

Cisco ASA 5500 Series Adaptive Security Appliances

Cisco® ASA 5500 Series adaptive security appliances are purpose-built solutions that combine best-in-class security and VPN services with an innovative, extensible services architecture. Designed as a core component of the Cisco Self-Defending Network, the Cisco ASA 5500 Series provides proactive threat defense that stops attacks before they spread through the network, controls network activity and application traffic, and delivers flexible VPN connectivity. The result is a powerful multifunction network security appliance family that provides the security breadth and depth for protecting home office, branch office, small and medium-sized business, and enterprise networks while reducing the overall deployment and operations costs and complexities associated with providing this new level of security.

The Cisco ASA 5500 Series delivers a powerful combination of multiple market-proven technologies in a single platform, making it operationally and economically feasible for organizations to deploy comprehensive security services to more locations. The comprehensive portfolio of services within the Cisco ASA 5500 Series enables customization for location-specific needs through tailored product editions for small to medium-sized businesses and for enterprises. These editions enable superior protection by providing the right services for the right location. Each edition combines a focused set of Cisco ASA 5500 Series services (such as firewall, SSL and IPsec VPN, IPS, and anti-X services) to meet the needs of specific environments within the enterprise network. By ensuring the security needs of each location are met, the overall network security posture is raised.

Figure 1. Cisco ASA 5500 Series Adaptive Security Appliances



The Cisco ASA 5500 Series helps businesses more effectively and efficiently protect their networks while delivering exceptional investment protection through the following key elements:

- **Market-proven security and VPN capabilities:** Full-featured, high-performance firewall, intrusion prevention (IPS), anti-X, and Secure Sockets Layer/IP Security (SSL/IPsec) VPN technologies deliver robust application security, user- and application-based access control, worm and virus mitigation, malware protection, content filtering, and remote user/site connectivity.
- **Extensible services architecture:** Taking advantage of a modular services processing and policy framework offered by the Cisco ASA 5500 Series, businesses can apply specific security and network services on a per-traffic-flow basis, delivering highly granular policy controls and a wide range of protective services with streamlined traffic processing. The efficiencies of this policy framework, as well as software and hardware extensibility through user-installable security services modules (SSMs) and security services cards (SSCs), advance the evolution of existing services and the deployment of new services without requiring a platform replacement or performance compromise. With these capabilities, the

Cisco ASA 5500 Series provides the foundation for highly customizable security policies and unprecedented services extensibility to help protect against the fast-evolving threat environment.

- **Reduced deployment and operations costs:** The multifunction Cisco ASA 5500 Series allows for platform, configuration, and management standardization, helping to decrease the costs of deployment and ongoing operations.

Introducing The Cisco ASA 5500 Series

The Cisco ASA 5500 Series includes the Cisco ASA 5505, 5510, 5520, 5540, and 5550 adaptive security appliances, purpose-built, high-performance security solutions that take advantage of Cisco expertise in developing industry-leading, award-winning security and VPN solutions. The series integrates the latest technologies from Cisco PIX® 500 Series security appliances, Cisco IPS 4200 Series sensors, and Cisco VPN 3000 Series concentrators. Designed as a key component of the Cisco Self-Defending Network, the Cisco ASA 5500 Series provides proactive threat defense that stops attacks before they spread through the network, controls network activity and application traffic, and delivers flexible VPN connectivity. The result is a powerful multifunction network security appliance family that provides the security breadth and depth for protecting small and medium-sized business (SMB), enterprise, and service provider networks while reducing the overall deployment and operations costs and complexities associated with providing this new level of security.

The extensible Cisco AIM services architecture and the flexible multiprocessor design of the Cisco ASA 5500 Series enable the adaptive security appliances to provide unprecedented performance for multiple concurrent security services while delivering exceptional investment protection. The Cisco ASA 5500 Series appliances combines multiple high-performance processors that work in concert to deliver advanced firewall services, IPS services, anti-X/content security services, IPsec and SSL VPN services, and more. Businesses can add other high-performance security services by installing Cisco ASA 5500 Series security services modules, such as the Advanced Inspection and Prevention Security Services Module (AIP SSM) for intrusion prevention services or the Cisco ASA 5500 Series Content Security and Control Security Services Module (CSC SSM) for advanced anti-X services. This flexible design makes the Cisco ASA 5500 Series uniquely capable of adapting to new threats, protecting against the fast-evolving threat environment, and providing exceptional investment protection through its use of programmable hardware to “future-proof” the platform for years to come. The combination of these high-performance, market-proven security and VPN capabilities, along with integrated Gigabit Ethernet connectivity and a diskless, flash-based architecture, make the Cisco ASA 5500 Series an ideal choice for businesses requiring a best-in-class security solution with high performance, flexibility, reliability, and investment protection.

All Cisco ASA 5500 Series appliances include maximum IPsec VPN users on the base system; SSL VPN is licensed and purchased separately. By converging SSL and IPsec VPN services with comprehensive threat defense technologies, the Cisco ASA 5500 Series provides highly customizable network access tailored to meet the requirements of diverse deployment environments while providing advanced endpoint and network-level security.

Cisco ASA 5505 Adaptive Security Appliance

The Cisco ASA 5505 Adaptive Security Appliance is a next-generation, full-featured security appliance for small business, branch office, and enterprise teleworker environments that delivers high-performance firewall, SSL and IPsec VPN, and rich networking services in a modular, “plug-and-play” appliance. Using the integrated Web-based Cisco Adaptive Security Device Manager, 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, enabling simplified deployment of Cisco IP phones with zero-touch secure voice over IP (VoIP) capabilities, and deployment of external wireless access points for extended network mobility. The Cisco ASA 5505 also provides significant expandability and investment protection through its modular design, similar to the rest of the Cisco ASA 5500 Series, offering both an external expansion slot and multiple USB ports that enable the addition of services in the future.

As business needs grow, customers can install a Security Plus upgrade license, enabling the Cisco ASA 5505 Adaptive Security Appliance to scale to support a higher connection capacity and a higher number of 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. 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 office, or enterprise teleworker security solution.

Table 1 lists features of the Cisco ASA 5505.

Table 1. Cisco ASA 5505 Adaptive Security Appliance Platform Capabilities and Capacities

Feature	Description
Firewall Throughput	Up to 150 Mbps
VPN Throughput	Up to 100 Mbps
Concurrent Sessions	10,000/25,000*
IPsec VPN Peers	10; 25*
SSL VPN Peer License Levels**	10 or 25
Interfaces	8-port Fast Ethernet switch with dynamic port grouping (including 2 PoE ports)
Virtual Interfaces (VLANs)	3 (no trunking support)/20 (with trunking support)*
High Availability	Not supported; stateless Active/Standby and redundant ISP support*

*Upgrade available with Cisco ASA 5505 Security Plus license

**Separately licensed feature; includes two with the base system

Cisco ASA 5510 Adaptive Security Appliance

The Cisco ASA 5510 Adaptive Security Appliance delivers advanced security and networking services for small and medium-sized businesses and enterprise remote/branch offices in an easy-to-deploy, cost-effective appliance. These services can be easily managed and monitored by the integrated, Web-based Cisco Adaptive Security Device Manager application, thus reducing the overall deployment and operations costs associated with providing this high level of security. The Cisco ASA 5510 Adaptive Security Appliance provides high-performance firewall and VPN services and three integrated 10/100 Fast Ethernet interfaces. It optionally provides high-performance intrusion prevention and worm mitigation services through the AIP SSM, or comprehensive malware protection services through the 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 upgrade license, enabling the Cisco ASA 5510 Adaptive Security Appliance to scale to a higher interface density and integrate into switched network environments through VLAN support. Furthermore, 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 Adaptive Security Appliance, businesses can deploy up to five virtual firewalls within an 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.

Table 2 lists features of the Cisco ASA 5510.

Table 2. Cisco ASA 5510 Adaptive Security Appliance Platform Capabilities and Capacities

Feature	Description
Firewall Throughput	Up to 300 Mbps
Concurrent Threat Mitigation Throughput (Firewall + IPS Services)	<ul style="list-style-type: none"> Up to 150 Mbps with AIP-SSM-10 Up to 300 Mbps with AIP-SSM-20
VPN Throughput	Up to 170 Mbps
Concurrent Sessions	50,000/130,000*
IPsec VPN Peers	250
SSL VPN Peer License Levels**	10, 25, 50, 100, or 250
Security Contexts	Up to 5***
Interfaces	3 Fast Ethernet + 1 management port; 5 Fast Ethernet ports*
Virtual Interfaces (VLANs)	50/100*
High Availability	Not supported; Active/Active, Active/Standby*

*Upgrade available with Cisco ASA 5510 Security Plus license

**Separately licensed feature; includes two with the base system

***Separately licensed feature; includes two with the Cisco ASA 5510 Security Plus license

Cisco ASA 5520 Adaptive Security Appliance

The Cisco ASA 5520 Adaptive Security Appliance delivers security services with Active/Active high availability and Gigabit Ethernet connectivity for medium-sized enterprise networks in a modular, high-performance appliance. With four Gigabit Ethernet interfaces and support for up to 100 VLANs, businesses can easily deploy the Cisco ASA 5520 into multiple zones within their network.

The Cisco ASA 5520 Adaptive Security Appliance scales with businesses as their network security requirements grow, delivering solid investment protection.

Businesses can extend their SSL and IPsec VPN capacity to support a larger number of mobile workers, remote sites, and business partners. Businesses can scale up to 750 SSL VPN peers on each Cisco ASA 5520 by installing an SSL VPN upgrade license; 750 IPsec VPN peers are supported on the base platform. VPN capacity and resiliency can also be increased by taking advantage of the Cisco ASA 5520's integrated VPN clustering and load-balancing capabilities. The Cisco ASA 5520 supports up to 10 appliances in a cluster, supporting a maximum of 7500 SSL VPN peers or 7500 IPsec VPN peers per cluster. The advanced application-layer security and anti-X defenses provided by the Cisco ASA 5520 can be extended by deploying the high-performance intrusion prevention and worm mitigation capabilities of the AIP SSM, or the comprehensive malware protection of the CSC SSM. Using the optional security context capabilities of the Cisco ASA 5520 Adaptive Security Appliance, businesses can deploy up to 20 virtual firewalls within an 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.

Table 3 lists features of the Cisco ASA 5520.

Table 3. Cisco ASA 5520 Adaptive Security Appliance Platform Capabilities and Capacities

Feature	Description
Firewall Throughput	Up to 450 Mbps
Concurrent Threat Mitigation Throughput (Firewall + IPS Services)	<ul style="list-style-type: none"> Up to 225 Mbps with AIP-SSM-10 Up to 375 Mbps with AIP-SSM-20
VPN Throughput	Up to 225 Mbps
Concurrent Sessions	280,000
IPsec VPN Peers	750
SSL VPN Peer License Levels*	10, 25, 50, 100, 250, 500, or 750
Security Contexts	Up to 20*
Interfaces	4 Gigabit Ethernet ports and 1 Fast Ethernet port
Virtual Interfaces (VLANs)	150
Scalability	VPN clustering and load balancing
High Availability	Active/Active, Active/Standby

*Separately licensed feature; includes two with base system

Cisco ASA 5540 Adaptive Security Appliance

The Cisco ASA 5540 Adaptive Security Appliance delivers high-performance, high-density security services with Active/Active high availability and Gigabit Ethernet connectivity for medium-sized and large enterprise and service-provider networks, in a reliable, modular appliance. With four Gigabit Ethernet interfaces and support for up to 100 VLANs, businesses can use the Cisco ASA 5540 to segment their network into numerous zones for improved security. The Cisco ASA 5540 Adaptive Security Appliance scales with businesses as their network security requirements grow, delivering exceptional investment protection and services scalability. The advanced network and application-layer security services and anti-X defenses provided by the Cisco ASA 5540 Adaptive Security Appliance can be extended by deploying the AIP SSM for high-performance intrusion prevention and worm mitigation.

Businesses can scale their SSL and IPsec VPN capacity to support a larger number of mobile workers, remote sites, and business partners. Businesses can scale up to 2500 SSL VPN peers on each Cisco ASA 5540 by installing an SSL VPN upgrade license; 5000 IPsec VPN peers are supported on the base platform. VPN capacity and resiliency can also be increased by taking advantage of the Cisco ASA 5540's integrated VPN clustering and load-balancing capabilities. The Cisco ASA 5540 supports up to 10 appliances in a cluster, supporting a maximum of 25,000 SSL VPN peers or 50,000 IPsec VPN peers per cluster. Using the optional security context capabilities of the Cisco ASA 5540 Adaptive Security Appliance, businesses can deploy up to 50 virtual firewalls within an appliance to enable compartmentalized control of security policies on a per-department or per-customer basis, and deliver reduced overall management and support costs.

Table 4 lists features of the Cisco ASA 5540.

Table 4. Cisco ASA 5540 Adaptive Security Appliance Platform Capabilities and Capacities

Feature	Description
Firewall Throughput	Up to 650 Mbps
Concurrent Threat Mitigation Throughput (Firewall + IPS Services)	Up to 450 Mbps with AIP-SSM-20
VPN Throughput	Up to 325 Mbps
Concurrent Sessions	400,000
IPsec VPN Peers	5000
SSL VPN Peer License Levels*	10, 25, 50, 100, 250, 500, 750, 1000, and 2500
Security Contexts	Up to 50*
Interfaces	4 Gigabit Ethernet ports and 1 Fast Ethernet port
Virtual Interfaces (VLANs)	200
Scalability	VPN clustering and load balancing
High Availability	Active/Active, Active/Standby

*Separately licensed feature; includes two with base system

Cisco ASA 5550 Adaptive Security Appliance

The Cisco ASA 5550 Adaptive Security Appliance delivers gigabit-class security services with Active/Active high availability and fiber and Gigabit Ethernet connectivity for large enterprise and service-provider networks in a reliable, 1-rack-unit form factor. Using its eight Gigabit Ethernet interfaces, four Small Form-Factor Pluggable (SFP) fiber interfaces¹, and support for up to 200 VLANs, businesses can segment their network into numerous high-performance zones for improved security.

The Cisco ASA 5550 Adaptive Security Appliance scales with businesses as their network security requirements grow, delivering exceptional investment protection and services scalability. Businesses can scale their SSL and IPsec VPN capacity to support a larger number of mobile workers, remote sites, and business partners. Businesses can scale up to 5000 SSL VPN peers on each Cisco ASA 5550 by installing an SSL VPN upgrade license; 5000 IPsec VPN peers are supported on the base platform. VPN capacity and resiliency can also be increased by taking advantage of the Cisco ASA 5550's integrated VPN clustering and load-balancing capabilities. The Cisco ASA 5550 supports up to 10 appliances in a cluster, supporting a maximum of 50,000 SSL VPN peers or 50,000 IPsec VPN peers per cluster. Using the optional security context capabilities

¹ Separately licensed feature; includes two with base system

of the Cisco ASA 5550 Adaptive Security Appliance, businesses can deploy up to 50 virtual firewalls within an appliance to enable compartmentalized control of security policies on a per-department or per-customer basis, and deliver reduced overall management and support costs.

Note: The system provides a total of 12 Gigabit Ethernet ports, of which only 8 can be in service at any time. Businesses can choose between copper or fiber connectivity, providing flexibility for data center, campus, or enterprise edge connectivity.

Table 5 lists features of the Cisco ASA 5550.

Table 5. Cisco ASA 5550 Adaptive Security Appliance Platform Capabilities and Capacities






Feature	Description
Firewall Throughput	Up to 1.2 Gbps
VPN Throughput	Up to 425 Mbps
Concurrent Sessions	650,000
IPsec VPN Peers	5000
SSL VPN Peer License Levels*	10, 25, 50, 100, 250, 500, 750, 1000, 2500, and 5000
Security Contexts	Up to 50*
Interfaces	8 Gigabit Ethernet ports, 4 SFP fiber ports, and 1 Fast Ethernet port
Virtual Interfaces (VLANs)	250
Scalability	VPN clustering and load balancing
High Availability	Active/Active, Active/Standby

*Separately licensed feature; includes two with base system

Product Specifications

Table 6 provides a comparison of the Cisco ASA 5505, 5510, 5520, 5540, and 5550 Adaptive Security Appliances.

Table 6. Characteristics of Cisco ASA 5500 Series Adaptive Security Appliances

	Cisco ASA 5505	Cisco ASA 5510	Cisco ASA 5520	Cisco ASA 5540	Cisco ASA 5550
					
Users/Nodes	10, 50, or unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Firewall Throughput	Up to 150 Mbps	Up to 300 Mbps	Up to 450 Mbps	Up to 650 Mbps	Up to 1.2 Gbps
Concurrent Threat Mitigation Throughput (Firewall + IPS Services)	Not available	<ul style="list-style-type: none"> Up to 150 Mbps with AIP-SSM-10 Up to 300 Mbps with AIP-SSM-20 	<ul style="list-style-type: none"> Up to 225 Mbps with AIP-SSM-10 Up to 375 Mbps with AIP-SSM-20 	Up to 450 Mbps with AIP-SSM-20	Not available
3DES/AES VPN Throughput	Up to 100 Mbps	Up to 170 Mbps	Up to 225 Mbps	Up to 325 Mbps	Up to 425 Mbps
IPsec VPN Peers	10; 25*	250	750	5000	5000
SSL VPN Peers* (Included/Maximum)	2/25	2/250	2/750	2/2500	2/5000
Concurrent Sessions	10,000; 25,000*	50,000; 130,000*	280,000	400,000	650,000
New Sessions/Second	3000	6000	9000	20,000	28,000

	Cisco ASA 5505	Cisco ASA 5510	Cisco ASA 5520	Cisco ASA 5540	Cisco ASA 5550
Integrated Network Ports	8-port Fast Ethernet switch (including 2 PoE ports)	3 Fast Ethernet + 1 management port; 5 Fast Ethernet ports*	4 Gigabit Ethernet, 1 Fast Ethernet	4 Gigabit Ethernet, 1 Fast Ethernet	8 Gigabit Ethernet, 4 SFP Fiber, 1 Fast Ethernet
Virtual Interfaces (VLANs)	3 (no trunking support)/20 (with trunking support)*	50 /100*	150	200	250
Security Contexts (Included/Maximum)	0/0	0/0 (Base); 2/5 (Security Plus)	2/20	2/50	2/50
High Availability	Not supported; stateless Active/Standby and redundant ISP support*	Not supported; Active/Active and Active/Standby*	Active/Active and Active/Standby	Active/Active and Active/Standby	Active/Active and Active/Standby
Expansion Slot	1, SSC	1, SSM	1, SSM	1, SSM	0
User-Accessible Flash Slot	0	1	1	1	1
USB 2.0 Ports	3 (1 on front, 2 on rear)	2	2	2	2
Serial Ports	1 RJ-45 console	2 RJ-45, console and auxiliary	2 RJ-45, console and auxiliary	2 RJ-45, console and auxiliary	2 RJ-45, console and auxiliary
Rack-Mountable	Yes, with rack-mount kit (available in the future)	Yes	Yes	Yes	Yes
Wall-Mountable	Yes, with wall-mount kit (available in the future)	No	No	No	No
Security Lock Slot (For Physical Security)	1	0	0	0	0
Technical Specifications					
Memory	256 MB	256 MB	512 MB	1024 MB	4096 MB
Minimum System Flash	64 MB	64 MB	64 MB	64 MB	64 MB
System Bus	Multibus architecture	Multibus architecture	Multibus architecture	Multibus architecture	Multibus architecture
Environmental Operating Ranges					
Operating					
Temperature	32 to 104°F (0 to 40°C)		32 to 104°F (0 to 40°C)		
Relative Humidity	5 to 95 percent noncondensing		5 to 95 percent noncondensing		
Altitude	0 to 9840 ft (3000 m)		0 to 9840 ft (3000 m)		
Shock	1.14 m/sec (45 in./sec) ½ sine input		1.14 m/sec (45 in./sec) 1/2 sine input		
Vibration	0.41 Grms2 (3 to 500 Hz) random input		0.41 Grms2 (3 to 500 Hz) random input		
Acoustic Noise	0 dBa max		60 dBa max		
Nonoperating					
Temperature	-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		
Altitude	0 to 15,000 ft (4570 m)		0 to 15,000 ft (4570 m)		
Shock	30 G		30 G		
Vibration	0.41 Grms2 (3 to 500 Hz) random input		0.41 Grms2 (3 to 500 Hz) random input		
Power					
Input (Per Power Supply)					
Range Line Voltage	100 to 240 VAC		100 to 240 VAC		

	Cisco ASA 5505	Cisco ASA 5510	Cisco ASA 5520	Cisco ASA 5540	Cisco ASA 5550
Normal Line Voltage	100 to 240 VAC		100 to 240 VAC		
Current	1.8A		3A		
Frequency	50/60 Hz		47/63 Hz, single-phase		
Output					
Steady State	20W		150W		
Maximum Peak	96W		190W		
Maximum Heat Dissipation	72 BTU/hr		648 BTU/hr		
Physical Specifications					
Form Factor	Desktop		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)		
Weight (With Power Supply)	4.0 lb (1.8 kg)		20.0 lb (9.07 kg) 22.0 lb (10 kg)		
Regulatory and Standards Compliance					
Safety	UL 60950, CSA C22.2 No. 60950, EN 60950 IEC 60950, AS/NZS60950		UL 1950, CSA C22.2 No. 950, EN 60950 IEC 60950, AS/NZS3260, TS001		
Electromagnetic Compatibility (EMC)	CE marking, FCC Part 15 Class B, AS/NZS 3548 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 3548 Class A, VCCI Class A, EN55022 Class A, CISPR22 Class A, EN61000-3-2, EN61000-3-3		
Industry Certifications	In process: Common Criteria EAL4, FIPS 140-2 Level 2		Common Criteria EAL4+ US DoD Application-Level Firewall for Medium-Robustness Environments, FIPS 140-2 Level 2, NEBS Level 3. In process: Common Criteria EAL4 for VPN, Common Criteria EAL2 for IPS on AIP SSM.		In process: Common Criteria EAL4, FIPS 140-2 Level 2

*Available through an upgrade license

Security Services Modules

The Cisco ASA 5500 Series brings a new level of integrated security performance to networks with its unique AIM 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 anti-worm services delivered by the AIP SSM or the comprehensive malware protection and anti-X services enabled by the CSC SSM. Further, the architecture allows Cisco to introduce new services to address new threats, delivering businesses outstanding investment protection for the Cisco ASA 5500 Series.



Cisco ASA 5500 Series Advanced Inspection and Prevention Module

The Cisco ASA 5500 Series AIP SSM is an inline, network-based solution that accurately identifies, classifies, and stops malicious traffic before it affects business continuity. It combines 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 also offers comprehensive network protection through its unique ability to collaborate with other network security resources, providing a proactive approach to protecting the network. It

uses accurate inline prevention technologies that 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 AIP SSM uses 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 7 details the two AIP SSM models that are available, and their respective performance and physical characteristics.

Table 7. Characteristics of Cisco ASA 5500 Series AIP SSMs



	Cisco ASA 5500 Series SSM-AIP-10	Cisco ASA 5500 Series SSM-AIP-20
		
Concurrent Threat Mitigation Throughput (Firewall + IPS Services)	<ul style="list-style-type: none"> • 150 Mbps with Cisco ASA 5510 • 225 Mbps with Cisco ASA 5520 	<ul style="list-style-type: none"> • 300 Mbps with Cisco ASA 5510 • 375 Mbps with Cisco ASA 5520 • 450 Mbps with Cisco ASA 5540
Technical Specifications		
Memory	1 GB	2 GB
Flash	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	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 1950, CSA C22.2 No. 950, EN 60950 IEC 60950, AS/NZS3260, TS001	
Electromagnetic Compatibility (EMC)	CE marking, FCC Part 15 Class A, AS/NZS 3548 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, anti-spyware, file blocking, anti-spam, anti-phishing, URL blocking and filtering, and content filtering, in an easy-to-manage solution. The CSC SSM bolsters the Cisco ASA 5500 Series' strong security capabilities, providing customers with additional protection 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 appliances. 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, anti-spyware, and file blocking services. A Plus license is available for each CSC SSM at an additional charge, delivering capabilities such as anti-spam, anti-phishing, 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 8 and in the CSC SSM data sheet.

Table 8. Characteristics of Cisco ASA 5500 Series CSC SSMs


	Cisco ASA 5500 Series CSC-SSM-10	Cisco ASA 5500 Series CSC-SSM-20
		
Supported Platforms	<ul style="list-style-type: none"> • Cisco ASA 5510 • Cisco ASA 5520 	<ul style="list-style-type: none"> • Cisco ASA 5510 • Cisco ASA 5520 • Cisco ASA 5540
Standard and Optional Features		
Standard User License	50 users	500 users
Standard Feature Set	Antivirus, anti-spyware, file blocking	
Optional User Upgrades (Total Users)	<ul style="list-style-type: none"> • 100 users • 250 users • 500 users 	<ul style="list-style-type: none"> • 750 users • 1000 users
Optional Feature Upgrades	Plus License—Adds anti-spam, anti-phishing, 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 1950, CSA C22.2 No. 950, EN 60950 IEC 60950, AS/NZS3260, TS001	
Electromagnetic Compatibility (EMC)	CE marking, FCC Part 15 Class A, AS/NZS 3548 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 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 connectivity for each of the four ports, providing flexibility for data center, campus, or enterprise edge connectivity (with a maximum of four ports in service concurrently). 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, and eight Gigabit Ethernet ports and one Fast Ethernet port on Cisco ASA 5520 and 5540 appliances (Table 9).

Table 9. Characteristics of Cisco ASA 5500 Series 4-Port Gigabit Ethernet SSM

Cisco ASA 5500 Series 4-Port GE SSM	
	
Technical Specifications	
Integrated LAN Ports	Four 10/100/1000BASE-T (RJ)
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 1950, CSA C22.2 No. 950, EN 60950 IEC 60950, AS/NZS3260, TS001
Electromagnetic Compatibility (EMC)	CE marking, FCC Part 15 Class A, AS/NZS 3548 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 10 provides ordering information for the Cisco ASA 5500 Series.

Table 10. Ordering Information

Product Name	Part Number
Cisco ASA 5500 Series Firewall Edition Bundles	
Cisco ASA 5505 10-User Bundle includes 8-port Fast Ethernet switch, 10 IPsec VPN peers, 2 SSL 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 SSL 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 SSL 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 SSL 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 SSL VPN peers, DMZ, stateless Active/Standby high availability, 3DES/AES license	ASA5505-SEC-BUN-K9
Cisco ASA 5510 Firewall Edition includes 3 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 SSL VPN peers, 3DES/AES license	ASA5510-BUN-K9
Cisco ASA 5510 Firewall Edition includes 3 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 SSL VPN peers, DES license	ASA5510-K8
Cisco ASA 5510 Security Plus Firewall Edition includes 5 Fast Ethernet interfaces, 250 IPsec VPN peers, 2 SSL VPN peers, Active/Standby high availability, 3DES/AES license	ASA5510-SEC-BUN-K9

Product Name	Part Number
Cisco ASA 5520 Firewall Edition includes 4 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 750 IPsec VPN peers, 2 SSL VPN peers, Active/Active and Active/Standby high availability, 3DES/AES license	ASA5520-BUN-K9
Cisco ASA 5520 Firewall Edition includes 4 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 750 IPsec VPN peers, 2 SSL VPN peers, Active/Active and Active/Standby high availability, DES license	ASA5520-K8
Cisco ASA 5540 Firewall Edition includes 4 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 5000 IPsec VPN peers, 2 SSL VPN peers, 3DES/AES license	ASA5540-BUN-K9
Cisco ASA 5540 Firewall Edition includes 4 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 5000 IPsec VPN peers, 2 SSL VPN peers, DES license	ASA5540-K8
Cisco ASA 5550 Firewall Edition includes 8 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 4 Gigabit SFP interfaces, 5000 IPsec VPN peers, 2 SSL VPN peers, 3DES/AES license	ASA5550-BUN-K9
Cisco ASA 5550 Firewall Edition includes 8 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 4 Gigabit SFP interfaces, 5000 IPsec VPN peers, 2 SSL VPN peers, DES license	ASA5550-K8
Cisco ASA 5500 Series IPS Edition Bundles	
Cisco ASA 5510 IPS Edition includes AIP-SSM-10, firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 3 Fast Ethernet interfaces	ASA5510-AIP10-K9
Cisco ASA 5520 IPS Edition includes AIP-SSM-10, firewall services, 750 IPsec VPN peers, 2 SSL VPN peers, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5520-AIP10-K9
Cisco ASA 5520 IPS Edition includes AIP-SSM-20, firewall services, 750 IPsec VPN peers, 2 SSL VPN peers, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5520-AIP20-K9
Cisco ASA 5540 IPS Edition includes AIP-SSM-20, firewall services, 5000 IPsec VPN peers, 2 SSL VPN peers, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5540-AIP20-K9
Cisco ASA 5500 Series Anti-X Edition Bundles	
Cisco ASA 5510 Anti-X Edition includes CSC-SSM-10, 50-user antivirus/anti-spyware with 1-year subscription, firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 3 Fast Ethernet interfaces	ASA5510-CSC10-K9
Cisco ASA 5510 Anti-X Edition includes CSC-SSM-20, 500-user antivirus/anti-spyware with 1-year subscription, firewall services, 250 IPsec VPN peers, 2 SSL VPN peers, 3 Fast Ethernet interfaces	ASA5510-CSC20-K9
Cisco ASA 5520 Anti-X Edition includes CSC-SSM-10, 50-user antivirus/anti-spyware with 1-year subscription, firewall services, 750 IPsec VPN peers, 2 SSL VPN peers, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5520-CSC10-K9
Cisco ASA 5520 Anti-X Edition includes CSC-SSM-20, 500-user antivirus/anti-spyware with 1-year subscription, firewall services, 750 IPsec VPN peers, 2 SSL 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 SSL 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 SSL 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 SSL VPN peers, firewall services, 3 Fast Ethernet interfaces	ASA5510-SSL50-K9
Cisco ASA 5510 SSL / IPsec VPN Edition includes 250 IPsec VPN peers, 100 SSL 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 SSL VPN peers, firewall services, 3 Fast Ethernet interfaces	ASA5510-SSL250-K9
Cisco ASA 5520 SSL / IPsec VPN Edition includes 750 IPsec VPN peers, 500 SSL VPN peers, firewall services, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5520-SSL500-K9
Cisco ASA 5540 SSL / IPsec VPN Edition includes 5000 IPsec VPN peers, 1000 SSL VPN peers, firewall services, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5540-SSL1000-K9
Cisco ASA 5540 SSL / IPsec VPN Edition includes 5000 IPsec VPN peers, 2500 SSL VPN peers, firewall services, 4 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5540-SSL2500-K9
Cisco ASA 5550 SSL / IPsec VPN Edition includes 5000 IPsec VPN peers, 2500 SSL VPN peers, firewall services, 8 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5550-SSL2500-K9
Cisco ASA 5550 SSL / IPsec VPN Edition includes 5000 IPsec VPN peers, 5000 SSL VPN peers, firewall services, 8 Gigabit Ethernet interfaces, 1 Fast Ethernet interface	ASA5550-SSL5000-K9
Security Services Modules	
Cisco ASA Advanced Inspection and Prevention Security Services Module 10	ASA-SSM-AIP-10-K9=
Cisco ASA Advanced Inspection and Prevention Security Services Module 20	ASA-SSM-AIP-20-K9=

Product Name	Part Number
Cisco ASA Content Security and Control Security Services Module 10 with 50-user antivirus/anti-spyware, 1-year subscription	ASA-SSM-CSC-10-K9=
Cisco ASA Content Security and Control Security Services Module 20 with 500-user antivirus/anti-spyware, 1-year subscription	ASA-SSM-CSC-20-K9=
Cisco ASA 4-Port Gigabit Ethernet Security Services Module	SSM-4GE=
Cisco ASA 5500 Series Software	
Cisco ASA Software one-time upgrade for nonsupport customers	ASA-SW-UPGRADE=
Cisco ASA 5500 Series Accessories	
Cisco ASA 5500 Series compact flash, 256 MB	ASA5500-CF-256MB=
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=

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For More Information

For more information, please visit the following links:

- **Cisco ASA 5500 Series Adaptive Security Appliance:** <http://www.cisco.com/go/asa>
- **Cisco Adaptive Security Device Manager:** <http://www.cisco.com/go/asdm>



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