

## Dependable Solution To A Complex Problem

- A simple, quick (30 minutes to install) solution for all DDOS problems.
- Can handle over 10 million spoofed IP DDOS attack.
- Equally efficient in new TCP/HTTP/CC attacks with a minimum of 4 million simultaneous sessions.
- Power of a big box packaged for corporate end-user environment.



## Proven DDOS Detection Algorithms

- Patented algorithms examine packet protocol compliance.
- Our algorithms examine packet behavior based on IETF and other published application standards. This approach is independent of human or network behavior, results in very high assurance of passing good traffic.

## Product Part Number Definition

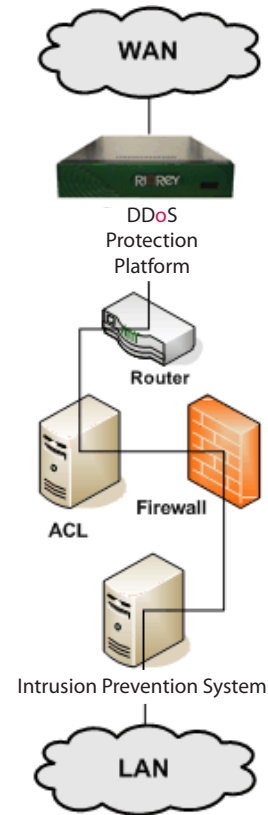
The RE series product names are related to the included features as follows:

Product Series	Feature
RE50x series	Units fail close
RE51x series	Units fail open
RE510 / RE1510	Copper Interface
RE511 / RE1511	Multi-mode fiber SX/LC
RE512 / RE1512	Single-mode fiber LX/LC

Example: RE500 = RE platform with copper GigE interface and HA Mode fail closed with LAN/WAN ports connected, losing LAN/WAN connectivity.

Example: RE1511 = RE platform fiber multi-mode 1Gbs SX/LC interface and fails open maintaining network connectivity.

Note: All RE series filters DDOS traffic from the WAN port only. DDOS traffic from the LAN port will not be detected or filtered.



IMMEDIATE • PAINLESS • INTELLIGENT • COST-EFFECTIVE

## RE Series Product Specifications (Specifications can change from time to time without notice. Check for the latest update)

	RE 500 Series	RE 1500 Series
Packet Throughput	150kpps Under Attack	300kpps Under Attack
Protocol	IP v4	
VLAN Support 802.1q	YES	
Jumbo Frames	YES	
Types of DDoS Protection and Filtering Capabilities	ICMP, UDP, TCP-SYN, ACK and SYN-ACK, TCP-Session, HTTP, P2P, TCP, UDP & ICMP Random/forged IP address attacks Network scans and port scans Can handle encrypted traffic without need of decoding Combination attacks including: Smurf, Ping floods, Fraggle, Evasive UDP, UDP scans, Pulsing zombie, Tribe Flood Network (TFN), Tribe FloodNet 2K (TFN2K), Stacheldraht, etc.	
Typical Latency	< 70µs	
Max Simultaneous Victims	128 (individual victim IP addresses at the same time)	
Connections per second	4 million concurrent sessions, No limit on connections or sessions	
Time to detect DDoS	RX detects and starts to mitigate DDoS attacks in approximately 90 seconds No operator intervention required No network baseline statistics required; the RE is fully functional immediately after installation.	
IP Exception Listing	Source and Destination IP white and black lists	
Physical interfaces options	Copper 10/100/1000 CAT5e Multimode fiber gigabit ethernet, 1000Base-SX (850nm), LC/LC connectors Singlemode fiber gigabit ethernet, 1000Base-LX (1310nm), LC/LC connectors	
Copper Interface	10Base-T/100Base-TX/1000Base-T, full and half duplex modes, Auto MDIX selectable	
Multimode Fiber Interface	Full duplex, 1000Base-SX, 850nm, LC connectors, Output power: -10.9dBm min, Input sensitivity: -15.6dBm max. Bypass mode insertion loss: 1.9dB max.	
Singlemode Fiber Interface	Full duplex, 1000Base-LX, 1310nm, LC connectors, Output power: -10.9dBm min, Input sensitivity: -18.6dBm max. Bypass mode insertion loss: 1.9dB max.	
High Availability Mode	Hardware bypass in case of system failures Automatic attempts to restart the system upon failures Ability to fall back to factory defaults	
System Availability	99.999%	
Attack Records	Retains 10 days of attack records; records can be downloaded for further analysis	
SNMP	v1, v2c and v3. Supports Get, Set and Traps	
Syslog	Link & configuration status, attack start and stop, victim information	
Alarms	rView Alarms and email notification, SYSLOG support included	
rVIEW Management Software	Element and cluster of elements manager, allows the manager to configure and monitor the RE series in real time. Provides detailed statistics and records of network traffic and DDoS attacks.	
rVIEW Software Requirement	Windows XP, Vista, Linux and Mac OSX, requires Java ver. 1.5 or later	
AC Power Input	Single 100V to 240V AC, 50-60Hz 4 A minimum outlets recommended	
Power Consumption	Max 2.5A at 115V AC	
Size	1U, 17.2" x 1.7" x 11.3" (437mm x 43mm x 287mm)	
Weight	13lbs, 6kg	
Operating Temperature	10 to 35°C	