

## A10 Thunder on Dell Technologies OEM Solution Bundle

## Single Service Platform (SSP) Specifications

The SSP range consists of A10's cloud-ready software and purpose-built Dell Technologies hardware, with an inclusive license\*4 that has the capabilities of delivering Application Delivery Controller (ADC), SSL Insight (SSLi), and Carrier Grade Networking (CGN) solutions along with an expanded feature set of A10 capabilities.

	Dell Technologies VEP4600	Dell Technologies R640		Dell Technologies R740	
		10GE NIC Model	100GE NIC Model	10GE NIC Model	100GE NIC Model
Thunder ADC Performance					
Application Throughput (L4 / L7)	10 Gbps / 7.5 Gbps	40 Gbps / 40 Gbps	60 Gbps / 60 Gbps	75 Gbps / 75 Gbps	100 Gbps / 100 Gbps
Connections Per Second (L4 / L7)*1	350K / 175K	2 Million / 1 Million	2 Million / 1 Million	2 Million / 1 Million	3 Million / 1 Million
SSL Bulk Throughput*2	2 Gbps	32 Gbps	38 Gbps	45 Gbps	66 Gbps
SSL CPS (RSA / ECDSA)*2	3.5K / 7K	100K / 45K	107K / 72K	120K / 60K	131K / 85K
Thunder CGN Performance					
Throughput	12 Gbps	30 Gbps	60 Gbps	60 Gbps	100 Gbps
Full TCP Connections Per Second	500K	1.5 Million	1.5 Million	2 Million	2 Million
Concurrent Sessions	50 Million	100 Million	100 Million	100 Million	100 Million
Thunder SSLi Performance <sup>*3</sup>					
SSL Insight Throughput	Not Supported	8.5 Gbps	12.5 Gbps	16.5 Gbps	30 Gbps
SSL Insight CPS (RSA / ECDHE)	Not Supported	28.5K / 13.5K	28.5K / 14.5K	30K / 18.5K	30K / 18.5K
SSL Insight Concurrent Sessions	Not Supported	3 Million	3 Million	3 Million	3 Million
Network Interface					
1 GE (BASE-T)	6	2	2	2	2
1/10 GE Fiber (SFP+)	4	6	2	10	10
100 GE Fiber (QSFP28)	0	0	2	0	4
Hardware Specifications					
Processor	1 x Intel Xeon 8-core	2 x Intel Xeon 20-core		2 x Intel Xeon 20-core	
Memory	16 GB	192 GB		192 GB	
Storage	SSD	2× SSD		2 x SSD	
TLS/SSL Security Processor	Built-in	2 x Security card (PCle)		2 x Dual-chip security card (PCle)	
Power Supply (DC option available)	Single 230W power supply	Dual 750W power supply		Dual 2000W power supply	

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

<sup>\*1</sup> Layer 7 connections per second - measures number of new HTTP connections (1 HTTP request per TCP connection, without TCP connection reuse ) within 1 second

<sup>\*2</sup> RSA (2K keys) cipher: "TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA256", ECDSA (EC P-256) cipher: "TLS\_ECDHE\_ECDSA\_WITH\_AES\_128\_CBC\_SHA256"

<sup>\*3</sup> SSLi performance is tested in L3, dual-partition mode deployment, with RSA (2K keys) cipher "TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA256" and ECDSA (EC P-256) cipher "TLS\_ECDHE\_RSA\_WITH\_AES\_128\_CBC\_SHA256"

<sup>\*4</sup> Single service platform is licensed under the Convergent Firewall (CFW) license. Check with your A10 Networks sales representative for the latest information on full feature testing and validation.



## Multi-tenant Virtual Platform (MVP) Specifications

A10 Thunder Multi-tenant Virtual Platform (MVP) is an advanced platform enabling multiple virtual instances or services on a single platform, that has the capabilities of delivering Application Delivery Controller (ADC) and Carrier Grade Networking (CGN) solutions along with an expanded feature set of A10 capabilities.

	A10 Thunder MVP⁺			
Performance with ADC				
Application Throughput (L4 / L7)	200 Gbps / 200 Gbps			
Connections Per Second (L4 / L7)*1	4.7 Million / 2.7 Million			
SSL Bulk Throughput*2	60 Gbps			
SSL CPS (RSA / ECDSA)*2	166K / 83K			
Performance with CGNAT				
Throughput	200 Gbps			
Full TCP Connections Per Second	3 Million			
Concurrent Sessions	256 Million			
Network Interface				
25/10GE Fiber (SFP28/SFP+)	4			
100/40GE Fiber (QSFP28/QSFP+)	4			
Hardware Specifications				
Processor	2 x Intel Xeon 24-core			
Memory	256 GB			
Storage	2×SSD			
TLS/SSL Security Processor	Integrated QAT			
Power Supply (DC option available)	Dual 1400W power supply			

Specifications and 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 RSA (2K keys) cipher: "TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA256", ECDSA (EC P-256) cipher: "TLS\_ECDHE\_ECDSA\_WITH\_AES\_128\_CBC\_SHA256" + Available bandwidth license: 50, 100, 150, 200 Gbps. Maximum throughput performance depends on the license.

All Thunder MVP performance specifications are aggregate numbers that use the following VM profiles:

- A10 Thunder MVP for ADC is tested on Dell R760 with 14-VM profile (6 vCPUs, 16 GB memory, 60GB storage, 4 SSL virtual functions (VFs) assigned on each vThunder)
- A10 Thunder MVP for CGN is tested on Dell R760 with 2-VM profile (32 vCPUs, 64 GB memory, 100GB storage assigned on each vThunder)

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