

Cisco PIX[®] 506E Firewall

The Cisco PIX[®] 506E Firewall, an enhanced version of the widely popular Cisco PIX 506 Firewall, delivers enterprise-class security for remote office/branch office environments in a robust, reliable appliance. Ideal for securing Internet connections for remote/branch offices, the Cisco PIX 506E Firewall, part of the market-leading Cisco PIX Firewall Series, provides a wide range of rich security capabilities and powerful remote management capabilities in a cost-effective, high-performance solution. The PIX 506E also delivers improved 3DES VPN performance, with up to 70% more performance than the PIX 506, when using certain applications.

Enterprise-Class Security for Remote Office/Branch Office Environments

The Cisco PIX 506E Firewall is a purpose-built security appliance that provides rich security services including stateful inspection firewalling, virtual private networking (VPN) and intrusion protection in a single device. Using the Cisco state-of-the-art Adaptive Security Algorithm (ASA) and PIX operating system, the PIX 506E ensures that all the users behind it are safe and secure from threats lurking on the Internet. Its powerful stateful inspection firewall technology keeps track of the state of authorized users' network requests and prevents unauthorized network access.



By leveraging the flexible access control capabilities of the PIX 506E, administrators can also enforce customized policies on network traffic traversing through the firewall. Access to your network resources can be strongly authenticated via PIX 506E's seamless integration with your backend enterprise databases, either directly using TACACS/RADIUS or indirectly via Cisco Secure Access Control Server (ACS).

The Cisco PIX 506E Firewall can secure all network communications from remote offices to corporate networks across the Internet using its standards-based Internet Key Exchange (IKE)/IP security (IPsec) VPN capabilities. By encrypting data with 56-bit Data Encryption Standard (DES) or optional advanced 168-bit Triple DES (3DES) encryption, prying eyes cannot see your sensitive corporate data as it safely travels across the Internet.

The integrated intrusion protection capabilities of the Cisco PIX 506E Firewall can protect your network from many popular forms of attacks. Looking for over 55 different attack "signatures," PIX keeps a vigilant watch for attacks and optionally blocks them or notifies you of them in real time.

Robust Remote Management Capabilities

The Cisco PIX 506E Firewall is a reliable, easy-to-maintain platform that provides a wide variety of methods for configuring, monitoring and troubleshooting it. PIX management solutions range from an integrated, Web-based management tool to centralized, policy-based management tools to support for remote monitoring protocols such as Simple Network Management Protocol (SNMP) and syslog.

PIX Device Manager (PDM) provides an intuitive, Web-based interface for administrators to easily configure and monitor a PIX 506E, without requiring any software (other than a standard Web browser) to be installed on the administrator's computer.

Administrators can also remotely configure, monitor and troubleshoot the PIX 506E using its command-line interface (CLI) through a variety of methods including Telnet, Secure Shell (SSH) and out-of-band access via the console port.

A large number of PIX 506Es can also be easily remotely managed using Cisco Secure Policy Manager (CSPM), available within the Cisco VPN/Security Management Solution (VMS). CSPM 3.0 is a scalable, next-generation centralized management solution for PIX firewalls that includes features such as a task-based interface, interactive network topology map, policy wizards, policy import capabilities, and much more..

Table 1 Key Product Features and Benefits

Key Features	Benefit
Enterprise-Class Security	
True security appliance	<ul style="list-style-type: none"> • Uses a proprietary, hardened operating system that eliminates security risks associated with general purpose operating systems • Cisco quality and no moving parts provide a highly reliable security platform
Stateful inspection firewall	<ul style="list-style-type: none"> • Provides perimeter network security to prevent unauthorized network access • Uses state-of-the-art Adaptive Security Algorithm (ASA) for robust stateful inspection firewall services • Provides flexible access-control capabilities for over 100 predefined applications, services and protocols, with the ability to define custom applications and services • Includes numerous application-aware "fix-ups" that secure advanced networking protocols such as H.323, SIP, Skinny, RTSP and more • Includes content filtering for Java and ActiveX applets
VPN	<ul style="list-style-type: none"> • Supports IKE and IPsec VPN standards • Ensures data privacy/integrity and strong authentication to remote networks and remote users over the Internet • Supports 56-bit DES and 168-bit 3DES data encryption to ensure data privacy
Intrusion protection	<ul style="list-style-type: none"> • Provides protection from over 55 different types of popular network-based attacks ranging from malformed packet attacks to denial-of-service (DoS) attacks • Integrates with Cisco Network Intrusion Detection System (IDS) sensors for the ability to dynamically block/shun hostile network nodes via the firewall
AAA support	<ul style="list-style-type: none"> • Integrates with popular authentication, authorization and accounting services via TACACS+ and RADIUS support • Provides tight integration with Cisco Secure Access Control Server (ACS)
X.509 certificate and CRL support	<ul style="list-style-type: none"> • Supports SCEP-based enrollment with leading X.509 solutions from Baltimore, Entrust, Microsoft and VeriSign
Integration with leading third-party solutions	<ul style="list-style-type: none"> • Supports the broad range of Cisco AVVID (Architecture for Voice, Video and Integrated Data) partner solutions that provide URL filtering, content filtering, virus protection, scalable remote management, and more
Robust Small Office Networking	
DHCP client/server	<ul style="list-style-type: none"> • Obtains IP address for outside interface of firewall automatically from service provider • Provides IP addresses to devices on inside network of the firewall
NAT/PAT support	<ul style="list-style-type: none"> • Provides dynamic/static Network Address Translation (NAT) and Port Address Translation (PAT) capabilities • Allows multiple users to share a single broadband connection using a single public IP address

Table 1 Key Product Features and Benefits

Key Features	Benefit
PPPoE (available Q1 2002)	<ul style="list-style-type: none"> Ensures compatibility with networks that require PPP over Ethernet (PPPoE) support
Rich Management Capabilities	
PIX Device Manager (PDM)	<ul style="list-style-type: none"> Intuitive Web-based GUI enables simple, secure remote management of PIX Firewalls Provides wide range of informative, real-time, and historical reports which give critical insight into usage trends, performance baselines, and security events
Supported by Cisco Secure Policy Manager (CSPM)	<ul style="list-style-type: none"> Provides scalable, consistent management of entire Cisco PIX product line throughout an enterprise using CSPM's robust policy management infrastructure
Cisco PIX CLI	<ul style="list-style-type: none"> Allows customers to use existing PIX CLI knowledge for easy installation and management without additional training Accessible through variety of methods including console port, Telnet and SSH
SNMP and syslog support	<ul style="list-style-type: none"> Provide remote monitoring and logging capabilities, with integration into Cisco and third-party management applications

Software Licenses

3DES and DES Licenses

The Cisco PIX 506E Firewall has two optional encryption licenses (168-bit 3DES and 56-bit DES) available either at the time of ordering the appliance, or as an upgrade that can be purchased later. Note that US export restrictions may apply to these licenses.

Performance Summary

Cleartext throughput: 20 Mbps

56-bit DES IPsec VPN throughput: 20 Mbps

168-bit 3DES IPsec VPN throughput: 16 Mbps

Simultaneous VPN peers: 25*

* Maximum number of simultaneous site-to-site or remote access VPN/IKE Security Associations (SAs) supported

Technical Specifications

Processor: 300-MHz Intel Celeron Processor

Random access memory: 32 MB of SDRAM

Flash memory: 8 MB

System bus: Single 32-bit, 33-MHz PCI

Environmental Operating Ranges

Operating

Temperature: 23 to 104° F (-5 to 40° C)

Relative humidity: 10 to 95%, noncondensing

Altitude: 0 to 6500 feet (2000 m)

Shock: 1.88 m/sec (74 in./sec) sine input

Vibration: 0.41 Grms² (5-500 Hz) random input

Nonoperating

Temperature: -13 to 158° F (-25 to 70° C)

Relative humidity: 10 to 95%, noncondensing

Altitude: 0 to 15000 feet (4570 m)

Shock: 60 G, 11 ms

Vibration: 0.41 Grms² (5-500 Hz) random input

Power

Autoswitching: 100V to 240V RMS

Current: 0.7 - 0.4 Amps

Frequency: 50-60 Hz, single phase

Heat dissipation chassis only: 102.4 BTU/hr, full power usage (30 W)

Heat dissipation chassis plus power adapter: 204.6 BTU/hr, full power usage (60 VA)

Physical Specifications

Dimensions and Weight Specifications

Dimensions (HxWxD): 1.72x8.5x11.8 in. (4.37x21.59x29.97 cm)

Weight: 6 pounds (2.71 kg)

Interfaces

Console Port: RS-232 (RJ-45) 9600 baud

Outside: Integrated 10BaseT port, auto-negotiate (half/full), RJ45

Inside: Integrated 10BaseT port, auto-negotiate (half/full), RJ45

Regulatory and Standards Compliance

Regulatory Compliance

Products bear CE Marking indicating compliance with the 89/366/EEC and 73/23/EEC directives, which includes the following safety and EMC standards.

Safety

UL 1950, CAN/CSA-C22.2 No. 950, EN 60950, IEC 60950, IEC 60825-1, IEC 60825-2, EN 60825-1, EN 60825-2, 21 CFR 1040

Electro Magnetic Compatibility (EMC)

FCC Part 15 (CFR 47) Class A, ICES-003 Class A, EN55022 Class A with UTP Class B with STP, CISPR22 Class A with UTP Class B with STP, AS/NZS 3548 Class A with UTP Class B with STP, VCCI Class A with UTP Class B with STP, EN55024, ETS 300 386-2, EN50082-1, EN61000-3-2, EN61000-3-3

Product Ordering Information

Part Number	Description
PIX-506E	PIX 506E chassis, software, 2 10BaseT ports
PIX-506E-PWR-AC=	Spare AC power supply for PIX 506E
PIX-506-SW-3DES	168-bit 3DES software license
PIX-506-SW-3DES=	168-bit 3DES software license
PIX-VPN-DES	56-bit DES software license
PIX-VPN-DES=	56-bit DES software license

Support Services

Support services are available from Cisco Partners, as well as from Cisco. Cisco's SMARTnet service augments customer support resources. It provides 24x7x365 access to technical resources, both on line and via telephone, the ability to download updated system software, and hardware advance replacement.

Support Ordering Information

Part Number	Description
CON-SNT-PIX506E	SMARTnet 8x5xNBD service for PIX 506E
CON-SNTE-PIX506E	SMARTnet 8x5x4 service for PIX 506E
CON-SNTP-PIX506E	SMARTnet 24x7x4 service for PIX 506E
CON-OS-PIX506E	On-Site 8x5xNBD service for PIX 506E
CON-OSE-PIX506E	On-Site 8x5x4 service for PIX 506E
CON-OSP-PIX506E	On-Site 24x7x4 service for PIX 506E

Additional Information

For more information about Cisco PIX Firewalls, go to <http://www.cisco.com/go/pix>

For more information about PIX Device Manager (PDM), go to http://www.cisco.com/warp/public/cc/pd/fw/sqfw500/prodlit/pixdm_ds.pdf

For more information about Cisco Secure Access Control Server (ACS), go to <http://www.cisco.com/go/acs>

For more information about Cisco Secure Policy Manager (CSPM), go to <http://www.cisco.com/go/policymanager>

For more information about Cisco VPN/Security Management Solution (VMS), go to <http://www.cisco.com/warp/public/cc/pd/wr2k/vpmnso/>

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