

# PA-220

Palo Alto Networks PA-220 brings ML-Powered Next-Generation Firewall capabilities to distributed enterprise branch offices, retail locations, and mid-size businesses.

## Highlights

- High availability with active/active and active/passive modes
- Redundant power input for increased reliability
- Fanless design
- Simplified deployments of large numbers of firewalls through USB



PA-220

The controlling element of the PA-220 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.
- Provides full visibility into the details of all TLS-encrypted connections and stops threats hidden in encrypted traffic, including traffic that uses TLS 1.3 and HTTP/2 protocols.

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

- 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.

### Extends native protection across all attack vectors with cloud-delivered security subscriptions

- **Threat Prevention**—inspects all traffic to automatically block known vulnerabilities, malware, vulnerability exploits, spyware, command and control (C2), and custom intrusion prevention system (IPS) signatures.
- **WildFire® malware prevention**—protects against unknown file-based threats, delivering automated prevention in seconds for most new threats across networks, endpoints, and clouds.
- **URL Filtering**—prevents access to malicious sites and protects users against web-based threats.
- **DNS Security**—detects and blocks known and unknown threats over DNS while predictive analytics disrupt attacks using DNS for C2 or data theft.
- **IoT Security**—discovers all unmanaged devices in your network, identifies risks and vulnerabilities, and automates enforcement policies for your ML-Powered NGFW using a new Device-ID™ policy construct.

### Enables SD-WAN functionality

- Allows you to 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-220 Performance and Capacities<sup>1</sup>**

Firewall throughput (HTTP/appmix) <sup>2</sup>	500/580 Mbps
Threat Prevention throughput (HTTP/appmix) <sup>3</sup>	240/280 Mbps
IPsec VPN throughput <sup>4</sup>	500 Mbps
Max sessions	64,000
New sessions per second <sup>5</sup>	4,200

1. Results were measured on PAN-OS 9.1.
2. Firewall throughput is measured with App-ID and logging enabled, using 64 KB HTTP/appmix transactions.
3. Threat Prevention throughput is measured with App-ID, IPS, antivirus, anti-spyware, WildFire, file blocking, and logging enabled, utilizing 64 KB HTTP/appmix transactions.
4. IPsec VPN throughput is measured with 64 KB HTTP transactions and logging enabled.
5. New sessions per second is measured with application-override utilizing 1 byte HTTP transactions.

The PA-220 supports a wide range of networking features that enable you to more easily integrate our security features into your existing network.

**Table 2: PA-220 Networking Features**

<b>Interface Modes</b>
L2, L3, tap, virtual wire (transparent mode)
<b>Routing</b>
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
<b>SD-WAN</b>
Path quality measurement (jitter, packet loss, latency)
Initial path selection (PBF)
Dynamic path change
<b>IPv6</b>
L2, L3, tap, virtual wire (transparent mode)
Features: App-ID, User-ID, Content-ID, WildFire, and SSL Decryption
SLAAC
<b>IPsec VPN</b>
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

Table 2: PA-220 Networking Features (continued)
<b>VLANs</b>
802.1Q VLAN tags per device/per interface: 4,094/4,094
<b>Network Address Translation</b>
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
<b>High Availability</b>
Modes: active/active, active/passive
Failure detection: path monitoring, interface monitoring
<b>Zero Touch Provisioning (ZTP)</b>
Available with -ZTP SKUs (PA-220-ZTP)
Requires Panorama 9.1.3 or higher

Table 3: PA-220 Hardware Specifications
<b>I/O</b>
10/100/1000 (8)
<b>Management I/O</b>
10/100/1000 out-of-band management port (1) RJ-45 console port (1) USB port (1) Micro USB console port (1)
<b>Storage Capacity</b>
32 GB eMMC
<b>Power Supply (Avg/Max Power Consumption)</b>
Optional: dual redundant 40 W (21 W / 25 W)

Table 3: PA-220 Hardware Specifications (continued)
<b>Max BTU/hr</b>
102
<b>Input Voltage (Input Frequency)</b>
100–240 VAC (50–60Hz)
<b>Max Current Consumption</b>
Firewall: 1.75 A @ 12 VDC Power supply (AC side): 0.5 A @ 100 VAC, 0.2 A @ 240 VAC
<b>Dimensions</b>
1.62" H x 6.29" D x 8.07" W
<b>Weight (Standalone Device/As Shipped)</b>
3.0 lbs / 5.4 lbs
<b>Safety</b>
cCSAus, CB
<b>EMI</b>
FCC Class B, CE Class B, VCCI Class B
<b>Certifications</b>
See <a href="http://www.paloaltonetworks.com/company/certifications.html">www.paloaltonetworks.com/company/certifications.html</a>
<b>Environment</b>
Operating temperature: 32° to 104° F, 0° to 40° C Non-operating temperature: -4° to 158° F, -20° to 70° C Passive cooling

To learn more about the features and associated capacities of the PA-220, please visit [www.paloaltonetworks.com/products](http://www.paloaltonetworks.com/products).