# PA-2000 Series

The PA-2000 Series is a next-generation firewall that delivers unprecedented visibility and control over applications, users and content on enterprise networks.



- Identifies more than 800 applications irrespective of port, protocol, SSL encryption or evasive tactic employed.
- Enables positive enforcement application usage policies: allow, deny, schedule, inspect, apply traffic shaping.
- Graphical visibility tools enable simple and intuitive view into application traffic.

## **USER IDENTIFICATION:**

- Policy-based visibility and control over who is using the applications through seamless integration with Active Directory.
- Identifies Citrix and Microsoft Terminal Services users, enabling visibility and control over their respective application usage.
- Control non-Windows hosts via webbased authentication.

## **CONTENT IDENTIFICATION:**

- Block viruses, spyware, and vulnerability exploits, limit unauthorized transfer of files and sensitive data such as CC# or SSN, and control non-work related web surfing.
- Single pass software architecture enables multi-gigabit throughput with low latency while scanning content.





The Palo Alto Networks<sup>™</sup> PA-2000 Series is comprised of two high performance platforms, the PA-2020 and the PA-2050, both of which are targeted at high speed Internet gateway deployments. The PA-2000 Series manages network traffic flows using dedicated processing and memory for networking, security, threat prevention and management.

A high speed backplane smoothes the pathway between dedicated processors, and the separation of data and control plane ensures that management access is always available, irrespective of the traffic load. Interface density for the PA-2020 and the PA-2050 is unmatched with up to 20 traffic interfaces and dedicated out-of-band management interfaces.

The controlling element of the PA-2000 Series next-generation firewalls is PAN-OS<sup>TM</sup>, a security-specific operating system that tightly integrates three unique identification technologies: App-ID<sup>TM</sup>, User-ID and Content-ID, with key firewall, networking, VPN and management features.

| KEY PERFORMANCE SPECIFICATIONS | PA-2020  | PA-2050  |
|--------------------------------|----------|----------|
| Firewall throughput            | 500 Mbps | 1 Gbps   |
| Threat prevention throughput   | 200 Mbps | 500 Mbps |
| IPSec VPN throughput           | 200 Mbps | 300 Mbps |
| IPSec VPN tunnels/interfaces   | 1,000    | 2,000    |
| SSL VPN concurrent users       | 500      | 1,000    |
| New sessions per second        | 15, 000  | 15,000   |
| Max sessions                   | 125,000  | 250,000  |

For a complete description of the PA-2000 Series feature set, please visit www. paloaltonetworks.com/literature.



#### Additional PA-2000 Series Specifications

#### APP-ID

- Identifies and controls more than 800 applications
- SSL decryption via forward or reverse proxy
- Customize application properties
- Custom HTTP applications

#### **FIREWALL**

- Policy-based control by application, application category, subcategory, technology, risk factor or characterisitic
- Policy-based control by user, group or IP address
- Maximum number of policies: 2,500 (PA-2020), 5,000 (PA-2050)
- Reconnaissance scan protection
- Denial of Service (DoS) protection
- Fragmented packet protection

#### **DATA FILTERING**

- Detect and block social security numbers, credit card numbers, custom data patterns
- Block files by type

## THREAT PREVENTION (SUBSCRIPTION REQUIRED)

 Block viruses, spyware, worms and vulnerability exploits

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

- Manual Key, IKE v1
- 3DES, AES (128-bit, 192-bit, 256-bit) encryption
- SHA1, MD5 authentication

#### **SSL VPN (REMOTE ACCESS)**

- IPSec transport with SSL fall-back
- Enforce unique policies for SSL VPN traffic
- Enable/disable split tunneling to control client access

#### **NETWORKING**

- Tap mode, virtual wire, layer 2, layer 3, mixed L2/L3
- IPv6 application visibilty and control via Content-ID (Virtual wire mode only)
- IPv6 full content inspection via Content-ID (Virtual wire mode only)
- 802.1Q VLAN tagging (layer 2, layer 3)
- Network address translation (NAT)
- OSPF and RIPv2
- DHCP server/ DHCP relay (up to 3 servers)
- Virtual routers: 3 (PA-2020), 5 (PA-2050)
- Security zones: 20
- Virtual systems: 5 (optional license required)

#### **URL FILTERING (SUBSCRIPTION REQUIRED)**

- 76-category on-box customizable database
- Customizable allow and block lists
- Customizable block pages

#### **QUALITY OF SERVICE (QOS)**

- Policy-based traffic shaping (guaranteed, maximum and priority) by application, user, source, destination, interface, IPSec VPN tunnel and more
- · Per policy diffserv marking

### **HIGH AVAILABILITY**

- Active/Passive
- Configuration and session synchronization
- Interface and IP tracking
- Link and path failure monitoring

#### **MANAGEMENT TOOLS**

- Integrated web interface
- Command line interface (CLI)
- Centralized management (Panorama)
- · Role-based adminstration
- Shared policies (Panorama)
- Syslog & SNMPv2
- Customizable administrator login banner
- XML-based REST API

## HARDWARE SPECIFICATIONS

1/0

Management I/O

Power supply (Avg/max power consumption)

Input voltage (Input frequency)

Max input current

Rack mountable (Dimensions)

Safety

EMI

(16) 10/100/1000 + (4) SFP optical gigabit (PA-2050), (12) 10/100/1000 + (2) SFP optical gigabit (PA-2020)

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

175W/200W (105W/120W)

100-240Vac (50-60Hz) 70A@230Vac; 35A@115Vac

1U, 19" standard rack (1.75"H x 17"D x 17"W)

UL. CUL. CB

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

## **ENVIRONMENT**

Operating temperature Non-operating temperature

32° to 122° F, 0° to 50° C -4° to 158° F, -20° to 70° C

## **ORDERING INFORMATION**

Platform

Annual threat prevention subscription Annual URL filtering subscription

Virtual systems

## PA-2050

PAN-PA-2050 PAN-PA-2050-TP PAN-PA-2050-URL2

PAN-PA-2050-VSYS-5

## PA-2020

PAN-PA-2020 PAN-PA-2020-TP PAN-PA-2020-URL2 PAN-PA-2020-VSYS-5

 $For additional\ Information\ on\ the\ PA-2000\ Series\ software\ features,\ please\ visit\ www.paloaltonetworks.com/literature.$ 



## Palo Alto Networks

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