

Table 1: Firewall Performance and Capacities													
Performance and Capacities	PA-7500 ^A	PA-7080 ^B	PA-7050 ^B	PA-5450 ^C	PA-5445	PA-5440	PA-5430	PA-5420	PA-5410	PA-5280 ^D	PA-5260 ^D	PA-5250 ^D	PA-5220 ^D
Firewall throughput (appmix)	1.5 Tbps	590 Gbps	343 Gbps	200 Gbps	90 Gbps	90 Gbps	82 Gbps	70 Gbps	52 Gbps	55 Gbps	55 Gbps	35 Gbps	15 Gbps
Threat Prevention throughput (appmix)	1.44 Tbps	305 Gbps	184 Gbps	189 Gbps	76 Gbps	70 Gbps	60 Gbps	50 Gbps	35 Gbps	31 Gbps	31 Gbps	19 Gbps	8.8 Gbps
IPsec VPN throughput	407 Gbps	310 Gbps	190 Gbps	85 Gbps ^E	64 Gbps	58 Gbps	42 Gbps	28 Gbps	20 Gbps	25 Gbps	25 Gbps	18.4 Gbps	9.5 Gbps
New sessions per second	7.2M	6M	4M	3.6M ^C	449,000	390,000	380,000	370,000	270,000	500,000	500,000	368,000	150,000
Maximum sessions	440M	416M	245M	100M ^C	48M	20M	9M	7M	5M	64M	32M	8M	4M
Virtual systems (base/max ^F)	25/225			25/225			25/125	15/65	10/20	25/225		25/125	10/20
Hardware Specifications	PA-7500	PA-7080	PA-7050	PA-5450	PA-5445	PA-5440	PA-5430	PA-5420	PA-5410	PA-5280	PA-5260	PA-5250	PA-5220
Interfaces supported ^G	SFP-DD (up to 84), QSFP-DD (up to 56)	10/100/1000 (up to 120), SFP/ SFP+ (up to 80), QSFP+/QSFP28 (up to 40)	10/100/1000 (up to 72), SFP/ SFP+ (up to 48), QSFP+/QSFP28 (up to 24)	100/1000/10G Cu (up to 8), 1G/10G SFP/ SFP+ (up to 24), 40G/100G QSFP28 (up to 4)	1G/2.5G/5G/10G (8), 1G/10G SFP/SFP+ (12), 25G SFP28 (4), 40G/100G QSFP+/QSFP28 (4)					100/1000/10G Cu (4), 1G/10G SFP/SFP+ (16), 40G/100G QSFP28 (4)		100/1000/10G Cu (4), 1G/10G SFP/SFP+ (16), 40G QSFP+ (4)	
Management I/O	QSFP28 logging (2), QSFP-DD HA (2), SFP28 management (2), Combo RJ-45 console (1), Micro USB console (1), USB (1)	SFP/SFP+ MGT (2), SFP/SFP+ HA1 (2), HSCI HA2/HA3 QSFP+/QSFP28 (2), RJ-45 serial console (1), Micro USB serial console (1)		SFP/SFP+ MGT (2), SFP/SFP+ HA1 (2), HSCI HA2/HA3 QSFP+/QSFP28 (2), RJ-45 serial console (1), Micro USB serial console (1)	1G SFP out-of-band management (1), 1G SFP HA (2) 40G QSFP+ HA (1), RJ-45 serial console (1), Micro USB serial console (1)					10/100/1000 Cu (2), 10/100/1000 out-of-band management (1), RJ-45 console (1)			
										40G/100G QSFP28 HA (1)		(1) 40G QSFP+ HA	
Size	14U standard rack (24.4" H x 31.0" D x 17.4" W)	19U, 19" standard rack (33.22" H x 24.66" D x 17.5" W)	9U, 19" standard rack (15.75" H x 23.75" D x 17.5" W) or 14U, 19" standard rack with optional PAN-AIR-DUCT kit (24.5" H x 23.75" D x 17.5" W)	5U, 19" standard rack (8.75" H x 30.25" D x 17.38" W)	2U, 19" standard rack (3.45" H x 22.5" D x 17.34" W)					3U, 19" standard rack (5.25" H x 20.5" D x 17.25" W)			
Power supply	M+N Redundant (4+6)	2500 W AC (2400 W/2700 W) (4 expandable to 8)	2500 W AC (2400 W/2700 W) (4)	2200 W AC or DC (2 expandable to 4)	1200 W AC or DC (1:1 fully redundant) (2)								
Redundant power supply	Yes	Yes		Yes									
Disk drives	—	240 GB SSD system drive, RAID1 (2)		System: 480 GB SSD, RAID1 Log: 4 TB SSD (optional)	480 GB SSD pair, system storage					System: 240 GB SSD, RAID1 Log: 2 TB HDD, RAID1			
Hot-swappable fans	—	Yes		Yes									
Performance and Capacities	PA-3440	PA-3430	PA-3420	PA-3410	PA-3260 ^{D,H}	PA-3250 ^{D,H}	PA-3220 ^{D,H}	PA-1420	PA-1410	PA-850 ^{D,I}	PA-820 ^{D,I}		
Firewall throughput (appmix)	35 Gbps	29 Gbps	19 Gbps	14 Gbps	7.5 Gbps	5 Gbps	4 Gbps	9.5 Gbps	8.5 Gbps	1.9 Gbps	1.5 Gbps		
Threat Prevention throughput (appmix)	20 Gbps	15 Gbps	10 Gbps	7.5 Gbps	4 Gbps	2.5 Gbps	2.2 Gbps	6.2 Gbps	4.5 Gbps	900 Mbps	800 Mbps		
IPsec VPN throughput	14.5 Gbps	12 Gbps	9.9 Gbps	6.6 Gbps	4.4 Gbps	2.6 Gbps	2.4 Gbps	6.5 Gbps	4.6 Gbps	1.6 Gbps	1.2 Gbps		
New sessions per second	268,000	240,000	220,000	145,000	84,000	58,000	46,000	140,000	100,000	12,500	7,500		
Maximum sessions	3,000,000	2,500,000	2,200,000	1,400,000	2,200,000	2,000,000	1,000,000	1,400,000	945,000	192,000	128,000		
Virtual systems (base/max ^F)	1/11				1/6			1/6		1/1			
Hardware Specifications	PA-3440	PA-3430	PA-3420	PA-3410	PA-3260	PA-3250	PA-3220	PA-1420	PA-1410	PA-850	PA-820		
Interfaces supported ^F	1G/2.5G/5G/10G (12), 1G/10G SFP/SFP+ (10), 25G SFP28 (4), 40G/100G QSFP/ QSFP28 (2)		1G/2.5G/5G/10G (12), 1G/10G SFP/SFP+ (10), 25G SFP28 (4)		10/100/1000 (12), 1G/10G SFP/ SFP+ (8), 40G QSFP+ (4)	10/100/1000 (12), 1G/10G SFP/SFP+ (8)	10/100/1000 (12), 1G SFP (4), 1G/10G SFP/ SFP+ (4)	10/100/1000 (4), 1/2.5/5G (4), 1/2.5/5G (4)/PoE, 1G SFP (2), 10G SFP+ (8)	10/100/1000 (8), 1/2.5/5G (4)/ PoE, 1G SFP (6), 10G SFP+ (4)	10/100/1000 (4), 1G SFP (4), 1G/10G SFP/SFP+ (4)	10/100/1000 (4), SFP (8)		
Management I/O	10/100/1000 out-of-band management (1), 10/100/1000 high availability (2), 10G SFP+ high availability (1), RJ-45 console port (1), Micro USB (1)				10/100/1000 out-of-band management (1), 10/100/1000 high availability (2), 10G SFP+ high availability (1), RJ-45 console port (1), Micro USB (1)			10/100/1000 out-of-band management (1), HSCI 10G high availability (1), RJ-45 console (1), USB (1), Micro USB console (1)		10/100/1000 out-of-band management (1), 10/100/1000 high availability (2), RJ-45 console (1), USB (1), Micro USB console (1)			
Size	1U, 19" standard rack (14.15" H x 17.15" D x 1.70" W)				2U, 19" standard rack (3.5" H x 20.53" D x 17.34" W)			1U, 19" standard rack (1.70" H x 14.15" D x 17.15" W)		1U, 19" standard rack (1.75" H x 14" D x 17.125" W)			
Power supply	450W AC				650 W AC or DC (180/240)			450 W AC (2; one is redundant)		450 W AC (2; one is redundant)		200 W	
Redundant power supply	Yes				Yes			Yes		Yes		No	
Disk drives	480 GB SSD				240 GB SSD			240 GB SSD	120 GB SSD	240 GB SSD			
Hot-swappable fans	No				Yes			No		No			

Table 1: Firewall Performance and Capacities (continued)												
Performance and Capacities	PA-460	PA-455	PA-450R-5G	PA-450R	PA-450	PA-445	PA-440	PA-415-5G	PA-415	PA-410R-5G	PA-410R	PA-410
Firewall throughput (appmix)	4.6 Gbps	3.6 Gbps	3.2 Gbps			2.65 Gbps	2.55 Gbps	1.5 Gbps	1.5 Gbps	1.4 Gbps		
Threat Prevention throughput (appmix)	3.0 Gbps	2.3 Gbps	1.9 Gbps			1.25 Gbps	1.2 Gbps	800 Mbps		780 Mbps		
IPsec VPN throughput	2.3 Gbps	1.8 Gbps	1.7 Gbps			1.1 Gbps		650 Mbps				
New sessions per second	69,000	56,000	48,000			37,500		11,400				
Maximum sessions	400,000	300,000	200,000			200,000		64,000				
Virtual systems (base/max ¹)	1/5		1/2		1/5	1/2		1/1				
Hardware Specifications	PA-460	PA-455	PA-450R-5G	PA-450R	PA-450	PA-445	PA-440	PA-415-5G	PA-415	PA-410R-5G	PA-410R	PA-410
Interfaces supported ²	10/100/1000 (8)	1G SFP/RJ45 combo (2), 1G RJ45 (2), 1G RJ45/PoE (4)	Integrated 5G (DSSS – Dual SIM Single Standby), 10/100/1000 (6), 1G SFP/RJ45 combo (2)	10/100/1000 (6), Combo [SFP or Copper 10/100/1000] (2)	10/100/1000 (8)	10/100/1000 (8), 1G SFP/RJ-45 Combo	10/100/1000 (8)	Embedded 5G Wireless WAN Module, 1G SFP/RJ45 combo (1), 1G RJ45 (4), 1G RJ45/PoE (4)	10/100/1000 (8), 1G SFP/RJ-45 Combo	Integrated 5G (DSSS – Dual SIM Single Standby), 10/100/1000 (4), 1G SFP (2)	10/100/1000 (4), 1G SFP (2)	10/100/1000 (7)
Management I/O	10/100/1000 out-of-band management (1), RJ-45 console (1), USB (2), Micro USB console (1)	SFP/RJ45 (1 GB) combo management (1), RJ45 console port (1), USB port (2) Micro USB console port (1)	10/100/1000 out-of-band management (1), RJ45 console port (1), USB port (1)		10/100/1000 out-of-band management (1), RJ-45 console (1), USB (2), Micro USB console (1)	1G SFP/R-J45 combo management (1), RJ-45 console (1), USB (2), Micro USB console (1)	10/100/1000 out-of-band management (1), RJ-45 console (1), USB (2), Micro USB console (1)	SFP/RJ45 (1 GB) combo management (1), RJ45 console port (1), USB port (2) Micro USB console port (1)	1G SFP/R-J45 combo management (1), RJ-45 console (1), USB (2), Micro USB console (1)	10/100/1000 out-of-band management (1), RJ45 console port (1), USB port (1)		10/100/1000 out-of-band management (1), RJ-45 console (1), USB (2)
Size	1.74" H x 8.83" D x 8.07" W	1.7" H x 9.4" D x 15.4" W	1.75" H x 9.96" D x 15.35" W	1.74" H x 9.37" D x 15.35" W	1.74" H x 8.83" D x 8.07" W	1.66" H x 13" D x 8.87" W	1.74" H x 8.83" D x 8.07" W	1.73" H x 9" D x 13" W	1.73" H x 13" D x 9" W	4.13" H x 8.19" D x 10.63" W	3.78" H x 8.19" D x 10.63" W	1.63" H x 6.42" D x 9.53" W
Power supply	Dual redundant 50 W	Dual redundant 150W			Dual redundant 50 W	Dual redundant 150 W	Dual redundant 50 W	Dual redundant 150 W		Dual DC		25 W
Redundant power supply						Yes (optional)						No
Disk drives						128 GB eMMC						64 GB eMMC
Hot-swappable fans	Fanless											

(A) Results measured with a configuration using six PA-7500-DPC-A cards and two PA-7500-NPC-A cards. (B) Each result in this column is for an optimum combination of PA-7000-DPC-A and PA-7000-100G-NPC-A cards populated in all available slots. (C) All tests performed with 2 Networking Cards + 4 Data Processing Cards populated, unless otherwise noted. (D) Device has reached End-of-Sale. (E) This test performed with 1 Networking Card + 5 Data Processing Cards populated. (F) Adding virtual systems to the base quantity requires a separately purchased license. Adding virtual systems for PA-440, PA-445, PA-450 and PA-460 requires minimum PAN-OS 11.0. (G) Optical/Copper transceivers are sold separately. (H) Results measured on PAN-OS 11.1. (I) Results measured on PAN-OS 11.0.

