

Product: [RAVEN 5300](#)

RAVEN Next Generation Firewall - RAVEN 5300



Product Description

1U rack mount, 6 × fixed FE/GE TX ports, 1 × extended media module slot, redundant PSU

Technical Specifications

Product description

| | |
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| Type: | RAVEN 5300 |
| Name: | RAVEN 5300 |
| Description: | 1U rack mount, 6 × fixed FE/GE TX ports, 1 × extended media module slot, redundant PSU |
| Part Number: | 942999703 |
| Port type and quantity: | 6 × fixed FE/GE TX ports, 2 × USB, 1 × RJ45 console port |
| Heat Radiation Type: | Fixed fan |

Performance and Capacity

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| Performance: | 4G (Firewall), 3.4G (enable NGFW) |
| Connections per Second: | 68000/s (Firewall), 12000/s (enable NGFW) |
| IPSec VPN default tunnel: | 1000 |
| Concurrent Connections: | 1.2 million |

More Interfaces

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| Power Supply: | 2 × fixed redundant PSUs |
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Power requirements

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| Operating Voltage: | 100-240VAC, 50-60Hz, redundant PSU supported |
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Ambient conditions

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| Permissible Humidity (Storage/Transport): | 5% to 95% |
| Operating temperature: | -5-+45 °C |
| Storage/transport temperature: | -20°C to +70 °C |
| Relative humidity (non-condensing): | 5-85 % |

Mechanical construction

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| Width: | 435 mm |
| Height: | 44.5 mm |
| Depth: | 360 mm |
| Weight: | 8.1 kg |
| Mounting: | Rack mount |

Software Specifications

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|----------|----------------|---|
| Security | Access control | Access control based on network interface, security zones, source/destination IP, domain name, port, application and customer; support time-based policy. Support DPI identification in access control. |
| | | Support security policies pre-compile during committing configuration, complex security policies will not reduce chassis performance |
| | | Support default policy, permit all or deny all is available for all policies |
| | | Support logging for policy match, include flow and hitting |

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| | | Support shadowing checking in security policies |
| | | Support session management for special security policy |
| | | Support group based security policies management |
| | APT (Advanced Persistent Threat) protection | Chassis has another dedicated hardware based APT engine. Sandbox is used to detect malicious code. APT engine has abilities for protecting long-term detection attack and 0 DAY attack |
| | | APT engine can process at least 20 types of files, such as exe, rtf, Office file, rar, zip, pdf and so forth. |
| | Raven Eye cloud security protection | Raven can sync all system libraries from Raven Eye. Raven is able to prevent either known or unknown threaten when it is captured by Raven Eye in past 6 hours |
| | | Support both IPv4 and IPv6 environment. |
| | | Support one-key process for captured host |
| | IPS | Support flow based protocol analysis and protocol tree algorithm, support both IPv4 and IPv6 |
| | | Attack sample library has more than 3600 entries, weekly update, and support online user manual |
| | | Support online, bypass and complex deployment |
| | Anti-Virus | Based on Raven eye cloud security center, Raven has more than 36k virus samples, weekly update |
| | | Support HTTP, FTP, POP3, IMAP and SMTP attachment scanning |
| | | Support customized scan template |
| | | Anti-virus policy can base on interface, security zone, address, user, service and time |
| | | Support online, bypass and complex deployment, support both IPv4 and IPv6 |
| | Web application protection | Support protection for SQL injection and XSS script attack, support Web application security in IPv4/IPv6 protection |
| | DDoS | Support TCP flooding protection, include packet rate, source host packet rate and destination packet rate limitation. SYN cookie, dropping violation packets or only alarm are available protection actions |
| | | Support UDP flooding protection, include packet rate, source host packet rate and destination packet rate. Dropping violation packets and only alarm are available protection actions |
| | | Support ICMP flooding protection, include packet rate, source host packet rate and destination packet rate. Dropping violation packets and only alarm are available protection actions |
| | | Support inhibition for malicious scanning, such as TCP scanning, UDP scanning and ICMP scanning |
| | | Support protection for Jolt2, Land-Base, Ping of death, Syn flag, Tear drop, Winnuke, Smurf |
| | Session Control | Total connection control based on interface, address, user, application and time |
| | | CPS control based on interface, address, user, application and time |
| | | Source total connection control based on interface, address, user, application and time |
| | | Source CPS suppression control based on interface, address, user, application and time |
| | | Destination total connection control based on interface, address, user, application and time |
| | | Destination CPS control based on interface, address, user, application and time |
| | ARP protection | Support IP-MAC mapping protection and unique mapping validation |
| | | Support protection of ARP spoofing. Raven support static MAC learning or reverse flooding to correct ARP to strike back the attacker |
| | | Support ARP suppression to defense ARP flooding |
| | Deny List | Support IP based deny list, deny list up to 30K entries |
| | | Support import/export operation for deny list |
| Application-based control | Application Identification | App ID engine based on DPI, DFI and network behavior analysis |
| | Application control | Support application identification by classes, such as: IM, class-based URL management, social media, download tools, video application and so forth |
| | Email application control | Support deep email inspection based on parameters such as email title, email body, attachments and protocol commands |
| | Application library | Application library support at least 1000 applications |
| | Application library update | Application library update support both online and offline operation, weekly update |
| | IPv4/IPv6 support | Support application behavior management in IPv4/IPv6 |
| Traffic control | Token bucket | Multi-level token bucket mechanism, minimum particle size 1K bps |
| | Flexible QoS | Support QoS policy on physical interface and VLAN interface |
| | Application based QoS | QoS policy support application traffic inspection |
| | Hierarchical QoS | Support 4-level nesting HQoS, each level has 64 queue |
| | Per-user bandwidth control | Support assign per-user bandwidth schedule in customer communication for upstream traffic and downstream traffic |
| | Bandwidth reserve | Support to configure upstream bandwidth and downstream bandwidth |
| | Priority queue | Support priority queue |
| | Shaping | Support shaping |
| Network | Deployment | Support routing mode and transparent mode firewall, support complex deployment |
| | IPv4/IPv6 dual stack | Support IPv4/IPv6 dual stack, all functions can work both under IPv4 and IPv6 |
| | Physical interface | Support static IP address and DHCP client, support multiple addresses under interface |
| | 802.1Q VLAN | Support 4096 VLANs |
| | LAG | Support LACP and static LAG. Load balancing mode can be configured. |
| | GRE | Support GRE tunnel |
| | Static route | Support static route and ECMP under static route. Support various methods of static route health check |
| | Routing protocol | Support RIP, OSPF and BGP |
| | Policy based route | Support PBR based on ingress port, source IP, destination IP, port, service and domain name, multiple next-hops are also supported |
| | BFD | Support BFD function. |

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| | Load balance in WAN | Support load balance for multiple WAN interface, include PPPoE |
| | Health check | Support link health check via ICMP, TCP, DNS and HTTP request |
| | Routing control | Support ECMP, PBR and link-load balance |
| | NAT | Support source NAT, destination NAT, static NAT and policy NAT. Support CG-NAT. |
| | NAT46/NAT64 | Support NAT between IPv4 and IPv6 |
| | ALG | NAT pin-hole support on application layer |
| | NAT address pool | Support multiple address pool and discontinuous address pool |
| | VPN | Support IPSec VPN and L2TP VPN |
| | | Support SSLVPN in proxy mode and tunnel mode. Support nested access policy in SSLVPN |
| | STP | Support STP protocol |
| | DHCP | Support DHCP server, support IP-MAC binding entry |
| | DNS Server | Support DNS server, Support DNS zone |
| | DNS record | Support DNS record, include A, AAA, NS, CNAME, TXT, MX and PTR |
| | DNS transparent agent | Support DNS transparent agent, support multiple algorithms for load balancing |
| Virtualization | Hardware based virtualization | Raven support hardware based virtualization acceleration |
| | Virtual FW configuration | Support full functional vFW deployment. vFW support different software, feature and HA policy |
| | Virtual FW management | Each vFW has private resource template and configuration |
| HA | Hot-standby | Support active-active and active-backup mode |
| | Backup node management | Backup node support OOB management |
| | VRRP | Support VRRP for gateway backup |
| | Multi-standard failure detection | Failure detection based on heart-beat detection, link flapping, remote failure. |
| | Session sync | Support session sync between nodes, failover will not interrupt service |
| | HA preempt | Support priority configuration for certain active node |
| Monitoring | Threaten visualization | Support threaten visualization for attack. Visualization based on threat level, country and victim, include TOP10 table and diagram. |
| | Application based traffic visualization | Support application visualization for TOP100 application. Diagram include traffic detail and per app/per user traffic statistics. |
| | User based traffic visualization | Support user based visualization for TOP100 users. Diagram include user traffic detail. |
| | Interface based traffic visualization | Support collecting detail information of interfaces, based on physical interface or virtual interface (VNI or GRE) |
| | System report | Support to generate system report in system usage. CPU usage, memory usage, concurrent connection, CPS field during real time, 1 hour, 1 day, 7 days and 1 month |
| Logging | Local syslog | Support local storage for system log |
| | Remote syslog | Support multiple syslog server |
| | Log level | Support standard level 0~7 |
| | Report | System can generate traffic report and threaten report. |
| | Email alarm | System alarm can trigger email to certain receivers. |
| Address management | Address object management | Support address objects up to 8K, each object has address records up to 2K. Support domain name as address record. |
| | Address object bulk operation | Support import/export address objects/record for bulk operation. |
| | Customized application | Support customized application |
| System configuration | Web UI(HTTP/HTTPS) | Internationalization Web UI |
| | Control/VTY | Support console port, SSH and telnet for remote CLI management |
| | SNMP | Support SNMP v1/v2/v3 |
| | User login management | Support local account, Radius and LDAP authentication |
| | User role management | Support different user roles to implement user management and operation audit. |
| | NTP | Support external NTP server |
| | System configuration backup/restore | Support export/import configuration file as plain text. |
| | Packet dump | Support WebUI for packet dumping |

Mechanical stability

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| IEC 60068-2-6 vibration: | 1 mm, 2 Hz-13.2 Hz, 90 min.; 0.7 g, 13.2 Hz-100 Hz, 90 min.; 3.5 mm, 3 Hz-9 Hz, 10 cycles, 1 octave/min.; 1 g, 9 Hz-150 Hz, 10 cycles, 1 octave/min |
| IEC 60068-2-27 shock: | 15 g, 11 ms duration, 18 shocks |

EMC interference immunity

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| EN 61000-4-2 electrostatic discharge (ESD): | 4 kV contact discharge, 8 kV air discharge |
| EN 61000-4-3 electromagnetic field: | 10V/m (80-1000MHz), 3V/m (1000-6000MHz) |
| EN 61000-4-4 fast transients (burst): | 2 kV power line, 1 kV data line |
| EN 61000-4-5 surge voltage: | power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line |
| EN 61000-4-6 Conducted Immunity: | 10 V (150 kHz-80 MHz) |
| EN 61000-4-8 power freq magnetic field: | 30A/m |
| EN 61000-4-11 voltagedips,shortinterrupt: | 0%(20ms), 40%(300ms), 70%(500ms), 0%(5s) |

EMC emitted immunity

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| EN 55032: | EN 55032 Class A |
| EN 61000-3-2: | EN 61000-3-2 Class A |
| EN 61000-3-3: | EN 61000-3-3 |
| FCC CFR47 Part 15: | FCC 47CFR Part 15, Class A |

Approvals

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| FCC: | Compliant |
| China Network Access Certificate: | Compliant |
| RoHS Compliant: | RoHS((EU) 2015/863) and RoHS(GB/T26572-2011) compliant |

Scope of delivery and accessories

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| Accessories to Order Separately: | Media module |
| Scope of delivery: | 1 × device, 1 × grounding wire, 2 × power cords, 1 × console cable, 1 × Cat5UTP 2M, 1 × installation package |

History

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| Update and Revision: | Revision Number: 0.14 Revision Date: 05-14-2024 |
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