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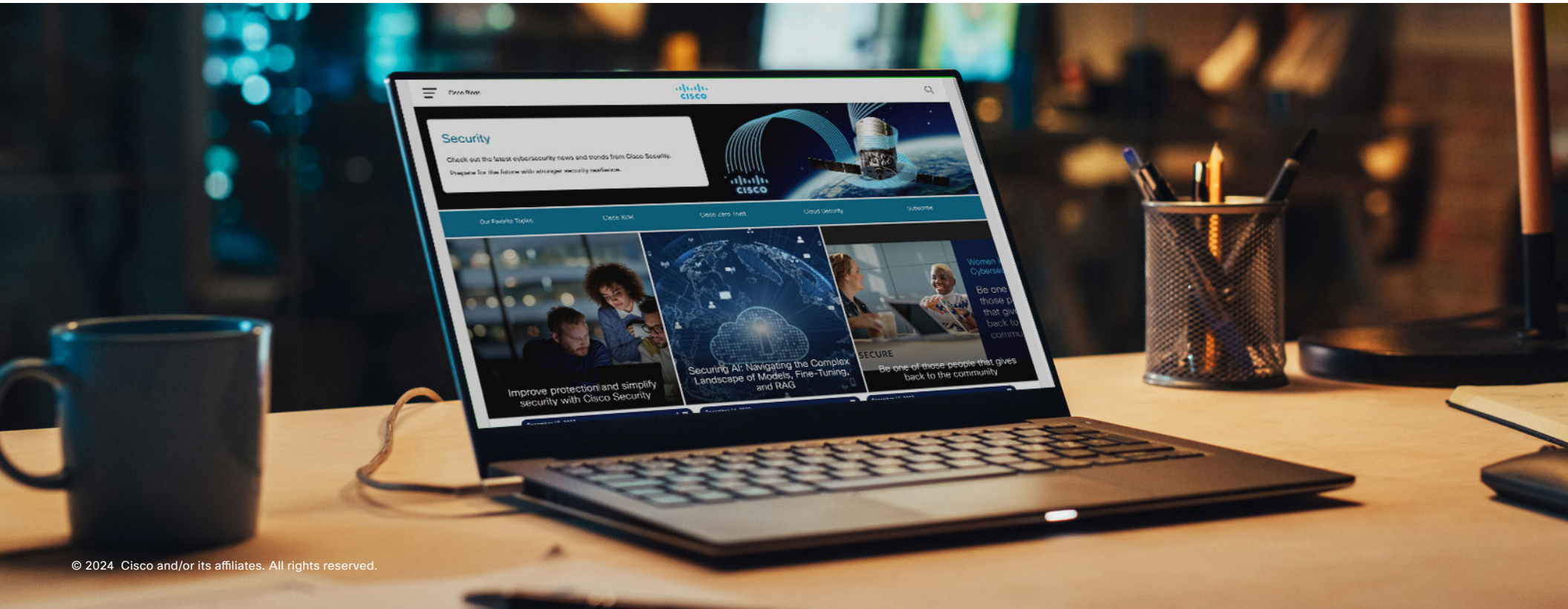
Secure DDoS Protection DefensePro X and DPVA Data Sheet

Customer-facing data sheet for DefensePro X, Cisco's industry-leading DDoS protection solution. This data sheet includes DefensePro Virtual Appliance (DPVA) for public cloud and private cloud deployments. Updated March 2024.



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DefensePro® X Data Sheet

	DefensePro® X10/X20	DefensePro X40	DefensePro X80	DefensePro X100/X200	DefensePro X400/X800
Programmable Mitigation Performance					
On-Demand Scalable Clean Throughput Licenses	DefensePro X10-05 - 500 Mbps DefensePro X10-1 - 1 Gbps DefensePro X10-2 - 2 Gbps DefensePro X10-5 - 5 Gbps DefensePro X20-5 - 5 Gbps DefensePro X20-10 - 10 Gbps	DefensePro X40-10 - 10 Gbps DefensePro X40-20 - 20 Gbps DefensePro X40-40 - 40 Gbps	DefensePro X80-10 - 10 Gbps DefensePro X80-20 - 20 Gbps DefensePro X80-40 - 40 Gbps	DefensePro X100-50 - 50 Gbps DefensePro X200-100 - 100 Gbps	DefensePro X400-200 - 200Gbps DefensePro X800-380 - 380Gbps
Max Programmable Mitigation Throughput	10 Gbps/20 Gbps	40 Gbps	80 Gbps	100 Gbps/200 Gbps	400 Gbps/800 Gbps
Max Attack Concurrent Sessions	Unlimited				

DefensePro is a registered trademark of Radware, Inc.
DefensePro, DefensePro X, and other industry-leading DDoS protection solutions are sold by Cisco through its global OEM partnership with Radware.

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	DefensePro® X10/X20	DefensePro X40	DefensePro X80	DefensePro X100/X200	DefensePro X400/X800
Programmable Mitigation Performance					
DDoS Flood Attack Prevention Rate	14 Mpps	30 Mpps	30 Mpps	142 Mpps	1119 Mpps
Latency	<60 microseconds				
Real-Time Signatures	Detect attacks and protect in less than 18 seconds				
SSL/TLS Decryption					
SSL/TLS Connections per Second	43 KCPS (RSA 2K)	90 KCPS (RSA 2K)	90 KCPS (RSA 2K)	150 KCPS (RSA 2K)	-
TLS 1.3 Perfect Forward Secrecy (PFS) HW Acceleration Support	Yes	Yes	Yes	Yes	-
Blocking Performance					
Maximal DDoS Blocking Throughput	-	-	-	800 Gbps	3.4 Tbps
Maximal DDoS Blocking (PPS)	-	-	-	1.19 Billion	2.7 Billion

	DefensePro® X10/X20	DefensePro X40	DefensePro X80	DefensePro X100/X200	DefensePro X400/X800
Inspection Ports					
10/100/1000 Copper Ethernet	Up to 16 (2x8) - Modular	-	-	-	-
1 GE/10 GE	-	12 (SFP+)	12 (SFP+)	-	-
10 GE/25 GE	Up to 8 (2x4) (SFP+) - Modular	-	-	24 (SFP+/SFP28)	-
40 GE	-	6 (QSFP+)	6 (QSFP+)	-	-
100 GE	-	-	-	8 (QSFP+/QSFP28)	18 (QSFP28)
400 GE[1]	-	-	-	-	4 (QSFP-DD)
Management Ports					
10/100/1000 Copper Ethernet	2				
Management Console	RJ-45				

	DefensePro® X10/X20	DefensePro X40	DefensePro X80	DefensePro X100/X200	DefensePro X400/X800
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				
High Availability					
Fail-Open/ Fail-Close[2]	Internal fail-open/ fail-close for modular copper ports; Internal fail-open/fail-close for fiber ports or optical transceivers (i.e., SFP+)	Internal fail-close for optical transceivers (i.e., SFP+, QSFP+)		Internal fail-close for optical transceivers (e.g., SFP+, SFP28, QSFP+, QSFP28)	Internal fail-close for optical transceivers (e.g., QSFP28, QSFP-DD)
Dual Power Supply	Yes, hot swappable				

External fiber fail-open switch is available at additional cost.

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	DefensePro® X10/X20	DefensePro X40	DefensePro X80	DefensePro X100/X200	DefensePro X400/X800
Physical					
Dimensions (W x D x H) mm	436 x 406 x 44 mm (1U)	438 x 530 x 88 mm (2U) EIA rack or standalone: 530 mm (20.86 in)	438 x 530 x 88 mm (2U) EIA rack or standalone: 530 mm (20.86 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)
Weight	Single power supply: 6 kg (13.2 lb) Dual power supply: 6.5 kg (14 lb)	Single power supply: 11 kg (24.2 lb) Dual power supply: 12 kg (26.4 lb)	Single power supply: 11 kg (24.2 lb) Dual power supply: 12 kg (26.4 lb)	Dual power supply: 14.5 kg (31.9 lb)	Dual power supply: 27.5 kg (60.6 lb)
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: -44 to -72V	80 plus certified AC:100–120V/200–240V, 47–63 Hz DC: -44 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: 400W	Dual power supply: 400W	Dual power supply: 550W	Dual power supply: 970W
Heat Dissipation	Single and dual power supply: 480 BTU/h	Dual power supply: 1364 BTU/h	Dual power supply: 1364 BTU/h	Dual power supply: 1880 BTU/h	Dual power supply: 3300 BTU/h
Operating Temperature	0°–40°C (32°–104°F)				
Humidity	5% to 95% noncondensing				

External fiber fail-open switch is available at additional cost.

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	DefensePro® X10/X20	DefensePro X40	DefensePro X80	DefensePro X100/X200	DefensePro X400/X800
Compliance & Certifications					
Compliance					
RoHS	Compliant (EU directive 2011/65/EU, 2015/863/EU)				
ECCN	5A002.a.2				
Safety/ EMC/EMI & Certifications	UL/TUV, FCC (USA), IC (Canada), CE (Europe), UKCA (UK), RCM (Australia/ NZ) , VCCI (Japan), KCC (Korea), EAC (Russia), BSMI (Taiwan), Anatel (Brazil), NOM (Mexico) For more information visit: https://www.radware.com/newsroom/certifications-hardware/ Note: DefensePro X is sold by Cisco through its global OEM partnership with Radware.				
Warranty	1-year hardware and software maintenance				
Support	Certainty Support Program				

External fiber fail-open switch is available at additional cost.

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	DefensePro Virtual Appliance (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[1]	
OnDemand Scalable Throughput Licenses	DefensePro VA 200 Mbps, 500 Mbps, 1 Gbps, 2 Gbps, 5 Gbps, 10 Gbps, 20 Gbps[2], 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, 100 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

1. Performance figures assume Intel® server-grade processor with 3 GHz
2. 20 Gbps, 40 Gbps Throughput License supported on KVM

	DefensePro Virtual Appliance (VA) for Private Clouds
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

	DefensePro Virtual Appliance (VA) for Public 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

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	DefensePro Virtual Appliance (VA) for Public Clouds
High Availability	
Active: Active	AWS and Azure: integration with AWS Gateway Load Balancer and Azure Load Balancer
Fail-open/fail-close	AWS: with Radware-provided Lambda function
Support	Certainty Support Program