

HALTDOS ROBIN TECHSPECS

Base Models	HD-RBN-4100	HD-RBN-4600	HD-RBN-5100	HD-RBN-5120	HD-RBN-5400	HD-RBN-6200
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
Induced Latency				< 50 microseconds (µs)	10111 20111	2011 00111
,	RDWARE SPECS			(100)		
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 Specs			ading & compression optimi:			
			or Non-FIPS compliant HSN	Л		
Form Factor	1U/2U Rack Mount Serv		0.4017 50.11			
Power Supply	0° – 40° C	y (Hot Swappable) AC 170	1-24UV, 5U HZ			
Operating Temperature Humidity	8% - 95% (non-condens	ning)				
Humaity	6% - 95% (Hon-condens	sirig)	Hard Dick and Mame	ory can be customized ov	or the base model	
INS	PECTION PORTS		naru Disk anu Weini	ory can be customized by	er the base moder	
1 GE Ports	8	8	4	4	-	-
10 GE Ports	2	4	4	4	8	8
25 GE Ports	-	- 4	-	-	-	-
40 GE Ports	-		2	2	2	4
100 GE Ports	-	-	-	-	-	-
			No. of ports ca	n be customized over the	base model	
OU	T OF BAND PORTS		<u> </u>			
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
Input/Output (USB)	2	2	2	2	2	2
					2	
	CHNOLOGY, CERTIFICA					
Platform	Haltdos Platform – hdPla					
Technology	Signature with Threat Intelligence, Machine Learning Bandwidth capping on provided license. Upgrade possible without hardware replacement upto max supported bandwidth on hardware					
Bandwidth License Additional Licenses	Optional license for WAR	, DDoS, SLB & DNS Firewa	ossible without hardware re	piacement upto max suppor	ted bandwidth on nardwar	е
Certification						
	FCC, ROHS, CE compliant, Common Criteria EAL 2+					
Support	24x7 Support with dedicated Account Manager 1 year software and hardware maintenance					
Support						
Warranty	1 year software and hard					
Warranty TAC Support						
Warranty TAC Support	1 year software and hard TAC support in India					
Warranty TAC Support OP E	1 year software and hard TAC support in India ERATION MODE Inline L3 Dual IPv4 & IPv6 stack	dware maintenance				
Warranty TAC Support OPE Network Operations IP Stack IP Fragmentation	1 year software and hard TAC support in India ERATION MODE Inline L3 Dual IPv4 & IPv6 stack IP defragmentation & TO	dware maintenance				
Warranty TAC Support OPE Network Operations IP Stack IP Fragmentation Jumbo Frames	1 year software and hard TAC support in India ERATION MODE Inline L3 Dual IPv4 & IPv6 stack IP defragmentation & TC Yes	dware maintenance				
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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	Custom rules for Static and Policy based routing				
Dual Stack Lite	Support for NAT 46 / 64 and DNS 46 / 64 with DNS Proxy				
Traffic Shaping	Traffic shaping and QoS on inbound and outbound links				
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					
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Version: v6.1

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