-PR=
ASA 5515-X CX AVC and Web Security Essentials; 5-year	ASA5515-AW5Y
ASA 5515-X CX AVC and Web Security Essentials; 5-year (eDelivery Spare)	L-ASA5515-AW5Y=
Cisco ASA 5500 Series Accessories	
Cisco ASA 5500 Series compact flash, 256 MB	ASA5500-CF-256MB=
Cisco ASA 5512-X through 5555-X 120 GB MLC SED SSD	ASA5500X-SSD120=
Cisco ASA 5500 Series compact flash, 512 MB	ASA5500-CF-512MB=
Cisco ASA 180W AC power supply	ASA-180W-PWR-AC=
Gigabit Ethernet optical SFP connector, 1000BASE-SX short-wavelength transceiver	GLC-SX-MM=
Gigabit Ethernet optical SFP connector, 1000BASE-LX/LH long-wavelength/long-haul transceiver	GLC-LH-SM=
Gigabit Ethernet optical SFP connector, 1000BASE-SX short-wavelength transceiver, DOM	GLC-SX-MMD=
Gigabit Ethernet optical SFP connector, 1000BASE-LX/LH long-wavelength/long-haul transceiver, DOM	GLC-LH-SMD=
Cisco ASA 5580 spare AC power supply	ASA5580-PWR-AC=
Cisco ASA 5580 spare rail kit	ASA5580-RAILS=
Cisco ASA 5512-X, 5515-X, 5525-X, 5545-X, 5555-X spare rail kit	ASA-RAILS=
Cisco ASA 5512-X, 5515-X, 5525-X brackets for rack mounting	ASA-BRACKETS=
Cisco ASA 5512-X/5515-X interface card (blank)	ASA-IC-A-BLANK=
Cisco ASA 5512-X, 5515-X, 5525-X, 5545-X, 5555-X spare hard drive slot cover	ASA-HD-BLANK=

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Included in the “Operate” phase of the service lifecycle are Cisco Security IntelliShield Alert Manager Service, Cisco SMARTnet[®] Service, Cisco Service Provider Base, and Cisco Services for IPS. These services are suitable for enterprise, commercial, and service provider customers.

Cisco Security IntelliShield Alert Manager Service provides a customizable, web-based threat and vulnerability alert service that allows organizations to easily access timely, accurate, and credible information about potential vulnerabilities in their environment.

Cisco Services for IPS supports modules, platforms, and bundles of platforms and modules that feature IPS capabilities. Cisco SMARTnet and Service Provider Base support other products in this family.

For More Information

For more information, please visit the following links:

- Cisco ASA 5500 and ASA 5500-X Series Next-Generation Firewalls: <http://www.cisco.com/go/asa>
- Cisco Adaptive Security Device Manager: <http://www.cisco.com/go/asdm>
- Cisco Security Services:
http://www.cisco.com/en/US/products/svcs/ps2961/ps2952/serv_group_home.html
- Cisco ASA 5500 Series and ASA 5500-X Series Licensing Information:
http://www.cisco.com/en/US/products/ps6120/products_licensing_information_listing.html



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