

## THUNDER ADC PHYSICAL APPLIANCE

<b>PERFORMANCE</b>	<b>THUNDER 840 ADC</b>	<b>THUNDER 930 ADC</b>	<b>THUNDER 1030S ADC</b>	<b>THUNDER 3030S ADC</b>	<b>THUNDER 3040 ADC</b>
Application Throughput (L4/L7)	5 Gbps / 5 Gbps	5 Gbps / 5 Gbps	10 Gbps / 10 Gbps	30 Gbps / 30 Gbps	30 Gbps / 30 Gbps
Layer 4 CPS	200K	200K	450K	750K	750K
Layer 4 HTTP RPS	1 Million	1 Million	2 Million	3 Million	3 Million
Layer 4 Concurrent Sessions	16 Million	16 Million	32 Million	64 Million	64 Million
Layer 7 CPS (1:1)*1	50K	50K	150K	250K	280K
SSL Bulk Throughput*2	1 Gbps	1 Gbps	7 Gbps	11 Gbps	11 Gbps
SSL CPS*2	RSA (1K): 2K RSA (2K): 500	RSA (1K): 1.9K RSA (2K): 400	RSA (1K): 25K RSA (2K): 7K	RSA (1K): 47K RSA (2K): 14K	RSA: 30K ECDSA: 20K
DDoS Protection (SYN Flood) SYN/sec	1.7 Million	2 Million	4 Million	7.5 Million	8 Million
Application Delivery Partitions (ADP)	32	32	32	64	64
<b>NETWORK INTERFACE</b>					
1 GE Copper	5	6	6	6	6
1 GE Fiber (SFP)	0	2	2	2	2
1/10 GE Fiber (SFP+)	2	2	2	4	4
Management Ports	Ethernet Mgmt port, RJ-45 console port		1 x Ethernet Mgmt port, 1 x RJ-45 console port, 1 x Lights Out Management		
<b>HARDWARE SPECIFICATIONS</b>					
Processor	Intel Communications Processor	Intel Xeon 2-core	Intel Xeon 4-core	Intel Xeon 4-core	Intel Xeon 4-core
Memory (ECC RAM)	8 GB	8 GB	8 GB	16 GB	16 GB
Storage	SSD	SSD	SSD	SSD	SSD
Hardware Acceleration	Software	Software	Software	Software	Software
SSL Security Processor ('S' Models)	N/A	N/A	Yes	Yes	Yes
Dimensions (inches)	1.75 (H) x 17 (W) x 12 (D)	1.75 (H) x 17.5 (W) x 17.45 (D)	1.75 (H) x 17.5 (W) x 17.45 (D)	1.75 (H) x 17.5 (W) x 17.45 (D)	1.75 (H) x 17.5 (W) x 17.45 (D)
Rack Units (Mountable)	1U	1U	1U	1U	1U
Unit Weight	8.8 lbs	17.8 lbs 19.9 lbs (RPS)	18.0 lbs 20.1 lbs (RPS)	20.1 lbs	20.6 lbs
Power Supply (DC option available)	Single 150W (AC only)	Single 600W*	Single 600W*	Dual 600W RPS	Dual 600W RPS
	100 - 240 VAC 50-60Hz	80 Plus Platinum efficiency, 100 - 240 VAC, 50 - 60 Hz			
Power Consumption (Typical/Max)*3	57W / 75W	66W / 76W	98W / 108W	131W / 139W	180W / 240W
Heat in BTU/hour (Typical/Max)*3	195 / 256	225 / 259	334 / 369	447 / 474	615 / 819
Cooling Fan	Single Fixed Fan	Hot Swap Smart Fans			
Operating Ranges	Temperature 0° - 40° C   Humidity 5% - 95%				
	FCC Class A, UL, CE, TUV, CB, VCCI, CCC, BSMI, RCM   RoHS	FCC Class A, UL, CE, TUV, CB, VCCI, CCC, MSIP, BSMI, RCM, FAC   RoHS	FCC Class A, UL, CE, TUV, CB, VCCI, CCC, KCC, BSMI, RCM, FAC   RoHS, CC EAL2+,	FCC Class A, UL, CE, TUV, CB, VCCI, CCC, KCC, BSMI, RCM, EAC, FAC   RoHS, CC EAL2+, FIPS 140-2**5	FCC Class A, UL, CE, CB, GS*, VCCI, CCC, KCC, BSMI, RCM   RoHS
Standard Warranty	90-Day Hardware and Software				

## Thunder ADC Physical Appliance Specifications (Cont.)

<b>PERFORMANCE</b>	<b>THUNDER 3230 ADC</b>	<b>THUNDER 3430 ADC</b>	<b>THUNDER 4430 ADC</b>	<b>THUNDER 4440 ADC</b>	<b>THUNDER 5330 ADC</b>
Application Throughput (L4/L7)	30 Gbps / 30 Gbps	42 Gbps / 42 Gbps	38 Gbps / 38 Gbps	80 Gbps / 80 Gbps	78 Gbps / 78 Gbps
Layer 4 CPS	1.5 Million	2.5 Million	2.7 Million	2.9 Million	3.1 Million
Layer 4 HTTP RPS	7.5 Million	12 Million	12 Million	15 Million	15 Million
Layer 4 Concurrent Sessions	64 Million	128 Million	128 Million	128 Million	128 Million
Layer 7 CPS (1:1) <sup>1</sup>	420K	620K	620K	750K	770K
SSL Bulk Throughput <sup>2</sup>	14 Gbps	20 Gbps	20 Gbps	25 Gbps	30 Gbps
SSL CPS <sup>2</sup>	RSA: 40K ECDSA: 26K	RSA: 45K ECDSA: 32K	RSA (1K): 86K RSA (2K): 84K	RSA: 70K ECDSA: 42K	RSA: 70K ECDSA: 50K
DDoS Protection (SYN Flood) SYN/sec	55 Million	55 Million	55 Million	166 Million	112 Million
Application Delivery Partitions (ADP)	64	127	127	127	127
<b>NETWORK INTERFACE</b>					
1 GE Fiber (SFP)	4	4	0	0	0
1/10 GE Fiber (SFP+)	4	4	16	24	8
40 GE Fiber (QSFP+)	0	0	4	4	0
Management Ports	1 x Ethernet Mgmt port, 1 x RJ-45 console port, 1 x Lights Out Management				
<b>HARDWARE SPECIFICATIONS</b>					
Processor	Intel Xeon 4-core	Intel Xeon 6-core	Intel Xeon 6-core	Intel Xeon 6-core	Intel Xeon 10-core
Memory (ECC RAM)	16 GB	32 GB	32 GB	32 GB	32 GB
Storage	SSD	SSD	SSD	SSD	SSD
Hardware Acceleration	FTA-4	FTA-4	FTA-3	2 x FTA-4	FTA-4
SSL Security Processor ('S' Models)	Yes	Yes	Yes	Yes	Yes
Dimensions (inches)	1.75 (H) x 17.5 (W) x 17.15 (D)	1.75 (H) x 17.5 (W) x 17.15 (D)	1.75 (H) x 17 (W) x 24.6 (D)	1.75 (H) x 17.5 (W) x 30 (D)	1.75 (H) x 17.5 (W) x 17.15 (D)
Rack Units (Mountable)	1U	1U	1U	1U	1U
Unit Weight	23 lbs	23 lbs	25.2 lbs	32.5 lbs	23 lbs
Power Supply (DC option available)	Dual 600W RPS	Dual 600W RPS	Dual 600W RPS	Dual 1100W RPS	Dual 600W RPS
	80 Plus Platinum efficiency, 100 - 240 VAC, 50 – 60 Hz				
Power Consumption (Typical/Max) <sup>3</sup>	190W / 240W	210W / 260W	266W / 319W	360W / 445W	210W / 260W
Heat in BTU/hour (Typical/Max) <sup>3</sup>	648 / 819	717 / 887	908 / 1,088	1,229 / 1,519	717 / 887
Cooling Fan	Hot Swap Smart Fans				
Operating Ranges	Temperature 0° - 40° C   Humidity 5% - 95%				
Regulatory Certifications	FCC Class A, UL, CE, GS, CB, VCCI, CCC, KCC, BSMI, RCM, NEBS   RoHS	FCC Class A, UL, CE, GS, CB, VCCI, CCC, KCC, BSMI, RCM, NEBS   RoHS	FCC Class A, UL, CE, TUV, CB, VCCI, CCC, KCC, BSMI, RCM, NEBS   RoHS, CC EAL2+	FCC Class A, UL, CE, GS, CB, VCCI, CCC, KCC, BSMI, RCM   RoHS, FIPS 140-2 <sup>1</sup> 5	FCC Class A, UL, CE, GS, CB, VCCI, CCC, BSMI, RCM, NEBS   RoHS
Standard Warranty	90-Day Hardware and Software				

## Thunder ADC Physical Appliance Specifications (Cont.)

<b>PERFORMANCE</b>	<b>THUNDER 5430-11</b> <sub>ADC</sub>	<b>THUNDER 5440</b> <sub>ADC</sub>	<b>THUNDER 5630</b> <sub>ADC</sub>	<b>THUNDER 5840</b> <sub>ADC</sub>	<b>THUNDER 6430</b> <sub>ADC</sub>
Application Throughput (L4/L7)	79 Gbps / 78 Gbps	100 Gbps / 100 Gbps	79 Gbps / 78 Gbps	115 Gbps / 113 Gbps	150 Gbps / 145 Gbps
Layer 4 CPS	3.7 Million	4 Million	6 Million	6.2 Million	5.3 Million
Layer 4 HTTP RPS	20 Million	22 Million	32.5 Million	31 Million	31 Million
Layer 4 Concurrent Sessions	256 Million	256 Million	256 Million	256 Million	256 Million
Layer 7 CPS (1:1) <sup>1</sup>	790K	950K	1.5 Million	1.5 Million	1.35 Million
SSL Bulk Throughput <sup>2</sup>	30 Gbps	45 Gbps	45 Gbps	55 Gbps	46 Gbps
SSL CPS <sup>2</sup>	RSA (1K): 111K RSA (2K): 110K	RSA: 100K ECDSA: 60K	RSA (1K): 180K RSA (2K): 174K	RSA: 150K ECDSA: 90K	RSA (1K): 134K RSA (2K): 130K
DDoS Protection (SYN Flood) SYN/sec	112 Million	166 Million	100 Million	166 Million	223 Million
Application Delivery Partitions (ADP)	1,023	1,023	1,023	1,023	1,023
<b>NETWORK INTERFACE</b>					
1 GE Fiber (SFP)	0	0	4	0	0
1/10 GE Fiber (SFP+)	16	24	24	24	16
40 GE Fiber (QSFP+)	4	4	4	4	4
Management Ports	1 x Ethernet Mgmt port, 1 x RJ-45 console port, 1 x Lights Out Management				
<b>HARDWARE SPECIFICATIONS</b>					
Processor	Intel Xeon 10-core	Intel Xeon 12-core	2 x Intel Xeon 8-core	Intel Xeon 18-core	2 x Intel Xeon 8-core
Memory (ECC RAM)	64 GB	64 GB	128 GB	64 GB	128 GB
Storage	SSD	SSD	SSD	SSD	SSD
Hardware Acceleration	2 x FTA-3	2 x FTA-4	4 x FTA-2	2 x FTA-4	4 x FTA-3
SSL Security Processor ('S' Models)	Yes	Yes	Yes	Yes	Yes
Hardware Security Module (HSM)	N/A	Yes	N/A	N/A	N/A
Dimensions (inches)	1.75 (H) x 17 (W) x 24.6 (D)	1.75 (H) x 17.5 (W) x 30 (D)	5.3 (H) x 16.9 (W) x 28 (D)	1.75 (H) x 17.5 (W) x 30 (D)	1.75 (H) x 17.5 (W) x 30 (D)
Rack Units (Mountable)	1U	1U	3U	1U	1U
Unit Weight	25.6 lbs	32.5 lbs	72 lbs / 76.5 lbs <sup>4</sup>	32.5 lbs	39 lbs
Power Supply (DC option available)	Dual 600W RPS	Dual 1100W RPS	2+2 1100W RPS	Dual 1100W RPS	Dual 1100W RPS
	80 Plus Platinum efficiency, 100 - 240 VAC, 50 - 60 Hz				
Power Consumption (Typical/Max) <sup>3</sup>	288W / 345W	360W / 445W	780W / 890W	375W / 470W	590W / 680W
Heat in BTU/hour (Typical/Max) <sup>3</sup>	983 / 1,178	1,229 / 1,519	2,661 / 3,037	1,280 / 1,604	2,013 / 2,320
Cooling Fan	Hot Swap Smart Fans				
Operating Ranges	Temperature 0° - 40° C   Humidity 5% - 95%				
Regulatory Certifications	FCC Class A, UL, CE, TUV, CB, VCCI, CCC, KCC, BSMI, RCM   RoHS	FCC Class A, UL, CE, GS, CB, VCCI, CCC, BSMI, RCM   RoHS	FCC Class A, UL, CE, TUV, CB, VCCI, KCC*, EAC, FAC   RoHS, CC EAL2+	FCC Class A, UL, CE, GS, CB, VCCI, CCC, BSMI, RCM   RoHS	FCC Class A, UL, CE, TUV, CB, VCCI, CCC, KCC, BSMI, RCM, EAC, FAC, NEBS   RoHS, CC EAL2+
Standard Warranty	90-Day Hardware and Software				

## Thunder ADC Physical Appliance Specifications (Cont.)

<b>PERFORMANCE</b>	<b>THUNDER 6440</b> ADC	<b>THUNDER 6630</b> ADC	<b>THUNDER 7440</b> ADC
Application Throughput (L4/L7)	160 Gbps / 150 Gbps	150 Gbps / 145 Gbps	220 Gbps / 200 Gbps
Layer 4 CPS	5.5 Million	7.1 Million	10.5 Million
Layer 4 HTTP RPS	31 Million	38 Million	44 Million
Layer 4 Concurrent Sessions	256 Million	256 Million	256 Million
Layer 7 CPS (1:1)*1	1.4 Million	1.6 Million	2.8 Million
SSL Bulk Throughput*2	60 Gbps	64 Gbps	75 Gbps
SSL CPS*2	RSA (1K): 180K RSA (2K): 180K	RSA (1K): 190K RSA (2K): 174K	RSA (1K): 200K RSA (2K): 200K
DDoS Protection (SYN Flood) SYN/sec	332 Million	223 Million	332 Million
Application Delivery Partitions (ADP) L3V	1,023	1,023	1,023
<b>NETWORK INTERFACE</b>			
1/10 GE Fiber (SFP+)	48	12	48
40 GE Fiber (QSFP+)	4	0	4
100 GE Fiber (CXP)	0	4	0
Management Ports	1 x Ethernet Mgmt port, 1 x RJ-45 console port, 1 x Lights Out Management		
<b>HARDWARE SPECIFICATIONS</b>			
Processor	2 x Intel Xeon 10-core	2 x Intel Xeon 12-core	2 x Intel Xeon 18-core
Memory (ECC RAM)	128 GB	128 GB	128 GB
Storage	SSD	SSD	SSD
Hardware Acceleration	3 x FTA-4	4 x FTA-3	3 x FTA-4
SSL Security Processor ('S' Models)	Yes	Yes	Yes
Hardware Security Module (HSM)	N/A	Yes	N/A
Dimensions (inches)	1.75 (H) x 17.5 (W) x 30 (D)	5.3 (H) x 16.9 (W) x 28 (D)	1.75 (H) x 17.5 (W) x 30 (D)
Rack Units (Mountable)	1U	3U	1U
Unit Weight	36 lbs	74.5 lbs / 78 lbs*4	36 lbs
Power Supply (DC option available)	Dual 1100W RPS	2+2 1100W RPS	Dual 1100W RPS
	80 Plus Platinum efficiency, 100 - 240 VAC, 50 - 60 Hz		
Power Consumption (Typical/Max)*3	480W / 550W	995W / 1,150W	690W / 820W
Heat in BTU/hour (Typical/Max)*3	1,638 / 1,877	3,395 / 3,924	2,355 / 2,798
Cooling Fan	Hot Swap Smart Fans		
Operating Ranges	Temperature 0° - 40° C   Humidity 5% - 95%		
Regulatory Certifications	FCC Class A, UL, CE, GS, CB, VCCI, CCC, BSMI, RCM   RoHS	FCC Class A, UL, CE, TUV, CB, VCCI, KCC*, EAC, FAC   RoHS, CC EAL2+, FIPS 140-2**5	FCC Class A, UL, CE, GS, CB, VCCI, CCC, KCC, BSMI, RCM   RoHS, FIPS 140-2**5
Standard Warranty	90-Day Hardware and Software		

The specifications, performance numbers are subject to change without notice, and may vary depending on configuration and environmental conditions.

\*1 Layer 7 connections per second - measures number of new HTTP connections (1 HTTP request per TCP connection, without TCP connection reuse) within 1 second | + FIPS model must be purchased. | \*2 Layer 4 CPS per Watt (Max) | \*3 For FIPS 140-2 Level 2 validated, FIPS models must be purchased | \*4 With maximum SSL | \*5 With base model. Number varies by SSL model | \*6 No dedicated hardware but FTA-4 FPGA handles select switching/routing functions | \*7 Cipher "AES128-SHA256" with RSA 2K keys, unless noted, are used for RSA cases, "ECDHE-ECDHE-AES128-SHA256" with EC P-256 are used for PFS cases. | ^ Certification in process | + Optional RPS available

# THUNDER SPE PHYSICAL APPLIANCE

<b>PERFORMANCE</b>	<b>THUNDER 4435 SPE</b>	<b>THUNDER 5435 SPE</b>	<b>THUNDER 6435 SPE</b>	<b>THUNDER 6635 SPE</b>
Application Throughput (L4/L7)	38 Gbps / 38 Gbps	78 Gbps / 77 Gbps	153 Gbps / 150 Gbps	150 Gbps / 145 Gbps
Layer 4 CPS	3.1 Million	3.7 Million	7.1 Million	7.1 Million
Layer 4 HTTP RPS	12 Million	20 Million	38 Million	38 Million
Layer 4 Concurrent Sessions	128 Million	256 Million	256 Million	256 Million
Layer 7 CPS (1:1)*1	660K	790K	1.6 Million	1.6 Million
SSL Bulk Throughput (RSA 2K keys)*2	26 Gbps	37 Gbps	60 Gbps	64 Gbps
SSL CPS (RSA 2K keys)*2	65K	65K	135K	174K
DDoS Protection (SYN Flood) SYN/sec	55 Million	112 Million	223 Million	223 Million
Application Delivery Partitions (ADP) L3V	1,023	1,023	1,023	1,023
<b>NETWORK INTERFACE</b>				
1/10 GE Fiber (SFP+)	16	16	16	12
40 GE Fiber (QSFP+)	0	4	4	0
100 GE Fiber (CXP)	0	0	0	4
Management Ports	1 x Ethernet Mgmt port, 1 x RJ-45 console port, 1 x Lights Out Management			
<b>HARDWARE SPECIFICATIONS</b>				
Processor (Intel Xeon)	10-core	10-core	2 x 12-core	2 x 12-core
Memory (ECC RAM)	64 GB	64 GB	128 GB	128 GB
Storage	SSD	SSD	SSD	SSD
Hardware Acceleration	FTA-3, SPE	2 x FTA-3, SPE	4 x FTA-3, SPE	4 x FTA-3, SPE
SSL Security Processor ('S' Models)	Yes	Yes	Yes	Yes
Dimensions (inches)	1.75 (H) x 17.5 (W) x 30 (D)	1.75 (H) x 17.5 (W) x 30 (D)	1.75 (H) x 17.5 (W) x 30 (D)	5.3 (H) x 16.9 (W) x 28 (D)
Rack Units (Mountable)	1U	1U	1U	3U
Unit Weight	34.5 lbs	35.5 lbs	39 lbs	74.5 lbs / 78 lbs*4
Power Supply (DC option available)	350W / 420W	400W / 480W	620W / 710W	995W / 1,150W
	80 Plus Platinum efficiency, 100 - 240 VAC, 50 - 60 Hz			
Power Consumption (Typical/Max)*3	350W / 420W	400W / 480W	620W / 710W	995W / 1,150W
Heat in BTU/hour (Typical/Max)*3	1,195 / 1,433	1,365 / 1,638	2,116 / 2,423	3,395 / 3,924
Cooling Fan	Hot Swap Smart Fans			
Operating Ranges	Temperature 0° - 40° C   Humidity 5% - 95%			
Regulatory Certifications	FCC Class A, UL, CE, TUV, CB, VCCI, CCC, MSIP, BSMI, RCM, EAC, NEBS   RoHS	FCC Class A, UL, CE, TUV, CB, VCCI, CCC, BSMI, RCM, EAC, NEBS   RoHS	FCC Class A, UL, CE, TUV, CB, VCCI, CCC, BSMI, RCM, EAC, NEBS   RoHS	FCC Class A, UL, CE, TUV, CB, VCCI, EAC, FAC   RoHS
Standard Warranty	90-Day Hardware and Software			

The specifications, performance numbers are subject to change without notice, and may vary depending on configuration and environmental conditions.

\*1 Layer 7 connections per second - measures number of new HTTP connections (1 HTTP request per TCP connection, without TCP connection reuse) within 1 second | \*2 With maximum SSL | \*3 With base model. Number varies by SSL model | \*4 Layer 4 CPS per Watt (Max)

# THUNDER HVA PHYSICAL APPLIANCE

	THUNDER <b>3030S</b> HVA	THUNDER <b>3530S</b> HVA
<b>PERFORMANCE</b>		
Throughput*	35 Gbps	100 Gbps
vThunder Virtual Appliances Instances (Included)	8	40
<b>NETWORK INTERFACE</b>		
1 GE Copper	6	4
1 GE Fiber (SFP)	2	2
1/10 GE Fiber (SFP+)	4	12
Management Ports	1 x Ethernet Mgmt port, 1 x RJ-45 console port, 1 x Lights Out Management	
<b>HARDWARE SPECIFICATIONS</b>		
Processor (Intel Xeon)	4-core	2 x 10-core
Memory (ECC RAM)	32 GB	128 GB
Storage	SSD	SSD
Hardware Acceleration	Software	Software
SSL Security Processor (SR-IOV enabled)	Yes	Yes
Dimensions (inches)	1.75 (H) x 17.5 (W) x 17.45 (D)	1.75 (H) x 17.25 (W) x 22.8 (D)
Rack Units (Mountable)	1U	1U
Unit Weight	20.1 lbs	29.6 lbs
Power Supply (DC option available)	Dual 600W RPS 80 Plus Platinum efficiency, 100 - 240 VAC, 50 – 60 Hz	Dual 750W RPS 80 Plus Gold efficiency, 100 - 240 VAC, 50 – 60 Hz
Power Consumption (Typical/Max)	131W / 139W	380W / 476W
Heat in BTU/hour (Typical/Max)	447 / 474	1,297 / 1,624
Cooling Fan	Hot Swap Smart Fans	Hot Swap Smart Fans
Operating Ranges	Temperature 0° - 40° C   Humidity 5% - 95%	
Regulatory Certifications	FCC Class A‡, UL‡, CE‡, TUV‡, CB‡, VCCI‡, China CCC‡, BSMI‡, RCM‡, EAC‡, FAC‡	
Standard Warranty	90-Day Hardware and Software	

The specifications, performance numbers are subject to change without notice, and may vary depending on configuration and environmental conditions.

\* Performance varies by number of virtual machines running and hardware resources assigned | ‡ Certification in process |

# vTHUNDER VIRTUAL APPLIANCE

## vTHUNDER ADC

Supported Hypervisors	VMware ESXi 4.1 or higher KVM QEMU 1.0 or higher (VirtIO, OvS with DPDK, SR-IOV) Microsoft Hyper-V on Windows Server 2008 R2 or higher						
Hardware Requirements	See installation guide						
Standard Warranty	90-Day Software						
Bandwidth Licenses	Lab	200 Mbps	1 Gbps	4 Gbps	8 Gbps	10 Gbps	20 Gbps
VMware ESXi	●	●	●	●	●	●	
KVM (KVM   OvS-DPDK)	●	●	●	●	●	●	●
KVM	●	●	●	●	●		
Microsoft Hyper-V	●	●	●	●	● <sup>+</sup>		

\* 8 Gbps license not recommended for Microsoft Hyper-V

## vTHUNDER ADC FOR CLOUD

### AWS

### AZURE

Throughput	<ul style="list-style-type: none"> <li>Pre-installed License: up to 500 Mbps</li> <li>BYOL (Bring Your Own License) Editions: up to 1 Gbps</li> </ul>	<ul style="list-style-type: none"> <li>Pre-installed License: up to 500 Mbps</li> <li>BYOL (Bring Your Own License) Editions: up to 500 Mbps</li> </ul>
Image Format	Amazon AMI	Microsoft VHD
Bandwidth Licenses	vThunder for AWS Pre-installed License: <ul style="list-style-type: none"> <li>10 Mbps</li> <li>50 Mbps</li> <li>100 Mbps</li> <li>200 Mbps</li> <li>500 Mbps</li> </ul> vThunder for AWS BYOL Editions: <ul style="list-style-type: none"> <li>Lab/Developer</li> <li>200 Mbps</li> <li>1 Gbps</li> </ul>	vThunder for Azure Pre-installed License: <ul style="list-style-type: none"> <li>10 Mbps</li> <li>50 Mbps</li> <li>100 Mbps</li> <li>200 Mbps</li> <li>500 Mbps</li> </ul> vThunder for Azure BYOL Editions: <ul style="list-style-type: none"> <li>Lab/Developer</li> <li>200 Mbps</li> <li>500 Mbps</li> </ul>

## THUNDER ADC FOR BARE METAL

System Requirements	Minimum Hardware Requirement <ul style="list-style-type: none"> <li>Intel x86-based CPUs with minimum of 4 cores</li> <li>16 GB RAM</li> <li>80 GB of free disk space</li> <li>2 Ethernet interfaces (3 or more are recommended)</li> <li>Intel Network Adapters and drivers including igb, ixgbe, and i40e.</li> </ul>
Reference Platforms	Cisco UCS, Dell PowerEdge, Ericsson Hyperscale Datacenter System (HDS), HP ProLiant and more.
Bandwidth Licenses*	10 Gbps (4 cores), 20 Gbps (8 cores) and 40 Gbps (14 cores)
Standard Warranty	90-Day Software

\* Licenses are tied with maximum number of cores which can be allocated to ACOS

## LEARN MORE

ABOUT A10 NETWORKS

### CONTACT US

[a10networks.com/contact](http://a10networks.com/contact)

©2017 A10 Networks, Inc. All rights reserved. A10 Networks, the A10 Networks logo, ACOS, Thunder and SSL Insight are trademarks or registered trademarks of A10 Networks, Inc. in the United States and other countries. All other trademarks are property of their respective owners. A10 Networks assumes no responsibility for any inaccuracies in this document. A10 Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice. For the full list of trademarks, visit: [www.a10networks.com/a10-trademarks](http://www.a10networks.com/a10-trademarks).

Part Number: A10-DS-15109-EN-16 JUL 2017