# PA-5000 Series



Palo Alto Networks® PA-5000 Series of next-generation firewall appliances is comprised of the PA-5060, the PA-5050 and the PA-5020, all of which are targeted at high-speed data center and Internet gateway deployments. The PA-5000 Series delivers up to 20 Gbps of throughput using dedicated processing and memory for the key functional areas of networking, security, threat prevention and management.

# **Key Security Features:**

# Classifies all applications, on all ports, all the time

- Identifies the application, regardless of port, encryption (SSL or SSH), or evasive technique employed.
- Uses the application, not the port, as the basis for all of your safe enablement policy decisions: allow, deny, schedule, inspect and apply traffic-shaping.
- Categorizes unidentified applications for policy control, threat forensics or App-ID™ development.

## Enforces security policies for any user, at any location

- Deploys consistent policies to local and remote users running on the Windows®, Mac® OS X®, Linux®, Android®, or Apple® iOS platforms.
- Enables agentless integration with Microsoft® Active Directory® and Terminal Services, LDAP, Novell® eDirectory™ and Citrix®.
- Easily integrates your firewall policies with 802.1X wireless, proxies, NAC solutions, and any other source of user identity information.

# Prevents known and unknown threats

- Blocks a range of known threats, including exploits, malware and spyware, across all ports, regardless of common threat-evasion tactics employed.
- Limits the unauthorized transfer of files and sensitive data, and safely enables non-work-related web surfing.
- Identifies unknown malware, analyzes it based on hundreds of malicious behaviors, and then automatically creates and delivers protection.







PA-5050

PA-5020

The controlling element of the PA-5000 Series is PAN-OS®, a security-specific operating system that natively classifies all traffic, inclusive of applications, threats and content, and then ties that traffic to the user, regardless of location or device type. The application, content and user – in other words, the business elements that run your business – are then used as the basis of your security policies, resulting in an improved security posture and a reduction in incident response time.

Performance and capacities <sup>1</sup>	PA-5060	PA-5050	PA-5020
Firewall throughput (App-ID enabled)	20 Gbps	10 Gbps	5 Gbps
Threat prevention throughput	10 Gbps	5 Gbps	2 Gbps
IPsec VPN throughput	4 Gbps	4 Gbps	2 Gbps
Max sessions	4,000,000	2,000,000	1,000,000
New sessions per second	120,000	120,000	120,000
Virtual systems (base/max²)	25/225	25/125	10/20

<sup>&</sup>lt;sup>1</sup> Performance and capacities are measured under ideal testing conditions using PAN-OS 71

<sup>&</sup>lt;sup>2</sup> Adding virtual systems to the base quantity requires a separately purchased license.

# **Networking Features**

#### Interface Modes

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

#### Routing

- OSPFv2/v3 with graceful restart, BGP with graceful restart, RIP, static routing
- Policy-based forwarding
- Point-to-Point Protocol over Ethernet (PPPoE)
- Multicast: PIM-SM, PIM-SSM, IGMP v1, v2, and v3
- Bidirectional Forwarding Detection (BFD)

### IPv6

- L2, L3, Tap, Virtual Wire (transparent mode)
- Features: App-ID<sup>™</sup>, User-ID<sup>™</sup>, Content-ID<sup>™</sup>, WildFire<sup>™</sup>, and SSL decryption
- SLAAC

# IPsec VPN

- Key exchange: Manual key, IKE v1 (pre-shared key, certificate-based authentication)
- Encryption: 3DES, AES (128-bit, 192-bit, 256-bit)
- Authentication: MD5, SHA-1, SHA-256, SHA-384, SHA-512

#### **VLANs**

- 802.1q VLAN tags per device/per interface: 4,094/4,094
- Aggregate interfaces (802.3ad), LACP

### **Network Address Translation (NAT)**

- NAT modes (IPv4): static IP, dynamic IP, dynamic IP and port (port address translation)
- NAT64, NPTv6
- Additional NAT features: Dynamic IP reservation, tunable dynamic IP and port oversubscription

# **High Availability**

- Modes: Active/Active, Active/Passive
- · Failure detection: Path monitoring, interface monitoring

# **Hardware Specifications**

### 1/0

PA-5060 | PA-5050 - (12) 10/100/1000, (8) Gigabit SFP, (4) 10 Gigabit SFP+

PA-5020 - (12)10/100/1000, (8) Gigabit SFP

### MANAGEMENT I/O

 (2) 10/100/1000 high availability, (1) 10/100/1000 out-of-band management, (1) RJ45 console port

# Storage Options

• Single or dual solid state disk drives

# Storage capacity

• 120GB, 240GB SSD, RAID 1

# Power supply (Avg/max power consumption)

**PA-5060** - Redundant 450W AC (330W/415W)

PA-5050 | PA-5020 - Redundant 450W AC (270W/340W)

# Max BTU/hr

PA-5060 - 1,416

PA-5050 | PA-5020 - 1,160

# Input voltage (Input frequency)

• 100-240VAC (50-60Hz); -40 to -72 VDC

# Max current consumption

• 8A@100VAC. 14A@48VDC

### Max inrush current

• 80A@230VAC; 40A@120VAC; 40A@48VDC

## Mean time between failure (MTBF)

• 10.2 years

# Rack mountable (Dimensions)

• 2U, 19" standard rack (3.5"H x 21"D x 17.5"W)

# Weight (Stand-alone device/As shipped)

• 41 lbs/55 lbs

# Safety

• cCSAus, CB

## EMI

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

# Certifications

See: https://www.paloaltonetworks.com/company/certifications.html

# Environment

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

To view additional information about the security features and associated capacities of the PA-5000 Series, please visit www.paloaltonetworks.com/products.



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