

## PA-800 Series

Palo Alto Networks PA-800 Series Next-Generation Firewalls, comprising the PA-850 and PA-820, are designed to provide secure connectivity for organizations' branch offices as well as midsize businesses.



PA-850

The controlling element of the PA-800 series is PAN-OS®, which 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 elements that run your business—then serve as the basis of your security policies, resulting in improved security posture and reduced incident response time.

## Key Security and Connectivity Features

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

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

### Enforces security policies for any user, anywhere

- Deploys consistent policies to local and remote users running on the Windows®, macOS®, 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, network access control, 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 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.

### Enables SD-WAN functionality

- Easily adopt SD-WAN by simply enabling it on your existing firewalls.
- Enables you to safely implement SD-WAN, which is natively integrated with our industry-leading security.
- Delivers an exceptional end user experience by minimizing latency, jitter, and packet loss.

**Table 1: PA-800 Series Performance and Capacities**

	PA-850	PA-820
Firewall throughput (HTTP/appmix) <sup>1</sup>	2/2 Gbps	1.7/1.6 Gbps
Threat Prevention throughput (HTTP/appmix) <sup>2</sup>	1/1 Gbps	780/800 Mbps
IPsec VPN throughput <sup>3</sup>	1.6 Gbps	1.2 Gbps
New sessions per second <sup>4</sup>	13,000	8,300
Max sessions	192,000	128,000

1. Firewall throughput is measured with App-ID and logging enabled, using 64 KB HTTP/appmix transactions.

2. Threat Prevention throughput is measured with App-ID, IPS, antivirus, anti-spyware, WildFire, file blocking, and logging enabled, utilizing 64 KB HTTP/appmix transactions.

3. IPsec VPN throughput is measured with 64 KB HTTP transactions and logging enabled.

4. New sessions per second is measured with application override utilizing 1 byte HTTP transactions.

PA-800 Series Next-Generation Firewalls support a wide range of networking features that enable you to more easily integrate our security features into your existing network.

**Table 2: PA-800 Series 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

### SD-WAN

Path quality measurement (jitter, packet loss, latency)  
Initial path selection (PBF)  
Dynamic path change

### IPv6

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

### IPsec VPN

Key exchange: manual key, IKEv1, and IKEv2 (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 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

**Table 3: PA-800 Series Hardware Specifications**

I/O
PA-850: 10/100/1000 (4), Gigabit SFP (8) or PA-850: 10/100/1000 (4), Gigabit SFP (4), 10 Gigabit SFP+ (4) PA-820: 10/100/1000 (4), Gigabit SFP (8)
Management I/O
10/100/1000 out-of-band management port (1) 10/100/1000 high availability (2) RJ-45 console port (1) USB port (1) Micro USB console port (1)
Storage Capacity
240 GB SSD
Power Supply
PA-850: AC 450 W power supplies (2); one is redundant PA-820: Fixed AC 200 W power supply (1)
Power Consumption
Maximum: PA-850: 240 W; PA-820: 120 W Average: PA-850: 64 W; PA-820: 41 W
Max BTU/hr
256
Input Voltage (Input Frequency)
100–240 VAC (50–60 Hz)
Max Current Consumption
PA-850: 2.0 A @ 100 VAC, 1.0 A @ 240 VAC PA-820: 1.0 A @ 100 VAC, 0.5 A @ 240 VAC

**Max Inrush Current**

PA-850: 1.0 A @ 230 VAC, 1.84 A @ 120 VAC  
PA-820: 0.4 A @ 230 VAC, 0.96 A @ 120 VAC

**Rack Mount (Dimensions)**

PA-850: 1U, 19" standard rack (1.75" H x 14.5" D x 17.125" W)  
PA-820: 1U, 19" standard rack (1.75" H x 14" D x 17.125" W)

**Weight (Standalone Device/As Shipped)**

PA-850: 13.5 lbs / 21.5 lbs  
PA-820: 11 lbs / 18 lbs

**Safety**

cCSAus, CB

**EMI**

FCC Class A, CE Class A, VCCI Class A

**Certifications**

See [www.paloaltonetworks.com/company/certifications.html](http://www.paloaltonetworks.com/company/certifications.html)

**Environment**

Operating temperature: 32° to 104° F, 0° to 40° C  
Non-operating temperature: -4° to 158° F, -20° to 70° C

**Airflow**

Front to back