# PA-500

## Key PA-500 next-generation firewall features:

## CLASSIFY ALL APPLICATIONS, ON ALL PORTS, ALL THE TIME WITH APP-ID<sup>™</sup>.

- Identify the application, regardless of port, encryption (SSL or SSH) or evasive technique employed.
- Use the application, not the port, as the basis for all safe enablement policy decisions: allow, deny, schedule, inspect, apply traffic shaping.
- Categorize unidentified applications for policy control, threat forensics, custom App-ID creation, or packet capture for App-ID development.

## EXTEND SAFE APPLICATION ENABLEMENT POLICIES TO ANY USER, AT ANY LOCATION, WITH USER-ID™ AND GLOBALPROTECT™.

- Agentless integration with Active Directory, LDAP, eDirectory Citrix and Microsoft Terminal Services.
- Integrate with NAC, 802.1X wireless and other non-standard user repositories with an XML API.
- Deploy consistent policies to local and remote users running Microsoft Windows, Mac OS X, Linux, Android or iOS platforms.

## PROTECT AGAINST ALL THREATS— BOTH KNOWN AND UNKNOWN—WITH CONTENT-ID<sup>™</sup> AND WILDFIRE<sup>™</sup>.

- Block a range of known threats including exploits, malware and spyware, across all ports, regardless of common threat evasion tactics employed.
- Limit unauthorized transfer of files and sensitive data, and control non-work-related web surfing.
- Identify unknown malware, analyze for more than 100 malicious behaviors, automatically create and deliver a signature in the next available update.





The Palo Alto Networks<sup>™</sup> PA-500 is targeted at high speed firewall deployments for enterprise branch offices and medium size businesses. The PA-500 manages network traffic flows using dedicated computing resources for networking, security, threat prevention and management.

The high speed backplane is divided into separate data and control planes, thereby ensuring that management access is always available, irrespective of the traffic load. The controlling element of the PA-500 next-generation firewall is PAN-OS<sup>™</sup>, a security-specific operating system that allows organizations to safely enable applications using App-ID, User-ID, Content-ID, GlobalProtect and WildFire.

PERFORMANCE AND CAPACITIES <sup>1</sup>	PA-500
Firewall throughput (App-ID enabled)	250 Mbps
Threat prevention throughput	100 Mbps
IPSec VPN throughput	50 Mbps
New sessions per second	7,500
Max sessions	64,000
IPSec VPN tunnels/tunnel interfaces	250
GlobalProtect (SSL VPN) concurrent users	100
SSL decrypt sessions	1,000
SSL inbound certificates	25
Virtual routers	3
Security zones	20
Max. number of policies	1,000

<sup>1</sup> Performance and capacities are measured under ideal testing conditions using PAN-OS 5.0.

For a complete description of the PA-500 next-generation firewall feature set, please visit www.paloaltonetworks.com/literature.

## HARDWARE SPECIFICATIONS

#### I/0

• (8) 10/100/1000

## MANAGEMENT I/O

• (1) 10/100/1000 out-of-band management port, (1) RJ-45 console port

## STORAGE CAPACITY

• 160GB HDD

#### **POWER SUPPLY (AVG/MAX POWER CONSUMPTION)**

• 180W (40W/75W)

## MAX BTU/HR

• 256

## INPUT VOLTAGE (INPUT FREQUENCY)

• 100-240VAC (50-60Hz)

## MAX CURRENT CONSUMPTION

• 1A@100VAC

## **MEAN TIME BETWEEN FAILURE (MTBF)**

• 10.16 years

## NETWORKING

#### **INTERFACE MODES**

• L2, L3, Tap, Virtual wire (transparent mode)

## ROUTING

- Modes: OSPF, RIP, BGP, Static
- Forwarding table size (entries per device/per VR): 1,250/1,250
- Policy-based forwarding
- Point-to-Point Protocol over Ethernet (PPPoE)
- Multicast: PIM-SM, PIM-SSM, IGMP v1, v2, and v3

## HIGH AVAILABILITY

- Modes: Active/Active, Active/Passive
- Failure detection: Path monitoring, Interface monitoring

## ADDRESS ASSIGNMENT

- Address assignment for device: DHCP Client/PPPoE/Static
- Address assignment for users: DHCP Server/DHCP Relay/Static

#### IPV6

- L2, L3, tap, virtual wire (transparent mode)
- Features: App-ID, User-ID, Content-ID, WildFire and SSL decryption

#### VLANS

- 802.1q VLAN tags per device/per interface: 4,094/4,094
- Max interfaces: 250

MAX INRUSH CURRENT

• 8lbs/13lbs

• UL, CUL, CB

CERTIFICATIONS

ENVIRONMENT

• FIPS 140 Level 2, ICSA, UCAPL

SAFETY

**EMI** 

• 110A@230VAC; 51A@115VAC

**RACK MOUNTABLE (DIMENSIONS)** 

• 1U, 19" standard rack (1.75"H x 10"D x 17"W) WEIGHT (STAND ALONE DEVICE/AS SHIPPED)

• FCC Class A, CE Class A, VCCI Class A, TUV

Operating temperature: 32° to 122° F, 0° to 50° C
Non-operating temperature: -4° to 158° F, -20° to 70° C

Aggregate interfaces (802.3ad)

## NAT/PAT

- Max NAT rules: 125
- Max NAT rules (DIPP): 125
- Dynamic IP and port pool: 254
- Dynamic IP pool: 16,234
- NAT Modes: 1:1 NAT, n:n NAT, m:n NAT
- DIPP oversubscription (Unique destination IPs per source port and IP): 1

## VIRTUAL WIRE

• NAT64

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Max virtual wires: 125
Interface types mapped to virtual wires: physical and subinterfaces

#### **L2 FORWARDING**

- ARP table size/device: 500
- MAC table size/device: 500
- IPv6 neighbor table size: 500

## SECURITY

## FIREWALL

- Policy-based control over applications, users and content
- Fragmented packet protection
- Reconnaissance scan protection
- Denial of Service (DoS)/Distributed Denial of Services (DDoS) protection
- Decryption: SSL (inbound and outbound), SSH

#### WILDFIRE

- Identify and analyze targeted and unknown files for more than 100 malicious behaviors
- Generate and automatically deliver protection for newly discovered malware via signature updates
- Signature update delivery in less than 1 hour, integrated logging/ reporting; access to WildFire API for programmatic submission of up to 100 samples per day and up to 1,000 report queries by file hash per day (Subscription Required)

### **FILE AND DATA FILTERING**

- File transfer: Bi-directional control over more than 60 unique file types
- Data transfer: Bi-directional control over unauthorized transfer of CC# and SSN
- Drive-by download protection

#### **USER INTEGRATION (USER-ID)**

- Microsoft Active Directory, Novell eDirectory, Sun One and other LDAP-based directories
- Microsoft Windows Server 2003/2008/2008r2, Microsoft Exchange Server 2003/2007/2010
- Microsoft Terminal Services, Citrix XenApp
- XML API to facilitate integration with non-standard user repositories

## **IPSEC VPN (SITE-TO-SITE)**

- Key Exchange: Manual key, IKE v1
- Encryption: 3DES, AES (128-bit, 192-bit, 256-bit)
- Authentication: MD5, SHA-1, SHA-256, SHA-384, SHA-512
- Dynamic VPN tunnel creation (GlobalProtect)

#### **THREAT PREVENTION (SUBSCRIPTION REQUIRED)**

- Application, operating system vulnerability exploit protection
- Stream-based protection against viruses (including those embedded in HTML, Javascript, PDF and compressed), spyware, worms

#### URL FILTERING (SUBSCRIPTION REQUIRED)

- Pre-defined and custom URL categories
- Device cache for most recently accessed URLs
- URL category as part of match criteria for security policies
- Browse time information

#### QUALITY OF SERVICE (QOS)

- Policy-based traffic shaping by application, user, source, destination, interface, IPSec VPN tunnel and more
- 8 traffic classes with guaranteed, maximum and priority bandwidth parameters
- Real-time bandwidth monitor
- Per policy diffserv marking
- Physical interfaces supported for QoS: 4

#### SSL VPN/REMOTE ACCESS (GLOBALPROTECT)

- GlobalProtect Gateway
- GlobalProtect Portal
- Transport: IPSec with SSL fall-back
- Authentication: LDAP, SecurID, or local DB
- Client OS: Mac OS X 10.6, 10.7 (32/64 bit), 10.8 (32/64 bit), Windows XP, Windows Vista (32/64 bit), Windows 7 (32/64 bit)
- Third party client support: Apple iOS, Android 4.0 and greater, VPNC IPSec for Linux

#### MANAGEMENT, REPORTING, VISIBILITY TOOLS

- Integrated web interface, CLI or central management (Panorama)
- Multi-language user interface
- Syslog, Netflow v9 and SNMP v2/v3
- XML-based REST API
- Graphical summary of applications, URL categories, threats and data (ACC)
- View, filter and export traffic, threat, WildFire, URL, and data filtering logs
- Fully customizable reporting

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