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

**APPLICATION IDENTIFICATION:**
- Identifies and controls applications irrespective of port, protocol, encryption (SSL or SSH) 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, LDAP, and eDirectory.
- Identifies Citrix, Microsoft Terminal Services and XenWorks users, enabling visibility and control over their respective application usage.
- Control non-Windows hosts via web-based authentication.

**CONTENT IDENTIFICATION:**
- Block viruses, spyware, modern malware, 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™ 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™, a security-specific operating system that tightly integrates three unique identification technologies: App-ID™, User-ID™ and Content-ID™, with key firewall, networking, VPN and management features.

<table>
<thead>
<tr>
<th>PERFORMANCE AND CAPACITIES¹</th>
<th>PA-2050</th>
<th>PA-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firewall throughput</td>
<td>1 Gbps</td>
<td>500 Mbps</td>
</tr>
<tr>
<td>IPSec VPN throughput</td>
<td>500 Mbps</td>
<td>200 Mbps</td>
</tr>
<tr>
<td>IPsec VPN throughput</td>
<td>300 Mbps</td>
<td>200 Mbps</td>
</tr>
<tr>
<td>New sessions per second</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Max sessions</td>
<td>250,000</td>
<td>125,000</td>
</tr>
<tr>
<td>IPSec VPN tunnels/tunnel interfaces</td>
<td>2,000</td>
<td>1,000</td>
</tr>
<tr>
<td>SSL VPN concurrent users</td>
<td>1,000</td>
<td>500</td>
</tr>
<tr>
<td>SSL decrypt sessions</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>SSL inbound certificates</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Virtual routers</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Virtual systems [base/max²]</td>
<td>1/6</td>
<td>1/6</td>
</tr>
<tr>
<td>Security zones</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Max number of policies</td>
<td>5,000</td>
<td>2,500</td>
</tr>
<tr>
<td>Address objects</td>
<td>10,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Fully Qualified Domain Names (FQDN)</td>
<td>2,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>

¹ Performance and capacity listed above are based on systems running PAN-OS 4.1 and are measured under ideal testing conditions.

² Adding virtual systems to the base quantity requires a separately purchased license.

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

I/O
- PA-2050: (16) 10/100/1000, (4) SFP optical Gigabit
- PA-2020, PA-4020: (12) 10/100/1000, (2) SFP optical Gigabit

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

POWER SUPPLY (AVG/MAX POWER CONSUMPTION)
- 175W/200W (105W/120W)

INPUT VOLTAGE (INPUT FREQUENCY)
- 100-240VAC (50-60Hz)

MAX CURRENT CONSUMPTION
- 1.5A@100VAC

MEAN TIME BETWEEN FAILURE (MTBF)
- 7.3 years

MAX INRUSH CURRENT
- 70A@230VAC; 35A@115VAC

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

WEIGHT (STAND ALONE DEVICE/AS SHIPPED)
- 15lbs/20lbs

SAFETY
- UL, CUL, CB

EMI
- FCC Class A, CE Class A, VCCI Class A

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

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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

USER INTEGRATION (USER-ID)
• Active Directory, LDAP, eDirectory, Citrix and Microsoft Terminal Services, Xenworks, XML API

IPSEC VPN (SITE-TO-SITE)
• Key Exchange: Manual key, IKE v1
• Encryption: 3DES, AES (128-bit, 192-bit, 256-bit)
• Authentication: MD5, SHA1, SHA-256, SHA-384, SHA-512

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), Windows XP, Windows Vista (32/64 bit), Windows 7 (32/64 bit)
• Third Party Client Support: Apple i0S

FILE AND DATA FILTERING
• Control unauthorized data transfer [data patterns and file types]
• Drive-by download protection
• Predefined signatures for SSN and Credit Card numbers
• Unique file types identified: 59

MANAGEMENT, REPORTING, VISIBILITY TOOLS
• Integrated web interface, CLI or central management (Panorama)
• Syslog, SNMP v2/v3
• XML-based REST API
• Graphical summary of applications, URL categories, threats and data (ACC)
• View, filter, export traffic, threat, URL, and data filtering logs
• Fully customizable reporting

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

WILDFIRE
• Identify and analyze targeted and unknown malware
• Automated analysis of unknown files for malicious behaviors
• Forensic analysis and protection for newly discovered malware

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: 6

URL FILTERING (SUBSCRIPTION REQUIRED)
• 76-category, 20M URL on-box database
• Dynamic URL filtering [1M URL cache on device]
• Custom block pages and URL categories

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