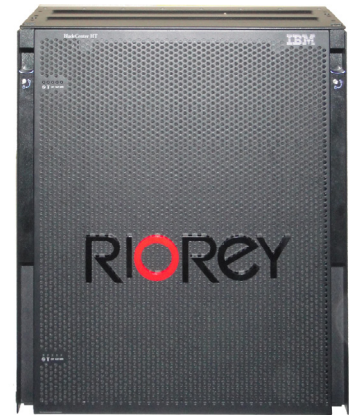


RioRey RG-Series: 50G to 200Gbps Platform

Carrier Class DDoS Performance

- Most powerful DDoS mitigation engine in the world
- In an off-ramp hairpinned configuration, the RG supports up to twenty 10 Gbps ports, providing 200Gbps throughput
- For in-line applications, the RG supports ten pairs of 10Gbps Interfaces, providing 100Gbps throughput
- RG supports link aggregation using LACP
- rWeb management tool with REST API provides complete network view as well as per zone mitigation control



High Availability Design

- 99.999% system availability
- SFP+ fiber interface module with optional failover bypass
- Filter blades have load sharing and are hot swappable
- Redundant controller blades that are hot swappable
- Quad redundant power supply and fan modules that are hot swappable
- NEBS-3 Compliance with 220 VAC and -48V DC options

Innovative Protection Architecture

- RioRey's Platform can be placed off-ramp or in-line depending on the customer's network architecture
- RG designed for Scrubbing Center with tandem filtering using on-premise CLE/CPE equipment such as the RioRey RE, RX or RS
- Port VLAN Patch Panel to simplify Scrubbing Center traffic routing

Proven DDoS Detection Algorithms

- Protects against all 25 classes of DDoS Attacks (TCP Based, TCP-HTTP Based, UDP Based, and ICMP Based)
- Detection and mitigation of DDoS is automatic and does not require the collecting and analyzing of network baseline traffic patterns
- Our algorithmic architecture is designed to provide a very high assurance of passing good traffic while mitigating bad traffic

Specification	Specification Detail
Packet Throughput	72mpps with 8 Type A filter blades
Bandwidth Throughput	200 Gbps with twenty 10Gbps link, can be used In-line, Off-Ramp and hairpined
Protocol	IP v4 and IP v6 ready (software upgrade)
VLAN Support 802.1q	Inspects IP payload inside VLAN tags
GRE Tunnel (Input packets)	Inspects IP payload inside GRE tunnels, tunnel headers are ignored
Jumbo Frames	Yes
Types of DDoS Protection and Filtering Capabilities	<p>All 25 classes of DDoS attacks.</p> <p>TCP Based (<i>SYN Flood, SYN-ACK Flood, ACK & PUSH ACK Flood, Fragmented ACK, RST or FIN Flood, Synonymous Flood, Fake Session, Session Attack, Misused Application</i>);</p> <p>TCP-HTTP Based (<i>HTTP Fragmentation, Excessive VERB, Excessive VERB Single Session, Multiple VERB Single Request, Recursive GET, Random Recursive GET, Faulty Application</i>);</p> <p>UDP Based (<i>UDP Flood, Fragmentation, DNS Flood, VoIP Flood, Media Data Flood, Non-Spoofed UDP Flood</i>);</p> <p>ICMP Based (<i>ICMP Flood, Fragmentation, Ping Flood</i>)</p>
Typical Latency	< 100 μ s (micro second)
Maximum Simultaneous Victim IPs	100,000
TCP Connection Limits	128 million concurrent connections
Detection Time Frame	DDoS detection time is typically 30 - 90 seconds
Mitigation Time Frame	Mitigation time is typically 90 - 120 seconds
IP Exception Listing	Source and Destination IP White and Black lists
Fiber Interface	Full duplex; 10 GigE SFP+ Connection Supports all 10G SFP+ plug-in modules including short and long wavelengths, short and long reach optics
System Availability	99.999% RG is fully functional immediately after installation Automatic attempts to restart the system upon failures Ability to fall back to factory defaults Optional hardware bypass in case of system failure
Attack Records	Works with rWeb to provide long term historical records and analysis. Records can be downloaded for further analysis.
SNMP	v1, v2c, and v3. Supports GET and Traps
Alarms	Standard Red/Yellow/Green alarm indicators on front panel and on rView Standard dry alarm relay contacts SNMP traps, SYSLOG and email notification
rWeb Management	Zone based, multi-tenant management and reporting system, with comprehensive REST API
Power Options	220V AC or -48V DC
NEBS Compliant	NEBS Level 3
Size	H 12U W 19" D 22.5" (H 12U W 482.59 mm D 571.5 mm)
Weight	Fully populated 340 lbs (154 kg)
Mounting	2 posts or 4 posts mounting options

Specifications are subject to change; contact sales@riorey.com for more information