## DefensePro Tech Specs





	DefensePro 6	DefensePro 20	DefensePro 60	DefensePro 110/220	DefensePro 200/400	DefensePro 400/800
PROGRAMMABLE MITIGATION	PERFORMANCE					
On-Demand Scalable Clean Throughput Licenses	DefensePro 6-02 - 200 Mbps DefensePro 6-05 - 500 Mbps DefensePro 6-1 - 1 Gbps DefensePro 6-2 - 2 Gbps DefensePro 6-3 - 3 Gbps DefensePro 6-5 - 5 Gbps	DefensePro 20-2 - 2 Gbps DefensePro 20-4 - 4 Gbps DefensePro 20-8 - 8 Gbps DefensePro 20-12 - 12 Gbps	DefensePro 60-10 - 10 Gbps DefensePro 60-20 - 20 Gbps DefensePro 60-40 - 40 Gbps	DefensePro 110-40 - 40 Gbps DefensePro 220-120 - 120 Gbps	DefensePro 200-80 - 80 Gbps DefensePro 400-160 - 160 Gbps	DefensePro 400-200 - 200Gbps DefensePro 800-380 - 380Gbps
Max Programmable Mitigation Throughput	6 Gbps	20 Gbps	60 Gbps	110 Gbps/220 Gbps	200 Gbps/400 Gbps	400 Gbps/800 Gbps
Max Attack Concurrent Sessions	Unlimited					
DDoS Flood Attack Prevention Rate	7,2 Mpps	27,5 Mpps	27,5 Mpps	50 Mpps/142 Mpps	292 Mpps	1,119 Mpps
SSL/TLS Connections per Second	20KCPS (RSA 2K)	95KCPS (RSA 2K)	95KCPS (RSA 2K)	150KCPS (RSA 2K)	-	-
Latency	< 60 microseconds					
Real-Time Signatures	Detect attacks and protect in less than 18 seconds					
BLOCKING PERFORMANCE						
Maximal DDoS Blocking Throughput	-	240 Gbps	240 Gbps	800 Gbps	760 Gbps	3.4 Tbps
Maximal DDoS Blocking (PPS)	-	0.357 Billion	0.357 Billion	1.19 Billion	0.827 Billion	2.7 Billion
INSPECTION PORTS						
10/100/1000 Copper Ethernet	6	-	-	-	-	-
1 GE / 10 GE	2 (SFP+)	24 (SFP+)	24 (SFP+)	-	20 (SFP+)	-
10 GE / 25 GE	-	-	-	24 (SFP+/SFP28)	-	-
40 GE	-	-	-	max. 8/min. 4 (QSFP+)	4 (QSFP+)	-
100 GE	-	-	-	max. 4/min. 0 (QSFP28)	4 (QSFP28)	18 (QSFP28)
400 GE <sup>1</sup>	-	-	-	-	-	4 (QSFP-DD)
MANAGEMENT PORTS						
10/100/1000 Copper Ethernet	2					
Management Console	RJ-45					
OPERATION MODE						
Network Operation	Transparent L2 Forwarding, IP Forwarding					
Deployment Modes	Inline, SPAN port monitoring, Copy port monitoring, Out-of-path mitigation (scrubbing center solution)					
Tunneling Protocols	VLAN Tagging, L2TP, MPLS, GRE, GTP, IPinIP					
IPv6	Yes					
Jumbo Frame	- Supported					
Block Actions	Drop packet, reset (source, destination, both), suspend (source IP address, source port, destination IP address, destination port or any combination), challenge-response for TCP, HTTP and DNS suspicious traffic					

<sup>&</sup>lt;sup>1</sup> Requires 400G connectivity, available at additional cost.

	DefensePro 6	DefensePro 20	DefensePro 60	DefensePro 110/220	DefensePro 200/400	DefensePro 400/800	
HIGH AVAILABILITY							
Fail-open/fail-close <sup>2</sup>	Internal fail-open/fail-close for integrated copper ports; Internal fail-close for fiber ports or optical transceivers (i.e., SFP+)	Internal fail-close for optical transceivers (i.e., SFP+)		Internal fail-close for optical transceivers (e.g. SFP+, SFP28, QSFP+, SFP28)		Internal fail-close for optical transceivers (e.g. SFP+, SFP28, QSFP+, SFP28	
Dual Power Supply	Yes, hot swappable						
PHYSICAL							
Dimensions (W x D x H) mm	436 x 406 x 44 mm (1U) EIA rack or standalone: 482 mm (19 in)	436 x 480 x 88 mm (2U) EIA rack or standalone: 482 mm (19 in)	436 x 480 x 88 mm (2U) EIA rack or standalone: 482 mm (19 in)	482 x 550 x 87 mm (2U) EIA rack or standalone: 482 mm (19 in)	424 x 600 x 88 mm (2U) EIA rack or standalone: 482 mm (19 in)	436 x 570x 88 mm (2U) EIA rack or standalone: 482 mm (19 in)	
Weight	Single power supply: 6 kg (13.2 lbs) Dual power supply: 6.5 kg (14 lbs)	Dual power supply: 13.2 kg (29 lbs)	Dual power supply: 13.2 kg (29 lbs)	Dual power supply: 14.5 Kg (31.9 lbs)	Dual power supply: 18.7 kg (41.2 lbs)	Dual power supply: 27.5 kg (60.6 lbs)	
Power Supply (Auto-range)	80 plus certified AC:100–120V/200–240V, 47–63 Hz DC: -36 to -72V	80 plus certified AC:100–120V/200–240V, 47–63 Hz DC: -36 to -72V	80 plus certified AC:100–120V/200–240V, 47–63 Hz DC: -36 to -72V	80 plus certified AC:100-120V/200-240V, 47-63 Hz DC: -36 to -72V	80 plus certified AC:100–120V/200–240V, 47–63 Hz DC: -36 to -72V	80 plus certified AC:100–120V/200–240V, 47–63 Hz DC: -41 to -72V	
Power Consumption	Single and dual power supply: 140W	Dual power supply: 320W		Dual power supply: 550W	Dual power supply: 890W	Dual power supply: 970W	
Heat Dissipation	Single and dual power supply: 480 BTU/h	Dual power supply: 1,088 BTU/h		Dual power supply: 1880 BTU/h	Dual power supply: 2,930 BTU/h	Dual power supply: 3,300 BTU/h	
Operating Temperature	0°-40°C (32°-104°F)						
Humidity	5% to 95% non-condensing						
COMPLIANCE & CERTIFICATIONS	3						
Compliance							
RoHS	Compliant (EU directive 2011/65/EU, 2015/863/EU)						
Safety/EMC/EMI & Certifications	JL/TUV, FCC (USA), IC (Canada), CE (Europe), UKCA (UK), RCM (Australia/ NZ), VCCI (Japan), KCC (Korea), EAC (Russia), CCC (China), BSMI (Taiwan), Anatel (Brazil), NOM (Mexico)						
	For more information visit: https://www.radware.com/newsroom/certifications-hardware/						
Warranty	1-year hardware and software maintenance						
Support	Certainty Support Program						

<sup>&</sup>lt;sup>2</sup> External fiber fail-open switch is available at additional cost.

## **DefensePro VA for Private Clouds**

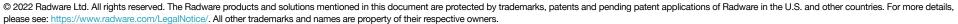
Hypervisor	KVM kernel 3.19, QEMU 2.0, VMware (ESX server versions: 6.0, 6.5, 6.7), OpenStack 16.1				
Minimum VM requirements	2 vCPUs, 16GB RAM, 10GB storage				
PERFORMANCE <sup>1</sup>					
OnDemand Scalable Throughput Licenses	DefensePro VA 200 Mbps, 500 Mbps, 1 Gbps, 2 Gbps, 5 Gbps, 10 Gbps, 2 Gbps <sup>2</sup> , 40 Gbps				
Max Mitigation Capacity/ Throughput	Up to 50 Gbps per DefensePro VA instance				
Max Legit Concurrent Sessions	1,000,000 sessions per vCPU				
Max Attack Concurrent Sessions	Unlimited				
Max DDoS Flood Attack Prevention Rate	Up to 950,000 pps per vCPU				
Latency	< 60 microseconds				
Real-Time Signatures	Detect attacks and protect in less than 18 seconds				
INSPECTION PORTS					
10 GE, 25 GE, 40 GE	2 (Intel® Ethernet Server Adapter X520, 10 GE; Intel® Ethernet Controller XL710, 40 GE), PCI Passthrough				
	4 (Intel® Ethernet Network Adapter XXV710, 10 GE, 25 GE), SRIOV				
	2 (Intel® Ethernet Network Controller E810 10GE, 25GE, 50GE, 100GE), SRIOV				
MANAGEMENT PORTS					
Ethernet	Via virtual interface (virtio)				
Management Console	KVM Virsh; VMware Serial Port				
OPERATION MODE					
Network Operation	Transparent L2 Forwarding/IP Forwarding				
Deployment Modes	In-line				
Tunneling Protocols	VLAN Tagging, L2TP, MPLS, GRE, GTP, IPinIP				
IPv6	Yes				
Jumbo Frame	Up to 2KB				
Block Actions	Drop packet, reset (source, destination, both), suspend (source IP address, source port, destination IP address, destination port or any combination), challenge-response for TCP, HTTP and DNS suspicious traffic				
SUPPORT					
Support	Certainty Support Program				

## $^{\rm 1}\textsc{Performance}$ figures assume Intel $^{\rm 8}$ server-grade processor with 3 GHz

## DefensePro VA for Public Clouds

	Deterior to VA for t abile clouds		
Native Public Cloud support	AWS, Azure		
Minimum VM requirements	2 vCPUs, 16GB RAM, 10GB storage		
PERFORMANCE			
Max Mitigation Capacity/ Throughput	Up to 25 Gbps per DefensePro VA instance		
Max Legit Concurrent Sessions	1,000,000 sessions per vCPU		
Max Attack Concurrent Sessions	Unlimited		
Max DDoS Flood Attack Prevention Rate	Up to 500,000 pps per vCPU		
INSPECTION PORTS			
Ethernet	1 or 2 inspection ports for typical deployments. Additional inspection ports up to a limit supported by the instance type.		
MANAGEMENT PORTS			
Ethernet	1 port		
OPERATION MODE			
Network Operation	AWS: Symmetric inspection, IP Forwarding Mode Azure: Asymmetric inspection, Destination NAT Forwarding Mode		
Deployment Mode	AWS: In-VPC or Security VPC Azure: In-VPC		
HIGH AVAILABILITY			
Active:Active	AWS and Azure: integration with AWS Gateway Load Balancer and Azur Load Balancer		
Fail-open/fail-close	AWS: with Radware-provided Lambda function		
Support	Certainty Support Program		
Support	Gertainty Support Program		

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<sup>&</sup>lt;sup>2</sup>20 Gbps, 40 Gbps Throughput License supported on KVM