

# Juniper Networks NetScreen-5200/5400

## With Second Generation Secure Port Modules



Already established as the market leader in dedicated, high-end Firewall/VPN solutions, the NetScreen-5000 Series further extends that lead by achieving previously unsurpassed levels of performance and flexibility with the introduction of two new, second generation Secure Port Modules (SPMs), the 8G2 and the 2XGE. The new modules – when combined with the second generation Management 2 Module – significantly increase the overall performance of the system, allowing the NetScreen-5000 Series to scale up to 30Gbps Firewall and 15Gbps VPN, while offering other new features, such as 10Gig Ethernet and Jumbo Frames support.

The Juniper Networks NetScreen-5000 Series Firewall/VPN solutions were originally architected with both existing and future performance network design in mind. Available in two modular chassis configurations, the two (2) slot NetScreen-5200 and the four (4) slot NetScreen-5400 offer excellent scalability and deployment flexibility for the world's most demanding large enterprise, carrier, and data center networks.

	Juniper Networks NetScreen-5200 <sup>(4)</sup>	Juniper Networks NetScreen-5400 <sup>(4)</sup>
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### Maximum Performance and Capacity<sup>(2)</sup>

ScreenOS version support	ScreenOS 5.4	ScreenOS 5.4
Firewall performance	10/8 Gbps <sup>(7)</sup>	30/24 Gbps <sup>(7)</sup>
Firewall packets per second (64 byte)	6 M	18 M
3DES/AES performance	5/4 Gbps <sup>(7)</sup>	15/12 Gbps <sup>(7)</sup>
Concurrent sessions	1,000,000 <sup>(5)</sup>	1,000,000 <sup>(5)</sup>
New sessions/second	19,000	19,000
Policies	40,000 <sup>(5)</sup>	40,000 <sup>(5)</sup>
Interfaces	8 mini GBIC (SX or LX) or 2 XFP 10Gig (SR or LR)	24 mini GBIC (SX or LX) or 6 XFP 10Gig (SR or LR)

	Juniper Networks NetScreen-5000 Series <sup>(4)</sup>
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### Mode of Operation

Layer 2 mode (transparent mode) <sup>(5)</sup>	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	64 per VSYS
Mapped IP	10,000 <sup>(4)</sup>
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
IPS (Deep Inspection FW)	Yes
Protocol anomaly	Yes
Stateful protocol signatures	Yes
Content Inspection	Yes
Malicious Web filtering	Up to 48 URLs
External Web filtering (SurfControl or Websense)	Yes
Integrated Web filtering	No

### VPN

VPN tunnels (site-to-site or manual)	up to 16,000 <sup>(5)</sup>
Concurrent VPN tunnels (dynamic dialup)	up to 25,000 <sup>(5)</sup>
Tunnel interfaces	up to 4,095
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
VPN tunnel monitor	Yes

### Firewall and VPN User Authentication

Built-in (internal) database - user limit	up to 25,000 <sup>(5)</sup>
3rd Party user authentication	RADIUS, RSA SecurID, 802.1X and LDAP
XAUTH VPN authentication	Yes
Web-based authentication	Yes

	Juniper Networks NetScreen-5000 Series <sup>(4)</sup>
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### Logging/Monitoring

Syslog (multiple servers)	External, up to 4 servers
E-mail (2 addresses)	Yes
NetIQ WebTrends	External
SNMP (v1, v2)	Yes
Standard and custom MIB	Yes
Traceroute	Yes
At session start and end	Yes

### Virtualization

Maximum number of Virtual Systems	0 default, upgradeable to 500 <sup>(6)</sup>
Maximum number of security zones	16 default, upgradeable to 1,016 <sup>(6)</sup>
Maximum number of virtual routers	3 default, upgradeable to 503 <sup>(6)</sup>
Number of VLANs supported	4,000 max

### Routing

OSPF dynamic routing	up to 8 instances each <sup>(5)</sup>
RIPv1/v2 dynamic routing	up to 512 instances <sup>(5)</sup>
BGP dynamic routing	up to 8 instances each <sup>(5)</sup>
Static routes	20,000 <sup>(5)</sup>
Source-based routing	Yes
Equal cost multi-path routing	Yes
IGMP group	Yes

### High Availability (HA)

Active/Active	Yes
Active/Passive	Yes
Redundant Interfaces	8G2 only
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
LDAP & RADIUS server failover	Yes

### VoIP

H.323 ALG	Yes
SIP ALG	Yes
MGCP ALG	Yes
SCCP ALG	Yes
NAT for H.323/SIP/MGCP/SCCP	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
Self Signed Certificates	Yes
Certificate Authorities Supported	
Verisign	Yes
Entrust	Yes
Microsoft	Yes
RSA Keon	Yes
iPlanet (Netscape)	Yes
Baltimore	Yes
DOD PKI	Yes

## Juniper Networks NetScreen-5000 Series<sup>(1)</sup>

<b>RADIUS Accounting</b>		
RADIUS Start/Stop	Yes	
<b>System Management</b>		
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	
NetScreen-Security Manager	Yes	
All management via VPN tunnel on any interface	Yes	
SNMP Full Custom MIB	Yes	
Rapid deployment	No	
<b>Administration</b>		
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/SCP/NSM	
Configuration Roll-back	Yes	
<b>Traffic Management</b>		
Guaranteed bandwidth	No	
Maximum bandwidth	Per port	
Priority-bandwidth utilization	No	
DiffServ stamp	Yes, per policy	
Jumbo Frames	Yes	
Link aggregation up to 4 ports	8G2 only	
<b>External Flash</b>		
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

	Juniper Networks NetScreen-5200	Juniper Networks NetScreen-5400
Dimensions (H/W/L)	3.4/17.5/20 in.	8.6/17.5/14 in.
Weight	37 lbs.	45 lbs.
Rack mountable	19" standard, 23" optional	19" standard, 23" optional
Power Supply (AC)	90 to 264 VAC, 150 watts	90 to 264 VAC, 300 watts
Power Supply (DC)	-36 to -72 VDC, 150 watts	-36 to -72 VDC, 300 watts

### Certifications

- Safety Certifications
  - UL, CUL, CSA, CB, Austel, NEBS Level 3
  - NEBS Level 3 NS-5000-MGT Management Module
- EMC Certifications
  - FCC class A, CE class A, C-Tick, VCCI class A

### Environment

- Operational temperature: 32 to 105° F, 0 to 45° C
- Non-operational temperature: -4 to 158° F, -20 to 70° C
- Humidity: 10 to 90% non-condensing

### MTBF (Bellcore model)

NetScreen-5200: 7.9 years, NetScreen-5400: 7.0 years

## Ordering Information

Product	Part Number
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<b>NetScreen-5000 Systems</b>	Add MGT2 and SPM Modules to build complete systems
<b>NS-5200</b>	NS-5200 System, No SPM or MGT modules, includes Fan Tray, Dual AC power supply, 19" Rack Mount, 0 VSYS
<b>NS-5200-DC</b>	NS-5200 System, No SPM or MGT modules, includes Fan Tray, Dual DC power supply, 19" Rack Mount, 0 VSYS
<b>NS-5400</b>	NS-5400 System, No SPM or MGT modules, includes Fan Tray, 3 x AC power supply, 19" Rack Mount, 0 VSYS
<b>NS-5400-DC</b>	NS-5400 System, No SPM or MGT modules, includes Fan Tray, 3 x DC power supply, 19" Rack Mount, 0 VSYS

### NetScreen-5000 Components – Needed to build complete systems

NS-5000-MGT2	NetScreen 5000 Management Module 2
NS-5000-2XGE	NetScreen 5000 2 10GigE Secure Port Module (SPM)
NS-5000-8G2	NetScreen 5000 8 GigE Secure Port Module 2 (SPM)

### Juniper Networks NetScreen-5000 Virtual System Upgrades

NetScreen-5000	VSYS Upgrade 0 to 5	NS-5000-VSYS-5
NetScreen-5000	VSYS Upgrade 5 to 25	NS-5000-VSYS-25
NetScreen-5000	VSYS Upgrade 25 to 50	NS-5000-VSYS-50
NetScreen-5000	VSYS Upgrade 50 to 100	NS-5000-VSYS-100
NetScreen-5000	VSYS Upgrade 100 to 250	NS-5000-VSYS-250
NetScreen-5000	VSYS Upgrade 250 to 500	NS-5000-VSYS-500
NetScreen-5000	VSYS Upgrade 0 to 500	NS-5000-VSYS

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

### Juniper Networks NetScreen-5000 Components

mini-GBIC transceiver - SX	NS-SYS-GBIC-MSX
mini-GBIC transceiver - LX	NS-SYS-GBIC-MLX
XFP 10GigE Transceiver Short Range (SR) (300m)	NS-SYS-GBIC-MXSR
XFP 10GigE Transceiver Long Range (LR) (10km)	NS-SYS-GBIC-MXLR

### Juniper Networks NetScreen-5200 Components

NetScreen-5200	Chassis	NS-5200-CHA
NetScreen-5200	AC Power Supply	NS-5200-PWR-AC
NetScreen-5200	DC Power Supply	NS-5200-PWR-DC
NetScreen-5200	Fan Assembly	NS-5200-FAN

### Juniper Networks NetScreen-5400 Components

NetScreen-5400	Chassis	NS-5400-CHA
NetScreen-5400	AC Power Supply	NS-5400-PWR-AC
NetScreen-5400	DC Power Supply	NS-5400-PWR-DC
NetScreen-5400	Fan Assembly	NS-5400-FAN

- (1) Performance, capacity and features listed are based upon systems ScreenOS 5.4 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.
- (7) Listed first, higher performance numbers are achieved with 2XGE, lower numbers with the 8G2 Secure Port Modules.



CORPORATE HEADQUARTERS  
AND SALES HEADQUARTERS  
FOR NORTH AND SOUTH AMERICA  
Juniper Networks, Inc.  
1194 North Mathilda Avenue  
Sunnyvale, CA 94089 USA  
Phone: 888-JUNIPER (888-586-4737)  
or 408-745-2000  
Fax: 408-745-2100  
www.juniper.net

EAST COAST OFFICE  
Juniper Networks, Inc.  
10 Technology Park Drive  
Westford, MA 01886-3146 USA  
Phone: 978-589-5800  
Fax: 978-589-0800

ASIA PACIFIC REGIONAL  
SALES HEADQUARTERS  
Juniper Networks (Hong Kong) Ltd.  
Suite 2507-11, 25/F  
ICBC Tower  
Citibank Plaza, 3 Garden Road  
Central, Hong Kong  
Phone: 852-2332-3636  
Fax: 852-2574-7803

EUROPE, MIDDLE EAST, AFRICA  
REGIONAL SALES HEADQUARTERS  
Juniper Networks (UK) Limited  
Building 1  
Aviator Park, Station Road  
Addlestone  
Surrey, KT15 2PG, U. K.  
Phone: 44(0)-1372-385500  
Fax: 44(0)-1372-385501

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