

Juniper Networks SSG 5 and SSG 20

The Juniper Networks Secure Services Gateway 5 (SSG 5) and Secure Services Gateway 20 (SSG 20) are purpose-built security appliances that deliver a perfect blend of performance, security, routing and LAN/WAN connectivity for small branch office and small business deployments. Traffic flowing in and out of the branch office can be protected from worms, Spyware, Trojans, and malware by a complete set of Unified Threat Management (UTM) security features including Stateful firewall, IPSec VPN, IPS, Antivirus (includes Anti-Spyware, Anti-Adware, Anti-Phishing), Anti-Spam, and Web Filtering.

The rich set of UTM security features allows the SSG 5 and SSG 20 to be deployed as a stand alone network protection device. With its robust routing engine, the SSG 5 and SSG 20 can also be deployed as a traditional branch office router or as a combination security and routing device to help reduce IT capital and operational expenditures. The SSG 5 and SSG 20 provide customers with the following features and benefits:

- Extensible I/O architecture that delivers fixed LAN connectivity plus WAN I/O options on top of unmatched security to reduce costs and extend investment protection.
- UTM security features backed by best-in-class security partners to ensure that the network is protected against all manner of attacks.
- Advanced security features such as network segmentation allows administrators to deploy security policies to isolate guests, wireless networks and regional servers or databases to prevent unauthorized access and contain any attacks that may occur.
- Dedicated, security specific processing hardware and software platform delivers performance required to protect high speed LAN as well as lower speed WAN connections.



Used by enterprises, service providers and stand alone businesses alike, the SSG 5 and SSG 20 are ideally suited for locations that are smaller, with fewer employees yet still require advanced security and routing features to protect business critical traffic traversing the WAN and high speed internal networks. Typical deployments include small businesses, distributed branch offices, retail outlets, and fixed telecommuter environments.

SSG 5:

The SSG 5 is a fixed form factor platform that delivers 160 Mbps of Stateful firewall traffic and 40 Mbps of IPSec VPN throughput. The SSG 5 Series is equipped with seven on-board 10/100 interfaces with optional fixed WAN ports (ISDN BRI S/T, V.92 or RS-232 Serial/Aux). Optional support for 802.11 a/b/g and a broad array of wireless specific security allow the SSG 5 to consolidate security, routing and wireless access point into a single device.

SSG 20:

The SSG 20 is a modular platform that delivers 160 Mbps of Stateful firewall traffic and 40 Mbps of IPSec VPN throughput. The SSG 20 is equipped with five on-board 10/100 interfaces with two I/O expansion slots that support I/O cards, such as ADSL2+, T1, E1, ISDN BRI S/T, V.92 for additional WAN connectivity. Optional support for 802.11 a/b/g and a broad array of wireless specific security allow the SSG 20 to consolidate security, routing and wireless access point into a single device.

Security

Proven Stateful firewall and IPSec VPN combined with best-in-class UTM security features including IPS (Deep Inspection), Antivirus (includes Anti-Spyware, Anti-Adware, Anti-Phishing), Anti-Spam, and Web Filtering protects both LAN and WAN traffic from worms, Spyware, Trojans, malware and other emerging attacks.

LAN/WAN connectivity

The combination of LAN/WAN connectivity options and supporting protocols provides customers with the ability to deploy the SSG 5 or SSG 20 as a traditional LAN-based firewall or as a consolidated routing and security device, thereby reducing TCO.

Network segmentation

The SSG 5 and SSG 20 provide an advanced set of network segmentation features such as Security Zones, Virtual Routers and VLANs that allow administrators to deploy different levels of security to different user groups by dividing the network into distinct, secure domains, each with their own security policy.

Seamlessly transform your network

Whether you are deploying a few SSGs to your local offices or implementing thousands around the world, Juniper Networks Professional Services can help. From simple lab testing to major network implementations, we can identify the goals, define the deployment process, create or validate the network design, and manage the deployment. We collaborate with your team to transform your network infrastructure to ensure that it is flexible, scalable, reliable, and secure.

Juniper Networks Secure Services Gateway 5 and 20

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| | SSG 20 | SSG 5 |
|---|--------------|--------------|
| Maximum Performance and Capacity⁽¹⁾ | | |
| ScreenOS version support | ScreenOS 5.4 | ScreenOS 5.4 |
| Firewall performance (Large packets) | 160 Mbps | 160 Mbps |
| Firewall performance ⁽²⁾ (IMIX) | 90 Mbps | 90 Mbps |
| Firewall Packets per second (64 byte) | 30,000 | 30,000 |
| VPN performance (3DES + SHA-1) | 40 Mbps | 40 Mbps |
| Concurrent sessions | 4,000 | 4,000 |
| New sessions/second | 2,800 | 2,800 |
| Policies | 200 | 200 |
| Users supported | Unrestricted | Unrestricted |

| | SSG 20 | SSG 5 |
|--|--|---|
| Network Connectivity | | |
| Fixed I/O | 5x 10/100 | 7x 10/100 |
| Physical Interface Module (Mini-PIM) Slots | 2 | 0 |
| WAN interface options | ADSL2+, T1, E1, ISDN BRI S/T, V.92 (See Mini-PIM datasheets) | ISDN BRI S/T or RS-232 Serial/Aux or V.92 (factory configured) |
| LAN interface options | None | None |
| Wireless networking | Dual Radio 802.11a + 802.11b/g (factory configured) | |

| | SSG 20 | SSG 5 |
|---|--------|-------|
| Firewall | | |
| Network attack detection | Yes | Yes |
| DoS and DDoS protection | Yes | Yes |
| TCP reassembly for fragmented packet protection | Yes | Yes |
| Malformed packet protection | Yes | Yes |

| | SSG 20 | SSG 5 |
|---|-----------------------------|-------|
| Unified Threat Management/Content Security⁽³⁾ | | |
| IPS (Deep Inspection FW) | Yes | Yes |
| Protocol anomaly detection | Yes | Yes |
| Stateful protocol signatures | Yes | Yes |
| Antivirus | Yes | Yes |
| Signature database | 100,000 + | |
| Protocols scanned | POP3, SMTP, HTTP, IMAP, FTP | |
| Anti-Phishing | Yes | Yes |
| Anti-Spyware | Yes | Yes |
| Anti-Adware | Yes | Yes |
| Anti-Keylogger | Yes | Yes |
| Anti-Spam | Yes | Yes |
| Integrated URL filtering | Yes | Yes |
| External URL filtering ⁽⁴⁾ | Yes | Yes |

| | SSG 20 | SSG 5 |
|--------------------------------|--------|-------|
| VoIP Security | | |
| H.323 ALG | Yes | Yes |
| SIP ALG | Yes | Yes |
| SCCP ALG | Yes | Yes |
| MGCP ALG | Yes | Yes |
| NAT for SIP, H.323, MGCP, SCCP | Yes | Yes |

| | SSG 20 | SSG 5 |
|--|--------|-------|
| VPN | | |
| Concurrent VPN tunnels | 25 | 25 |
| Tunnel interfaces | 10 | 10 |
| DES (56-bit), 3DES (168-bit) and AES encryptions | Yes | Yes |
| MD-5 and SHA-1 authentication | Yes | Yes |
| Manual key, IKE, PKI (X.509) | Yes | Yes |
| Perfect forward secrecy (DH Groups) | 1,2,5 | 1,2,5 |
| Prevent replay attack | Yes | Yes |
| Remote access VPN | Yes | Yes |
| L2TP within IPSec | Yes | Yes |
| IPSec NAT traversal | Yes | Yes |
| Redundant VPN gateways | Yes | Yes |

| | SSG 20 | SSG 5 |
|---|-------------------------------|-----------|
| Firewall and VPN User Authentication | | |
| Built-in (internal) database - user limit | Up to 100 | Up to 100 |
| 3rd Party user authentication | RADIUS, RSA SecurID, and LDAP | |
| XAUTH VPN authentication | Yes | Yes |
| Web-based authentication | Yes | Yes |
| 802.1X authentication | Yes | Yes |

| | SSG 20 | SSG 5 |
|---|--------|-------|
| Mode of Operation | | |
| Layer 2 (transparent) mode ⁽⁵⁾ | Yes | Yes |
| Layer 3 (route and/or NAT) mode | Yes | Yes |

| | SSG 20 | SSG 5 |
|-----------------------------------|--------|-------|
| Address Translation | | |
| Network Address Translation (NAT) | Yes | Yes |
| Port Address Translation (PAT) | Yes | Yes |
| Policy-based NAT/PAT | Yes | Yes |
| Mapped IP | Yes | Yes |
| Virtual IP | Yes | Yes |

| | SSG 20 | SSG 5 |
|-------------------------------|--------|-------|
| Routing | | |
| BGP | Yes | Yes |
| OSPF | Yes | Yes |
| RIPv1/v2 | Yes | Yes |
| Static routes | Yes | Yes |
| Source-based routing | Yes | Yes |
| Policy-based routing | Yes | Yes |
| ECMP | Yes | Yes |
| Routes | 1,024 | 1,024 |
| Multicast | Yes | Yes |
| Reverse Forwarding Path (RFP) | Yes | Yes |
| IGMP (v1, v2) | Yes | Yes |
| IGMP Proxy | Yes | Yes |
| PIM SM | Yes | Yes |
| PIM SSM | Yes | Yes |
| Mcast inside IPSec Tunnel | Yes | Yes |

| | SSG 20 | SSG 5 |
|-----------------------|--------|-------|
| Encapsulations | | |
| PPP | Yes | Yes |
| MLPPP | Yes | N/A |
| Frame Relay | Yes | N/A |
| MLFR (FRF 15, FRF 16) | Yes | N/A |
| HDLC | Yes | N/A |

| | SSG 20 | SSG 5 |
|---------------------------------|-----------------|-----------------|
| Traffic Management (QoS) | | |
| Guaranteed bandwidth | Yes | Yes |
| Maximum bandwidth | Yes | Yes |
| Ingress Traffic Policing | Yes | Yes |
| Priority-bandwidth utilization | Yes | Yes |
| DiffServ stamp | Yes, per policy | Yes, per policy |
| Wi-Fi Multi-Media (WMM) | Yes (with WLAN) | Yes (with WLAN) |

| | SSG 20 | SSG 5 |
|--|-------------------------------|-------|
| System Management | | |
| WebUI (HTTP and HTTPS) | Yes | Yes |
| Command Line Interface (console) | Yes | Yes |
| Command Line Interface (telnet) | Yes | Yes |
| Command Line Interface (SSH) | Yes, v1.5 and v2.0 compatible | |
| NetScreen-Security Manager | Yes | Yes |
| All management via VPN tunnel on any interface | Yes | Yes |
| SNMP full custom MIB | Yes | Yes |
| Rapid deployment | Yes | Yes |

| | SSG 20 | SSG 5 |
|-------------------------------|---------------------------|----------|
| Logging and Monitoring | | |
| Syslog (multiple servers) | External, up to 4 servers | |
| E-mail (2 addresses) | Yes | Yes |
| NetIQ WebTrends | External | External |
| SNMP (v2) | Yes | Yes |
| Traceroute | Yes | Yes |
| VPN tunnel monitor | Yes | Yes |

| | SSG 20 | SSG 5 |
|---|--------|-------|
| Virtualization | | |
| Maximum number of configurable security zones | 8 | 8 |
| Maximum number of virtual routers | 3 | 3 |
| Maximum number of 802.1q VLANs | 10 | 10 |

High Availability (HA)⁽⁶⁾

| | | |
|--|-----|-----|
| Active/Passive | Yes | Yes |
| Configuration synchronization | Yes | Yes |
| Session synchronization for firewall and VPN | Yes | Yes |
| Session failover for routing change | Yes | Yes |
| Device failure detection | Yes | Yes |
| Link failure detection | Yes | Yes |
| Authentication for new HA members | Yes | Yes |
| Encryption of HA traffic | Yes | Yes |

IP Address Assignment

| | | |
|----------------------|-----|-----|
| Static | Yes | Yes |
| DHCP, PPPoE client | Yes | Yes |
| Internal DHCP server | Yes | Yes |
| DHCP relay | Yes | Yes |

PKI Support

| | | |
|---|--|-----|
| PKI Certificate requests (PKCS 7 and PKCS 10) | Yes | Yes |
| Automated certificate enrollment (SCEP) | Yes | Yes |
| Online Certificate Status Protocol (OCSP) | Yes | Yes |
| Certificate Authorities Supported | Verisign, Entrust, Microsoft, RSA Keon, iPlanet (Netscape), Baltimore, DOD PKI | |

Administration

| | | |
|--|--------------------------------|-----|
| Local administrators database size | 20 | 20 |
| External administrator database | RADIUS/LDAP/SecurID | |
| Root Admin, Admin, and Read Only user levels | Yes | Yes |
| Software upgrades | TFTP / WebUI / NSM / SCP / USB | |
| Configuration Roll-back | Yes | Yes |

External Flash

| | | |
|------------------------|---------|-----|
| Additional log storage | via USB | |
| Event logs and alarms | Yes | Yes |
| System config script | Yes | Yes |
| ScreenOS Software | Yes | Yes |

Dimensions and Power

| | | |
|--------------------|--|---|
| Dimensions (W/L/H) | 11 5/8" x 7 3/8" x 1 3/4" 29.5cm x 18.7cm x 4.5cm | 8 3/4" x 5 5/8" x 1 5/8" 22.2cm x 14.3cm x 4.1cm |
| Weight | 3.3 lbs (1.5 kg) | 2.1 lbs (0.95 kg) |
| Rack mountable | Yes | Yes |
| Power Supply (AC) | 100-240 VAC | 100-240 VAC |

Certifications

| | | |
|-----------------------|---|---|
| Safety Certifications | CSA, CB | CSA, CB |
| EMC Certifications | FCC Class B, CE Class B, A-Tick, VCCI class B | FCC Class B, CE Class B, A-Tick, VCCI class B |

Environment

| | | |
|------------------------------|--------------------------------------|--------------------------------------|
| Temp and Humidity | | |
| Operating Temp | 0 to 40 Deg C (32 to 104 Deg F) | 0 to 40 Deg C (32 to 104 Deg F) |
| Non-Operating Temp | -20 to 65 Deg C (-4 to 149 Deg F) | -20 to 65 Deg C (-4 to 149 Deg F) |
| Humidity | 10 to 90 % non-condensing | 10 to 90 % non-condensing |
| MTBF (Bellcore model) | | |
| Non-Wireless | 35.8 Yrs | 40.5 Yrs |
| Wireless | 28.9 Yrs | 22.8 Yrs |

| | SSG 20 | SSG 5 |
|---|---------------------------------|-------|
| Wireless Radio Specifications (Wireless Models Only) | | |
| Transmit Power | Up to 200mW | |
| Wireless Standards supported | Dual Radio 802.11 a + 802.11b/g | |
| Site Survey | Yes | |
| Maximum Configured SSIDs | 16 | |
| Maximum Active SSIDs | 4 | |
| Atheros SuperG | Yes | |
| Atheros eXtended Range (XR) | Yes | |
| Wi-Fi CERTIFIED® | Yes | |

Wireless Security (Wireless Models Only)

| | |
|-------------------------|--|
| Wireless Privacy | WPA, WPA2 (AES or TKIP), IPSEC VPN, WEP |
| Wireless Authentication | PSK, EAP-PEAP, EAP-TLS, EAP-TTLS over 802.1x |
| MAC Access Controls | Permit or Deny |
| Client Isolation | Yes |

Antenna Option (Wireless Models Only)

| | |
|--------------------------|----------|
| Diversity Antenna | Included |
| Directional Antenna | Future |
| Omni-directional Antenna | Future |

- (1) Performance, capacity and features listed are based upon systems running ScreenOS 5.4 and are the measured maximums under ideal testing conditions unless otherwise noted. Actual results may vary based on ScreenOS release and by deployment.
- (2) IMIX stands for Internet mix and is more demanding than a single packet size as it represents a traffic mix that is more typical of a customer's network. The IMIX traffic used is made up of 58.33% 64 byte packets + 33.33% 570 byte packets + 8.33% 1518 byte packets of UDP traffic.
- (3) UTM Security features (IPS/Deep Inspection, Antivirus, Anti-Spam and Web filtering) are delivered by annual subscriptions purchased separately from Juniper Networks. Annual subscriptions provide signature updates and associated support. The high memory option is required for UTM Security features.
- (4) Redirect Web filtering sends traffic to a secondary server and therefore entails purchasing a separate Web filtering license from either Websense or SurfControl.
- (5) NAT, PAT, policy based NAT, virtual IP mapped IP virtual systems, virtual routers, VLANs, OSPF, BGP, RIPv2, Active/Active HA, and IP address assignment are not available in layer 2 transparent mode.
- (6) Active Passive and HA Lite require the purchase of an Extended License. In addition to the HA features, an Extended License key increases a subset of the capacities as outlined below.

Extended License Feature**SSG 20 and SSG 5**

| | |
|-------------------|---|
| Sessions | Increases max from 4000 to 8000 |
| VPN Tunnels | Increases max from 25 to 40 |
| VLANs | Increases max from 10 to 50 |
| VoIP Calls | Increases max from 32 to 48 |
| High Availability | Adds support for Stateful Active/Passive and/or HA Lite |

IPS (Deep Inspection FW) Signature Packs

Signature Packs provide the ability to tailor the attack protection to the specific deployment and/or attack type. The following Signature packs are available for the SSG 5 and SG 20.

| Signature Pack | Target Deployment | Defense Type | Type of Attack Object |
|-----------------|--|---|--|
| Base | Branch Offices, small medium businesses | Client/Server and worm protection | Range of signatures and protocol anomalies |
| Client | Remote/Branch Offices | Perimeter defense, compliance for hosts (desktops, etc) | Attacks in the server-to-client direction |
| Server | Small/Medium Businesses | Perimeter defense, compliance for server infrastructure | Attacks in the client-to-server direction |
| Worm Mitigation | Remote/Branch Offices of Large enterprises | Most comprehensive defense against worm attacks | Worms, Trojans, backdoor attacks |

Ordering Information

| Product | Part Number |
|---|-----------------|
| SSG 5 | |
| SSG 5 with Serial backup, 128 MB Memory | SSG-5-SB |
| SSG 5 with ISDN BRI S/T backup, Interface, 128 MB Memory | SSG-5-SB-BT |
| SSG 5 with v.92 backup, 128 MB Memory | SSG-5-SB-M |
| SSG 5 with Serial backup, Wireless 802.11a/b/g, 128 MB Memory | SSG-5-SB-W-xx |
| SSG 5 with ISDN BRI S/T backup, Wireless 802.11a/b/g, 128 MB memory | SSG-5-SB-BTW-xx |
| SSG 5 with v.92 backup, Wireless 802.11a/b/g, 128 MB Memory | SSG-5-SB-MW-xx |
| SSG 5 with Serial backup, 256 MB memory | SSG-5-SH |
| SSG 5 with ISDN BRI S/T backup, 256 MB memory | SSG-5-SH-BT |
| SSG 5 with v.92 backup, 256 MB memory | SSG-5-SH-M |
| SSG 5 with Serial backup, Wireless 802.11a/b/g, 256 MB memory | SSG-5-SH-W-xx |
| SSG 5 with ISDN BRI S/T backup, Wireless 802.11a/b/g, 256 MB memory | SSG-5-SH-BTW-xx |
| SSG 5 with v.92 backup, Wireless 802.11a/b/g, 256 MB memory | SSG-5-SH-MW-xx |

| | |
|---|----------------|
| SSG 20 | |
| SSG 20 with 2 port Mini-PIM slots, 128 MB Memory | SSG-20-SB |
| SSG 20 with 2 port Mini-PIM slots, Wireless 802.11a/b/g, 128 MB Memory | SSG-20-SB-W-xx |
| SSG 20 with 2 port Mini-PIM slots, 256 MB memory | SSG-20-SH |
| SSG 20 with 2 port Mini-PIM slots, Wireless 802.11a/b/g, 256 MB memory | SSG-20-SH-W-xx |

| | |
|--|----------------|
| SSG 20 I/O Options | |
| 1 port T1 Mini Physical Interface Module | JXM-1T1-S |
| 1 port E1 Mini Physical Interface Module | JXM-1E1-S |
| 1 port ADSL2+ Annex A Mini Physical Interface Module | JXM-1ADSL2-A-S |
| 1 port ADSL2+ Annex B Mini Physical Interface Module | JXM-1ADSL2-B-S |
| 1 port v.92 Mini Physical Interface Module | JXM-1V92-S |
| 1 port ISDN S/T BRI Mini Physical Interface Module | JXM-1BRI-ST-S |

| Product | Part Number |
|--|------------------|
| SSG 5 / SSG 20 Accessories & Upgrades | |
| Extended License Upgrade Key for SSG 5 | SSG-5-ELU |
| Extended License Upgrade Key for SSG 20 | SSG-20-ELU |
| SSG 5 and SSG 20 256MB Memory Upgrade Module | SSG-5-20-MEM-256 |
| SSG 5 Rack Mount Kit - holds 2 units | SSG-5-RMK |
| SSG 20 Rack Mount Kit | SSG-20-RMK |
| SSG Wireless Replacement Antenna | SSG-ANT |

| Unified Threat Management/Content Security (High Memory Option Required) | |
|---|-----------------|
| Anti-Virus (Anti-Spyware, Anti-Phishing) | NS-K-AVS-SSG5 |
| | NS-K-AVS-SSG20 |
| IPS (Deep Inspection) | NS-DI-ISG-SSG5 |
| | NS-DI-ISG-SSG20 |
| Web Filtering | NS-WF-SSG5 |
| | NS-WF-SSG20 |
| Anti-Spam | NS-SPAM-SSG5 |
| | NS-SPAM-SSG20 |
| Remote Office Bundle (Includes AV, DI, WF) | NS-RBO-CS-SSG5 |
| | NS-RBO-CS-SSG20 |
| Main Office Bundle (Includes AV, DI, WF, AS) | NS-SMB-CS-SSG5 |
| | NS-SMB-CS-SSG20 |

* Note: The appropriate power cord is included based upon the sales order "Ship To" destination.
 * Note: XX denotes Region Code for Wireless devices. Not all countries are supported. Please see Wireless Country Compliance Matrix for certified countries. www.juniper.net/products/integrated/ssg_5_20.html
 * Note: For 2nd year renewal of Content Security Subscriptions add "R" to above SKUs.



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