

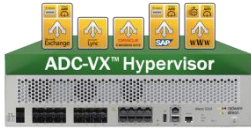




This paper provides technical information about all the hardware platforms of the Alteon product line.

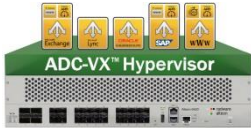
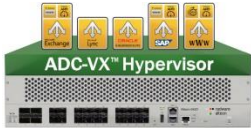
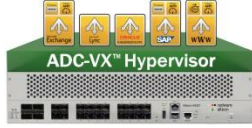
Alteon 4000 Series

Specifications	 Alteon 4408	 Alteon 4416
Available Throughput Licenses	5 Gbps throughput license	1 Gbps, 2 Gbps and 4 Gbps scalable throughput licenses
ADC-VX specialized ADC Hypervisor running virtual ADC instances	No, one instance	No, one instance
Layer 4 connections per second	204,000 CPS	252,000 CPS
Layer 7 requests per second	347,000 RPS	222,000 RPS
SSL connections per second, 2K keys (Std/XL/Extreme)	400 / 2800 CPS	400 / 4400 CPS
SSL throughput, 2K keys (Std/XL/Extreme)	700 Mbps / 2.6 Gbps	1.1 / 2.8 Gbps
Compression	2.3 Gbps	100 / 500 Mbps scalable up to 2 Gbps
Routing Protocols	OSPF, RIP, RIP II, BGP	
Processor	Intel Core 2 quad-core	AMD Shanghai quad-core
Memory	4GB up to 8GB	4GB up to 12GB
Traffic Ports	2 x 1 GbE SFP 6 x 1 GbE RJ45	4 x 1GbE SFP 12 x 1GbE RJ45
Pluggable Optics	SFP pluggable modules: <ul style="list-style-type: none"> • Short reach SFP, 1000BASE-SX • Short reach SFP, 1000BASE-LX • Long reach SFP, 1000BASE-ZX • Pluggable Copper, 1000BASE-T 	SFP pluggable modules: <ul style="list-style-type: none"> • Short reach SFP, 1000BASE-SX • Short reach SFP, 1000BASE-LX • Long reach SFP, 1000BASE-ZX • Pluggable Copper, 1000BASE-T
LCD Screen	No	Yes
USB Port	Yes	Yes
RS-232C Console	RJ-45 Serial Connection	DB-9 serial connection Female DCE interface
Power	Auto-range power supply: AC: 100-240V, 47-63 Hz DC: -36~-72V Power consumption: 195W Dual power supply (AC/DC) is optional	Auto-range supply: AC: 100-240V, 47-63 Hz DC: -36~-72V Power consumption: 304 W Dual power supply (AC/DC) is optional
Heat dissipation	665 BTU/h	1037 BTU/h
Dimensions	Width: 432 mm (17 in) Depth: 457 mm (18 in) Height: Single PS: 44 mm (1.7 in / 1U) Dual PS: 88 mm (3.4 in / 2U) EIA Rack or Standalone: 482 mm (19 in)	Width: 432 mm (17 in) Depth: 609 mm (24 in) Height: Single PS: 44 mm (1.7 in / 1U) Dual PS: 88 mm (3.4 in / 2U) EIA Rack or Standalone: 482 mm (19 in)
Weight (Std/XL/Extreme)	Single power supply: 7.66 kg (16.8 lbs) / 8.16 kg (17.9 lbs) Dual power supply: 8.9 kg (19.6 lbs) / 9.4 kg (20.7 lbs)	Single power supply: 9.1 kg (20 lbs) / 9.6 kg (21.1 lbs) Dual power supply: 10.66 kg (23.5 lbs) / 11.16 kg (24.6 lbs)
Environmental	Operating temperature: 0-40 °C (32-104 °F) Humidity: 5% to 95% non-condensing	
Certifications	Safety: CE LVD(EN 60950-1), CB - IEC 60950-1, CCC, cTUVus EMC: CE EMC (EU directive 2004/108/EC), FCC Part 15B Class A, ICES-003, VCCI, C-Tick RoHS Compliant (EU directive 2011/65/EC)	

Alteon 5000 Series

Specifications	 Alteon 5224	 Alteon 5208	 Alteon 5412
Available throughput licenses	5, 10 and 16 Gbps	6, 12 and 26 Gbps	8, 12, 16 and 20 Gbps
ADC-VX specialized ADC Hypervisor running virtual ADC instances	Yes, up to 24 instances	Yes, up to 24 instances	Yes, up to 28 instances
Layer 4 connections per second	510,000 CPS	778,000 CPS	725,000 CPS
Layer 7 requests per second	634,000 RPS	920,000 RPS	965,000 RPS
SSL connections per second, 2K keys (Std/XL/Extreme)	400 / 11,000 CPS	600 / 6,000 /13,000 CPS	700 / 11,250 CPS
SSL throughput, 2K keys (Std/XL/Extreme)	1.8 / 6.7 Gbps	2.5 / 7 / 7.5 Gbps	2.7 / 5 Gbps
Compression (Std/XL/Extreme)	1 Gbps	2 / 3.5 / 6 Gbps	2 Gbps
Routing Protocols	OSPF, RIP, RIP II, BGP		
Processor	1 x quad-core CPU	1 x quad-core CPU	2 x quad-core CPUs
Memory	24GB up to 48GB	16GB up to 32GB	16GB up to 32GB
Traffic Ports	2 x 10 GbE SFP+ 16 x 1 GbE SFP 8 x 1 GbE RJ45	2 x 10 GbE SFP+ 8 x 1 GbE RJ45	4 x 10GbE XFP 4 x 1GbE SFP 8 x 1GbE RJ45
Pluggable Optics	SFP+ pluggable modules: <ul style="list-style-type: none"> • Short reach SFP+, 10GBASE-SR • Long reach SFP+, 10GBASE-LR SFP pluggable modules: <ul style="list-style-type: none"> • Short reach SFP, 1000BASE-SX • Short reach SFP, 1000BASE-LX • Long reach SFP, 1000BASE-ZX • Pluggable Copper, 1000BASE-T 	SFP+ pluggable modules: <ul style="list-style-type: none"> • Short reach SFP+, 10GBASE-SR • Long reach SFP+, 10GBASE-LR SFP pluggable modules: <ul style="list-style-type: none"> • Short reach SFP, 1000BASE-SX • Long reach SFP, 1000BASE-LX • Extra reach SFP, 1000BASE-ZX • Pluggable Copper, 1000BASE-T 	XFP pluggable modules: <ul style="list-style-type: none"> • Short reach XFP-SR • Long reach XFP-LR SFP pluggable modules: <ul style="list-style-type: none"> • Short reach SFP, 1000BASE-SX • Short reach SFP, 1000BASE-LX • Long reach SFP, 1000BASE-ZX • Pluggable Copper, 1000BASE-T
LCD Screen	No	No	Yes
USB Port	Yes	Yes	Yes
RS-232C Console	RJ-45 Serial Connection	RJ-45 Serial Connection	RJ-45 Serial Connection
Power	Auto-range power supply: AC: 100-240 V, 47-63 Hz DC: -36--72 V Power consumption: 210 W Dual power supply is optional	Auto-range power supply: AC: 100-240 V, 47-63 Hz DC: -36--72 V Power consumption: 140 W Dual power supply is optional	Auto-range supply: AC: 100-240 V, 47-63 Hz DC: -36--72 V Power consumption: 510 W Dual power supply is included (AC/DC)
Heat dissipation	716 BTU/h	480 BTU/h	1739 BTU/h
Dimensions	Width: 432 mm (17 in) Depth: 432 mm (17 in) Height: 88 mm (3.4 in / 2U) EIA Rack or Standalone: 482 mm (19 in)	Width: 432 mm (17 in) Depth: 406 mm (16 in) Height: 44 mm (1.7 in / 1U) EIA Rack or Standalone: 482 mm (19 in)	Width: 432 mm (17 in) Depth: 609 mm (24 in) Height: 88 mm (3.4 in) EIA Rack or Standalone: 482 mm (19 in)
Weight (Std/XL/Extreme)	Single power supply: 9.3 Kg (20.5 lbs) / 9.8 Kg (21.6 lbs) Dual power supply: 10.8 Kg (23.8 lbs) /11.3 Kg (24.9 lbs)	Single power supply: 6 kg (13.2 lbs) Dual power supply: 7 kg (15.4 lbs)	Dual power Supply 15.44 kg (34 lbs) / 15.94 kg (35.1 lbs)
Environmental	Operating temperature: 0-40 °C (32-104 °F) Humidity: 10% to 95% non-condensing		
Certifications	Safety: CE LVD (EN 60950-1), CB - IEC 60950-1, CCC, cTUVus EMC: CE EMC (EU directive 2004/108/EC), FCC Part 15B Class A, ICES-003, VCCI, C-Tick RoHS Compliant (EU directive 2011/65/EC)		

Alteon 6000 and 8000 Series

Specifications	 Alteon 6420	 Alteon 6420P	 Alteon 8420
Available Throughput Licenses	30, 40 and 80 Gbps scalable throughput licenses	80Gbps throughput license	100 and 160Gbps throughput licenses
Number of virtual ADC instances	Up to 48 instances	Up to 88 virtual ADC instances	Up to 100 virtual ADC instances
Layer 4 connections per second	1.4M CPS	1.9M CPS	3.3M CPS
Layer 7 requests per second	1.7M RPS	2.5M RPS	5.1M RPS
SSL connections per second, 2K keys (Std/XL/Extreme)	2,000 / 33,000 / 78,000 CPS	4,000 / 34,000 / 97,000 CPS	4,000 / 34,000 / 97,000 CPS
SSL throughput, 2K keys (Std/XL/Extreme)	6 / 15 / 15 Gbps	9 / 22 / 22 Gbps	9 / 25 / 35 Gbps
Compression	15 Gbps	20 Gbps	25 Gbps
Routing Protocols	OSPF, RIP, RIP II, BGP		
Processor	2 x Intel octal-core CPUs	2 x Intel octal-core CPUs	2 x Intel 10-cores CPUs
Memory	32GB up to 256GB	64GB up to 256GB	128GB up to 256GB
Traffic Ports	4 x 40 GbE QSFP+ 20 x 10 GbE SFP+		
Pluggable Optics	QSFP+ pluggable modules: <ul style="list-style-type: none"> • Short reach QSFP, 40GBASE-SR4 • Long reach QSFP, 40GBASE-LR4 SFP+ pluggable modules: <ul style="list-style-type: none"> • Short reach SFP+, 10GBASE-SR • Long reach SFP+, 10GBASE-LR SFP pluggable modules: <ul style="list-style-type: none"> • Short reach SFP, 1000BASE-SX • Long reach SFP, 1000BASE-LX • Pluggable Copper, 1000BASE-T 		
USB Port	Yes		
RS-232C Console	RJ-45 Serial Connection		
Power	Auto-range power supply (80 plus gold certified): AC: 100-240 V, 47-63 Hz DC: -42~-72 V Power consumption:600W Dual power supply is optional	Auto-range power supply (80 plus gold certified): AC: 100-240 V, 47-63 Hz DC: -42~-72 V Power consumption:600W Dual power supply	Auto-range power supply (80 plus gold certified): AC: 100-240 V, 47-63 Hz DC: -42~-72 V Power consumption:670W Dual power supply
Heat dissipation	2050 BTU/h	2050 BTU/h	2290 BTU/h
Dimensions	Width: 432 mm (17 in) Depth: 537 mm (17 in) Height: 88 mm (3.4 in / 2U) EIA Rack or Standalone: 482 mm (19 in)	Width: 432 mm (17 in) Depth: 537 mm (17 in) Height: 88 mm (3.4 in / 2U) EIA Rack or Standalone: 482 mm (19 in)	Width: 432 mm (17 in) Depth: 600 mm (17 in) Height: 88 mm (3.4 in / 2U) EIA Rack or Standalone: 482 mm (19 in)
Weight (Std/XL/Extreme)	Single power supply: 13.2Kg (29.1lbs) / 13.7Kg (30.20 lbs) / 14.7Kg (32.40 lbs) Dual power supply: 14.35 Kg (31.63 lbs) / 14.85 Kg (32.73 lbs)/15.85 Kg (34.95 lbs)	Dual power supply: 14.35 Kg (31.63 lbs) / 14.85 Kg (32.73 lbs)/15.85 Kg (34.95 lbs)	Dual power supply: 16.15 Kg (35.53 lbs) / 16.65 Kg (36.63 lbs)/17.65 Kg (38.83 lbs)
Environmental	Operating temperature: 0-40 °C (32-104 °F) Humidity: 10% to 95% non-condensing		
Certifications	Safety: CE LVD (EN 60950-1), CB - IEC 60950-1, CCC, cTUVus EMC: CE EMC (EU directive 2004/108/EC), FCC Part 15B Class A, ICES-003, VCCI, C-Tick RoHS Compliant (EU directive 2011/65/EC) 6420/6420p has NEBS version		