

HALTDOS ROBIN TECHSPECS

Base Models	HD-RBN-4100	HD-RBN-4600	HD-RBN-5100	HD-RBN-5120	HD-RBN-5400	HD-RBN-620
Throughput Range	upto 4 Gbps	upto 24 Gbps	upto 48 Gbps	Upto 48 Gbps	upto 64 Gbps	upto 120 Gbps
SSL / TLS Connections per	22K (RSA 2K)	40K (RSA 2K)	40K (RSA 2K)	40K (RSA 2K)	95K (RSA 2K)	95K (RSA 2K)
Second	15K (ECC)	25K (ECC)	25K (ECC)	25K (ECC)	48K (ECC)	48K (ECC)
SSL Throughput	4 Gbps	20 Gbps	40 Gbps	40 Gbps	50 Gbps	100 Gbps
TCP Connection Tracking	1M – 4M	4M – 10M	10M – 15M	40M – 50M	10M – 25M	20M – 35M
Session Per Second	600K	960K	1.5M	2M	4M	4.2M
Max Concurrent Session	24M	32M	56M	96M	160M	192M
Induced Latency			< 50 microse	econds (us)		•
HAI	RDWARE SPECS			7		
Processor	Intel Xeon	Intel Xeon	Intel Xeon	Intel Xeon	Intel Xeon	Intel Xeon
CPU Cores	12	24	32	32	40	48
Memory	32 GB	64 GB	64 GB	128 GB	96 GB	128 GB
Hard Disk	256 GB SSD	512 GB SSD	1 TB SSD	1 TB SSD	2 TB SSD	2 TB SSD
Additional Coors	Built-in TPM Chip and H	ardware HSM for SSL offloa	iding & compression optimiz	zation	•	•
Additional Specs	Option available for FIPS	S-140-2 (additional charge)	or Non-FIPS compliant HSM	1		
Form Factor	1U/2U Rack Mount Serv	er (19 inch mounting)				
Power Supply	Redundant Power Suppl	y (Hot Swappable) AC 170-	-240V, 50 Hz			
Operating Temperature	0° – 40° C					
Humidity	8% - 95% (non-condens	sing)				
		Hard Di	isk and Memory can be co	ustomized over the base	model	
INS	PECTION PORTS					
1 GE Ports	8	8	4	4	-	-
10 GE Ports	2	4	4	4	8	8
25 GE Ports	-		-	-	-	-
40 GE Ports	-		2	2	2	4
100 GE Ports	-	-	-	-	-	-
	No. of ports can be customized over the base model					
OUT	T OF BAND PORTS					
1 GE (RJ-45) Ports	2	2	2	2	2	2
Console (RS232/RJ45) Ports	1	1	1	1	1	1
HA Ports (RJ-45/SFP/SFP+)	1	1	1	1	1	1
	2	2	2	2	2	2
Input/Output (USB)	2	2	2		2	
TEC	CHNOLOGY, CERTIFICA	TION & SUPPORT				
Platform	Haltdos Platform - hdPla	atform (EAL 2+ Certified)				
Technology	Signature with Threat Int	telligence, Machine Learnin	g			
Bandwidth License	Bandwidth capping on p	rovided license. Upgrade po	ossible without hardware rej	placement upto max suppor	ted bandwidth on hardwar	е
Additional Licenses	Optional license for WAF, DDoS, SLB & DNS Firewall					
Certification	FCC, ROHS, CE compliant, Common Criteria EAL 2+					
	24x7 Support with dedicated Account Manager					
Support	24x7 Support with dedic	ated Account Manager				
Support Warranty	24x7 Support with dedic 1 year software and hard					
Warranty TAC Support	1 year software and hard TAC support in India					
Warranty TAC Support	1 year software and hard TAC support in India ERATION MODE	dware maintenance				
Warranty TAC Support OPE Network Operations	1 year software and hard TAC support in India	dware maintenance				
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Warranty TAC Support OPE Network Operations Stateful Mode Deployment Modes IP Stack IP Fragmentation	1 year software and hard TAC support in India ERATION MODE Transparent L2 or Inline Stateful (Symmetric) or S Offline (SPAN port or Flot Dual IPv4 & IPv6 stack IP defragmentation & TC Yes	L3 Stateless (Asymmetric) moc bw), Inline, Out-of-path				
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D I	A booth or word body and only on				
Backup	Automatic or manual backup and restore				
Policy Management	On the fly configuration updates on mitigation appliances				
Events / Alerts	Detailed event and alert reporting on attack, health, etc.				
Forensic	Network forensic and packet capture capability for traffic examination and diagnosis				
Haltdos Threat Stream	Periodic threat intel updates (Signatures, Geo IP, Bad IP, TOR IP, Anon Proxy, etc.) from Haltdos				
Updates	Update and upgrade management on version releases and patch updates from Haltdos				
LLE	3 FEATURES				
Load Balancing Algorithms	Round robin (RR), weighted round robin, minimum packet loss, persistent hash, tuneable hash, least connections, least response time, least bandwidth,				
	minimum jitter, etc.				
NAT Rules	Support for static NAT, dynamic NAT, SNAT, DNAT, PAT, Full NAT				
Health Monitoring	Link monitoring with instant failover (<1s). Support for TCP, HTTP, DNS, ICMP or script based monitoring				
Routing Rules					
Dual Stack Lite	Support for NAT 46 / 64 and DNS 46 / 64 with DNS Proxy				
Traffic Shaping					
GSLB FEATURES					
Global Load Balancing	Routing traffic across multiple data centers based on health checks				
Local Load Balancing	Outbound WAN link selection based on link health				
Operation Mode	Option for Authoritative or Recursive operational modes				
Routing Rules	Custom rules for Static and Policy based routing				
Network Mode	Support DNS over HTTP, UDP, TCP & SSL as well as DNSSEC				
DNS Firewall	Protecting DNS infrastructure from bot attacks				
	OS MITIGATION FEATURES (ADDITIONAL LICENSING)				
Comprehensive Protection	Layer 3 to Layer 7 protection covering Network, Protocol, Application, Reflection / Amplification and 0-day DDoS attacks				
DDoS Detection & Mitigation	Attack detection & mitigation in less than 18s and 10s respectively				
Block Actions	Drop Packet, Terminate Connection (RST), Blacklist (temporary or permanent), Send Challenge (TCP, HTTP, DNS), Rate Limiting				
Hybrid DDoS Integration	Support for integration with Haltdos Cloud Scrubbing or ISP clean pipe services				
Bi-Directional	Support for both inbound and outbound traffic protection				
Deep Packet Inspection	Protection against malformed packets (TCP, UDP, ICMP, Ping of death, DNS, HTTP, SIP, SNMP, IPv4, IPv6, Fragmented packets, etc.)				
Enforce RFC Compliance	Protection against misbehaving clients sending invalid or out of state packets				
Bot Protection	Automatic detection and blocking of bot traffic with support for manual bot policy				
Behaviour Analysis	Network behaviour analysis for anomaly detection and packet scoring technology				
Multiple Security Profiles	Support for multiple security profiles for enforcing different policy for different sub-networks (Src, Dst IP Prefix, VLAN)				
Rate Limit & QoS Management	Rate limit capability for bandwidth and QoS management				
Blacklist / Whitelist	Support for temporary or permanent Blacklisting and Whitelisting based on IP, IP prefix, domain, country, etc				
Malicious Source Protection	Protection against TOR IP, Bad Reputation IP / domain, dark IP, malicious Bots, proxies, resolvers, etc				
Custom Signatures	Support for user defined custom rules with support for REGEX and byte matching				
SYN Flood Protection	TCP SYN flood protection with SYN Proxy and connection aging				
Challenge & Response	Support for TCP, HTTP, DNS challenge and response for validation of traffic from suspicious sources				
Connection Based Protection	Protection against TCP connection DDoS attacks such as sockstress, connection / src, zombie flood, SSL renegotiations, etc				
DNS Protection	Built-in DNS firewall capability for protecting DNS infrastructure against DNS DDoS attacks (Water Torture, NXDomain, etc.)				
L7 DDoS Protection	Protection against low & slow attacks such as Slowloris, R.U.D.Y., slow HTTP GET / POST, etc				
Machine Learning Protection	Automatic learning counter measures and dynamic signature creation upon attack detection				
Signatures for Known	Built-in rules for known vulnerabilities (server, web, mail, FTP, SIP, SQL, DNS, etc.)				
Vulnerabilities					
Vaniorabilities					

Version: v6.1

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