

Juniper Networks NetScreen-ISG 2000



Juniper Network's Integrated Security Gateway, the NetScreen-ISG 2000, is a purpose-built, high-performance system designed to deliver scalable network and application security for large enterprise, carrier and data center networks. Integrating best-of-breed Deep Inspection firewall, VPN and DoS solutions, the Juniper Networks NetScreen-ISG 2000 enables secure, reliable connectivity along with network and application-level protection for key, high-traffic network segments. The NetScreen-ISG 2000 is built on Juniper Network's next-generation architecture which includes a fourth generation security ASIC, the GigaScreen³, high speed microprocessors and add-on security modules to provide the predictable, multi-Gigabit performance needed for the most demanding network segments.

Juniper Networks NetScreen-ISG 2000⁽¹⁾

Maximum Performance and Capacity⁽²⁾

Firewall performance	2 Gbps
3DES performance	1 Gbps
Deep Inspection performance	300 Mbps
Concurrent sessions	512,000
New sessions/second	30,000
Policies	30,000
Interfaces	Up to 8 Mini GBIC (SX or LX), up to 28 10/100

Mode of Operation

Layer 2 mode (transparent mode) ⁽⁵⁾	Yes
Layer 3 mode (route and/or NAT mode)	Yes
NAT (Network Address Translation)	Yes
PAT (Port Address Translation)	Yes
Policy-based NAT	Yes
Virtual IP	8 ⁽⁴⁾
Mapped IP	8,192 ⁽⁵⁾
Users supported	Unrestricted

Firewall

Number of network attacks detected	31
Network attack detection	Yes
DoS and DDoS protections	Yes
TCP reassembly for fragmented packet protection	Yes
Malformed packet protections	Yes
Deep Inspection firewall	Yes
Stateful protocol signatures	Yes
Protocols supported	HTTP, FTP, SMTP, POP 3, IMAP, DNS
Content Inspection	Yes
Malicious Web filtering	up to 128 URLs
External Web filtering (Websense)	Yes
Integrated Web filtering	No

VPN

Concurrent VPN tunnels	up to 10,000 ⁽³⁾
Tunnel interfaces	up to 1,024 ⁽⁵⁾
DES (56-bit), 3DES (168-bit) and AES encryption	Yes
MD-5 and SHA-1 authentication	Yes
Manual Key, IKE, PKI (X.509)	Yes
Perfect forward secrecy (DH Groups)	1,2,5
Prevent replay attack	Yes
Remote access VPN	Yes
L2TP within IPSec	Yes
IPSec NAT traversal	Yes
Redundant VPN gateways	Yes

Firewall and VPN User Authentication

Built-in (internal) database - user limit	1,500 ⁽⁵⁾
3rd Party user authentication	RADIUS, RSA SecurID, and LDAP
XAUTH VPN authentication	Yes
Web-based authentication	Yes

System Management

WebUI (HTTP and HTTPS)	Yes
Command Line Interface (console)	Yes
Command Line Interface (telnet)	Yes
Command Line Interface (SSH)	Yes, v1.5 and v2.0 compatible

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System Management

NetScreen-Security Manager	Yes
All management via VPN tunnel on any interface	Yes
SNMP full custom MIB	Yes
Rapid deployment	No

Logging/Monitoring

Syslog (multiple servers)	External, up to 4 servers
E-mail (2 addresses)	Yes
NetIQ WebTrends	External
SNMP (v2)	Yes
Traceroute	Yes
VPN tunnel monitor	Yes

Virtualization

Maximum number of Virtual Systems	0 default, upgradeable to 50 ⁽⁶⁾
Maximum number of security zones	26 default, upgradeable to 126 ⁽⁶⁾
Maximum number of virtual routers	3 default, upgradeable to 53 ⁽⁶⁾
Number of VLANs supported	500 max

Routing

OSPF/BGP dynamic routing	up to 8 instances each ⁽³⁾
RIPv2 dynamic routing	up to 50 instances supported ⁽⁵⁾
Static routes	20,000
Source-based routing	Yes

High Availability (HA)

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

IP Address Assignment

Static	Yes
DHCP, PPPoE client	No
Internal DHCP server	No
DHCP relay	Yes

PKI Support

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

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Administration

Local administrators database	20
External administrator database	RADIUS/LDAP/SecurID
Restricted administrative networks	6
Root Admin, Admin, and Read Only user levels	Yes
Software upgrades	TFTP/WebUI/NSM
Configuration Roll-back	Yes

Traffic Management

Guaranteed bandwidth	No
Maximum bandwidth	Yes, per physical interface
Priority-bandwidth utilization	No
DiffServ stamp	Yes, per policy

External Flash

CompactFlash™	Supports 128 or 512 MB Industrial-Grade SanDisk
Event logs and alarms	Yes
System config script	Yes
NetScreen ScreenOS Software	Yes

Dimensions and Power

Dimensions (H/W/L)	5.25/17.5/23 inches
Weight	52 lbs.
Rack mountable	19" standard, 23" optional
Power Supply (AC)	90 to 264 VAC, 250 watts
Power Supply (DC)	-36 to -72 VDC, 250 watts

Licensing Options: The NetScreen-ISG 2000 is available with two licensing options to provide two different levels of functionality and capacity.

Advanced Models: The Advanced software license provides all of the features and capacities listed within this specsheet.

Baseline Models: The Baseline software license provides an entry-level solution for customer environments where features such as Deep Inspection™, OSPF and BGP dynamic routing, advanced High Availability, and full capacity are not critical requirements. The following table shows the features and capacities that are different than the Advanced models:

NetScreen-ISG 2000	Baseline	Advanced
Sessions	256,000	512,000
Concurrent VPN tunnels	1,000	10,000
Deep Inspection Firewall	No	Yes
VLANs	100	500
OSPF/BGP	No	Yes
High Availability (HA)	Active/Passive	Active/Active

Certifications

Safety Certifications
UL, CUL, CSA, CB
EMC Certifications
FCC class A, CE class A, C-Tick, VCCI class A

Environment

Operational temperature: 32° to 122° F, 0° to 50° C
Non-operational temperature: -4° to 158° F, -20° to 70° C
Humidity: 10 to 90 % non-condensing

MTBF (Bellcore model)

7.6 years

Security

Pending

Ordering Information

Product	Part Number	
NetScreen-ISG 2000 Bundles Advanced*		
NetScreen-ISG 2000 system	1 4 port 10/100 I/O Module	NS-ISG-2000-P00A-S00
NetScreen-ISG 2000 system	1 8 port 10/100 I/O Module	NS-ISG-2000-P01A-S00
NetScreen-ISG 2000 system	1 Dual-Port mini-GBIC I/O Module	NS-ISG-2000-P02A-S00
NetScreen-ISG 2000 system	1 dual port 10/100/1000 Copper I/O Module	NS-ISG-2000-P03A-S00
NetScreen-ISG 2000 Bundles Baseline*		
NetScreen-ISG 2000 system	1 4 port 10/100 I/O Module	NS-ISG-2000B-P00A-S00
NetScreen-ISG 2000 system	1 8 port 10/100 I/O Module	NS-ISG-2000B-P01A-S00
NetScreen-ISG 2000 system	1 Dual port mini-GBIC I/O Module	NS-ISG-2000B-P02A-S00
NetScreen-ISG 2000 system	1 dual port 10/100/1000 Copper I/O Module	NS-ISG-2000B-P03A-S00

*All systems include 2 AC power supplies and 0 virtual systems

NetScreen-ISG 2000 Virtual System Upgrades

VSYS Upgrade 0 to 5	NS-ISG-2000-VSYS-5
VSYS Upgrade 5 to 25	NS-ISG-2000-VSYS-25
VSYS Upgrade 25 to 50	NS-ISG-2000-VSYS-50
VSYS Upgrade 0 to 25	NS-ISG-2000-VSYS-025
VSYS Upgrade 0 to 50	NS-ISG-2000-VSYS-050

Every Virtual System includes 1 virtual router and 2 security zones, usable in the virtual or root system

NetScreen-ISG 2000 Components

I/O Module - Dual Port Mini GBIC-SX	NS-ISG-2000-SX2
I/O Module - Dual Port Mini GBIC-LX	NS-ISG-2000-LX2
I/O Module - 4 Port 10/100 Fast Ethernet	NS-ISG-2000-FE4
I/O Module - 8 Port 10/100 Fast Ethernet	NS-ISG-2000-FE8
I/O Module - Dual Port 10/100/1000 Gig Ethernet	NS-ISG-2000-TX2
SX transceiver (mini-GBIC)	NS-SYS-GBIC-MSX
LX transceiver (mini-GBIC)	NS-SYS-GBIC-MLX
AC power supply	NS-ISG-2000-PWR-AC
DC power supply	NS-ISG-2000-PWR-DC
Japan power cord option	NS-ISG-2000-JAPAN
Fan module	NS-ISG-2000-FAN
Rack Mount Kit (19 in., all mounting hardware)	NS-ISG-2000-RCK-01
Rack Mount Kit (23 in., all mounting hardware)	NS-ISG-2000-RCK-02
Blank Interface Panel	NS-ISG-2000-IPAN
Blank Power Supply Cover	NS-ISG-2000-PPAN

(1) Performance, capacity and features listed are based upon systems ScreenOS 5.0.0 and may vary with other ScreenOS releases. Actual throughput may vary based upon packet size and enabled features.

(2) Performance and capacity provided are the measured maximums under ideal testing conditions. May vary by deployment.

(3) Shared among all Virtual Systems

(4) Not available with Virtual Systems

(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) Requires purchase of virtual system key. Every virtual system includes one virtual router and two security zones, usable in the virtual or root system.



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