




Feature	PA-3020 	PA-850 	PA-820 
<h2 data-bbox="126 325 477 380">Performance</h2> <p data-bbox="126 422 1446 453"><i>*Performance and capacities are measured under ideal testing conditions using PAN-OS .0. Additionally, for VM models please refer to hypervisor, cloud specific data sheet for associated performance</i></p>			
App-ID firewall throughput	2 Gbps	1.9 Gbps	940 Mbps
Threat prevention throughput	1 Gbps	780 Mbps	610 Mbps
IPSec VPN throughput	500 Mbps	500 Mbps	400 Mbps
Connections per second	50,000	9,500	8,300
<h2 data-bbox="126 779 375 833">Sessions</h2>			
Max sessions (IPv4 or IPv6)	250,000	197,000	130,000
<h2 data-bbox="126 921 337 976">Policies</h2>			
Security rules	2,500	1,500	1,500
Security rule schedules	256	256	256
NAT rules	3,000	3,000	3,000
Decryption rules	250	150	100
App override rules	250	100	100
QoS rules	1,000	250	100
Tunnel content inspection rules	500	250	100
Policy based forwarding rules	500	250	100
Captive portal rules	1,000	250	100
DoS protection rules	1,000	250	100
<h2 data-bbox="126 1499 532 1554">Security Zones</h2>			
Max security zones	40	40	30
<h2 data-bbox="126 1642 1026 1696">Objects (addresses and services)</h2>			
Address objects	5,000	3,500	2,500
Address groups	500	350	250
Members per address group	2,500	2,500	2,500
Service objects	1,000	1,000	1,000
Service groups	250	250	250

Members per service group	500	500	500
FQDN address objects	2,000	2,000	2,000
Max IP addresses registered per system <i>*Applies to IP addresses registered to dynamic address groups</i>	5,000	2,500	1,000
Tags per IP address	32	32	32

Security Profiles

Security profiles	150	150	100
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App-ID

Custom App-ID signatures	6,000	6,000	6,000
Shared custom App-IDs	512	512	512
Custom App-IDs (virtual system specific)	6,416	6,416	6,416

User-ID

User-IP mappings (management plane)	512,000	512,000	512,000
User-IP mappings (data plane)	64,000	128,000	128,000
Active and unique groups used in policy	1,000	1,000	1,000
Number of agents	100	100	100
Monitored servers per agent	100	100	100
Maximum terminal services agents	400	400	400

SSL Decryption

Max SSL inbound certificates	25	25	25
SSL certificate cache (forward proxy)	128	128	128
Max concurrent decryption sessions	7,936	19,200	12,800

URL Filtering

Total entries for allow list, block list and custom categories	25,000	25,000	25,000
Max custom categories	2,849	2,849	2,849
Max custom categories (virtual system specific)	500	500	500
Dataplane cache size for URL filtering	20,000	10,000	10,000
Management plane dynamic cache size	1,000,000	1,000,000	1,000,000

Interfaces

Mgmt - out-of-band	10/100/ 1000, RJ45 console	null	null
Mgmt - 10/100/1000 high availability	2	2	2

Mgmt - 40Gbps high availability	NA	NA	NA
Traffic - 10/100/1000	12	4	4
Traffic - 100/1000/10000	NA	NA	NA
Traffic - 1Gbps SFP	8	4/8	8
Traffic - 10Gbps SFP+	NA	0/4	NA
Traffic - 10Gbps XFP	NA	NA	NA
Traffic - 40Gbps QSFP	NA	NA	NA
802.1q tags per device	4,094	4,094	4,094
802.1q tags per physical interface	4,094	4,094	4,094
Max interfaces (logical and physical)	1,024	1,024	1,024
Maximum aggregate interfaces	8	6	6

Virtual Routers

Virtual routers	10	5	5
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Virtual Wires

Virtual wires	512	512	512
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Virtual Systems

Base virtual systems	1	1	1
Max virtual systems <i>*Additional licenses are required for virtual system capacities above the base virtual systems capacity</i>	6	NA	NA

Routing

IPv4 forwarding table size <i>*Entries shared across virtual routers</i>	2,500	5,000	5,000
IPv6 forwarding table size <i>*Entries shared across virtual routers</i>	2,500	5,000	5,000
System total forwarding table size	5,000	10,000	10,000
Max route maps per virtual router	50	50	50
Max routing peers (protocol dependent)	500	1,000	1,000
Static entries - DNS proxy	1,024	1,024	1,024
Bidirectional Forwarding Detection (BFD) Sessions	512	NA	NA

L2 Forwarding

ARP table size per device	3,000	3,000	3,000
IPv6 neighbor table size	3,000	3,000	3,000
MAC table size per device	3,000	3,000	3,000
Max ARP entries per broadcast domain	3,000	3,000	3,000

Max MAC entries per broadcast domain	3,000	3,000	3,000
NAT			
Total NAT rule capacity	3,000	3,000	3,000
Max NAT rules (static) <i>*Configuring static NAT rules to full capacity requires that no other NAT rule types are used.</i>	3,000	3,000	3,000
Max NAT rules (DIP) <i>*Configuring DIP NAT rules to full capacity requires that no other NAT rule types are used.</i>	2,000	3,000	3,000
Max NAT rules (DIPP)	400	3,000	3,000
Max translated IPs (DIP)	128,000	3,000	3,000
Max translated IPs (DIPP) <i>*DIPP translated IP capacity is proportional to the DIPP pool oversubscription value. The capacity shown here is based on an oversubscription value of 1x.</i>	800	400	400
Default DIPP pool oversubscription <i>*Source IP and source port reuse across concurrent sessions</i>	2	2	2
Address Assignment			
DHCP servers	10	5	5
Max number of assigned addresses	64,000	64,000	64,000
High Availability			
Devices per cluster	2	2	2
Max virtual addresses	64	48	48
QoS			
Number of QoS policies	1,000	500	250
Physical interfaces supporting QoS	6	12	12
Clear text nodes per physical interface	31	31	31
DSCP marking by policy	Yes	Yes	Yes
Subinterfaces supported	System limit	System Limit	System Limit
IPSec VPN			
Site to site	3,000	2,000	2,000
Max IKE Peers	2,000	1,000	1,000
GlobalProtect Client VPN			
Max tunnels (SSL, IPSec, and IKE with XAUTH)	1,000	1,000	1,000

GlobalProtect Clientless VPN

Max SSL tunnels	250	250	250
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Multicast

Replication (egress interfaces)	100	200	200
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Routes	2,000	1,500	1,500
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Product Notes

End-of-sale	NA	NA	NA
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