



NETWORK AND SECURITY MANAGER APPLIANCES (NSMXPRESS AND NSM3000)

Product Overview

Now more than ever, network operators need the ability to easily manage security policies and to have visibility into potential security concerns in the network. At the same time, they need to invest their time in monitoring and operating secure networks. Juniper Networks NSM3000 and NSMXpress enable IT departments not only to control the entire device life cycle with a single, centralized solution, but also provides visibility with a complete set of investigative and reporting tools.

Product Description

Juniper Networks® NSMXpress and NSM3000 are purpose built security hardened appliance versions of Juniper Networks Network and Security Manager (NSM) optimized towards providing a single centralized management solution to effectively manage Juniper Networks family of devices including routers, switches, and firewalls.

While the NSMXpress is primarily geared towards small to mid market, the NSM3000 scales to the requirements of large enterprise customers with the capability to manage up to 1,500 devices. These appliances, which install in minutes with high availability (HA) support, not only simplify the complexity of device administration by providing a single integrated management interface that controls every device parameter, but also eliminate the need to have dedicated resources for maintaining the management solution.

NSM3000 and NSMXpress have the following features:

- Provides an appliance version of NSM with a security hardened OS
- Offers centralized, end-to-end device life cycle management for granular control of configuration, network settings and security policies
- Allows for delegation of administrative roles, which provides relevant access to those who need it
- Offers easy installation with operational efficiency that delivers lower total cost of ownership (TCO)
- Provides dedicated HA support

Architecture and Key Components

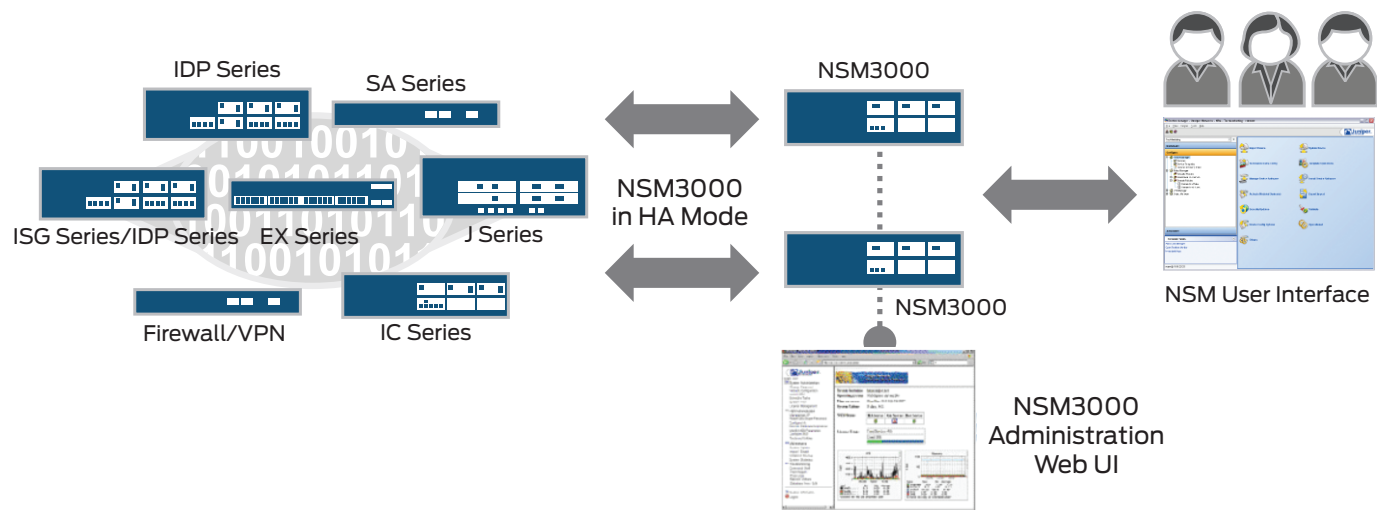


Figure 1: Managed Juniper Networks devices

Features and Benefits

Features	Feature Description	Benefits
Hardened OS	Juniper Networks security team monitors and maintains the OS, which is optimized for performance and security.	Users don't have to worry about security vulnerabilities, support or patch management for the OS.
Multi-user Web-based management	Intuitive Web UI for managing and maintaining the appliance, with multi-user, role-based access control.	Allows multiple role-based users to configure common appliance-specific parameters and tasks like network settings, scheduling updates, troubleshooting, utilities and backups via a Web interface. NSM appliance administrators can be assigned specific predefined roles with an option of RADIUS-based authentication.
Recovery option	Menu-driven recovery option allows users to revert back to factory defaults or restore to the last configuration.	Users can easily reset the box to its original state or quickly restore lost data.
Scheduled database backups	Supports both local and remote backups. By default it will perform nightly back-ups locally.	Users can set up an automatic task for backing up their data either locally or remotely.
Status monitoring	The system monitors the status of the NSM appliance and sends daily emails to the administrator regarding the health of the appliance.	Users can monitor and maintain the health of the appliance.
Server role option	Ability exists to choose the role of the appliance to be either a regional server or central manager.	User will get a chance to change the role of the server if needed. This is a one-time switch.
Central update	Updates are available in one place. NSM appliance can perform either automatic or manual updates.	It can download the latest OS upgrades and update NSM attack DB through proxy settings.
One stop support	Juniper Technical Assistance Center (JTAC) supports all aspects of NSM appliance.	Users don't have to go to several places to get support.

Juniper Networks Device Support

Device Type	NSMXpress Device Support	NSM3000 Device Support
Firewall/VPN (SSG5, SSG20, SRX100, SRX110, SRX210, SRX220, SRX240, SRX550, and SRX650)	300	1500
IDP Series	25	50
High-end firewall/VPN (SRX1400, SRX3400, SRX3600, SRX5600, and SRX5800)	25	100
M Series/MX Series	25	100
SA Series	30	50
IC Series	30	50
EX Series	300	1500
North Bound Interface (NBI) clients	5	5
NSM GUI clients	10	10



Specifications

	NSMXpress	NSM3000
Dimensions and Power		
Dimensions (W x H x D)	17.26 x 3.5 x 17.72 in (43.84 x 8.8 x 45 cm)	17.26 x 3.5 x 17.72 in (43.8 x 8.8 x 45 cm)
Weight	26 lb 6 oz	27 lb 10 oz with 1 power supply 30 lb with 2 power supplies
Rack mountable	Yes, 19 in rack, front and rear or mid-mount, flush or recessed mounting	Yes, 19 in rack, front and rear or mid-mount
A/C power supply	90 V to 264 V 250 W AC power module · Efficiency 80 PLUS certified · Peak inrush current is: - 40 A max. at 115 VAC and 25 C - 80 A max. at 240 VAC and 25 C	90 V to 264 V hot swap dual redundant 250 W AC power module, 90 V to 264 V hot swap · Efficiency 80 PLUS certified · Peak inrush current is: - 40 A max. at 115 VAC and 25 C - 80 A max. at 240 VAC and 25 C
DC power supply	Supports hot swap dual redundant 560 W DC power module -38 V to -72 V DC power supply; peak inrush is <60 A · Power module max efficiency: - 80 PLUS, 560 W AC - 80 PLUS, 560 W DC	Supports hot swap dual redundant 560 W DC power module -38 V to -72 V DC power supply; peak inrush is <60 A · Power module max efficiency: - 80 PLUS, 560 W AC - 80 PLUS, 560 W DC
System battery	CR2032 3V lithium coin cell	CR2032 3V lithium coin cell
Efficiency	65 percent minimum, at full load	80 PLUS Certified
MTBF	103,000 hours (1x power supply), 152,000 hours (2x power supply)	71,000 hours (1x power supply), 91,000 hours (2x power supply)
Material	18 gauge (.048 in) cold-rolled steel	18 gauge (.048 in) cold-rolled steel
Fans	Two externally accessible, hot-swappable ball-bearing fans	2x80 mm hot swap
Panel display	· LEDs: power, HD activity, hardware alert · HD activity and fail LED on drive tray	· LEDs: power, hardware alert · HD activity and fail LED on drive tray
Ports	1 RJ45 serial console, 2x RJ45 10/100/1000 802.3u/z/ab compliant	1 RJ45 serial console, 4x RJ45 10/100/1000 802.3u/z/ab compliant
Environment		
Operating temp	41° F to 104° F (5° C to 40° C)	41° F to 104° F (5° C to 40° C)
Storage temp	-40° F to 158° F (-40° C to 70° C)	-40° F to 158° F (-40° C to 70° C)
Relative humidity (operating)	8% to 90% noncondensing	8% to 90% noncondensing
Relative humidity (storage)	5% to 95% noncondensing	5% to 95% noncondensing
Altitude (operating)	10,000 ft (3,000 m) maximum	10,000 ft (3,000 m) maximum
Altitude (storage)	40,000 ft (12,192 m) maximum	40,000 ft (12,192 m) maximum
Power Consumption		
Thermal dissipation	416 BTU/hr (typical) 470 BTU/hr (max single power supply) 559 BTU/hr (max dual power supply)	Single power supply: · 89 W, 304 BTU/hr (typical) · 154 W, 526 BTU/hr (max) Dual power supplies: · 96 W, 327 BTU/hr (typical) · 162 W, 552 BTU/hr (max)
Peak inrush current	50 A max @ 115 VAC, 80A max @ 230 VAC	40 A max @ 115 VAC, 80A max @ 240 VAC
Certifications		
Safety certifications	· CSA 60950-1 (2003) Safety of Information Technology Equipment · UL 60950-1 (2003) Safety of Information Technology Equipment · EN 60950-1 (2001) Safety of Information Technology Equipment · IEC 60950-1 (2001) Safety of Information Technology Equipment (with country deviations) · EN 60825-1 +A1+A2 (1994) Safety of Laser Products - Part 1: Equipment Classification · EN 60825-2 (2000) Safety of Laser Products - Part 2: Safety of Optical Fiber Comm. Systems	· CSA 60950-1 (2003) Safety of Information Technology Equipment · UL 60950-1 (2003) Safety of Information Technology Equipment · EN 60950-1 (2001) Safety of Information Technology Equipment · IEC 60950-1 (2001) Safety of Information Technology Equipment (with country deviations) · EN 60825-1 +A1+A2 (1994) Safety of Laser Products - Part 1: Equipment Classification · EN 60825-2 (2000) Safety of Laser Products - Part 2: Safety of Optical Fiber Comm. Systems
EMC	· EN 300 386 V1.3.3 (2005) Telecom Network Equipment - EMC requirements · EN 300 386 V1.3.3 (2005) Telecom Network Equipment - EMC requirements	· EN 300 386 V1.3.3 (2005) Telecom Network Equipment - EMC requirements · EN 300 386 V1.3.3 (2005) Telecom Network Equipment - EMC requirements

	NSMXpress	NSM3000
EMI	• FCC Part 15 Class A (2007) USA Radiated Emissions • EN 55022 Class A (2006) European Radiated Emissions • VCCI Class A (2007) Japanese Radiated Emissions • FCC Part 15 Class A (2007) USA Radiated Emissions • EN 55022 Class A (2006) European Radiated Emissions • VCCI Class A (2007) Japanese Radiated Emissions	• FCC Part 15 Class A (2007) USA Radiated Emissions • EN 55022 Class A (2006) European Radiated Emissions • VCCI Class A (2007) Japanese Radiated Emissions • FCC Part 15 Class A (2007) USA Radiated Emissions • EN 55022 Class A (2006) European Radiated Emissions • VCCI Class A (2007) Japanese Radiated Emissions
Immunity	• EN 55024 +A1+A2 (1998) Information Technology Equipment Immunity Characteristics • EN-61000-3-2 (2006) Power Line Harmonics • EN-61000-3-3 +A1 +A2 +A3 (1995) Power Line Voltage Fluctuations • EN-61000-4-2 +A1 +A2 (1995) Electrostatic Discharge • EN-61000-4-3 +A1+A2 (2002) Radiated Immunity • EN-61000-4-4 (2004) Electrical Fast Transients • EN-61000-4-5 (2006) Surge • EN-61000-4-6 (2007) Immunity to Conducted Disturbances • EN-61000-4-11 (2004) Voltage Dips and Sags • EN 55024 +A1+A2 (1998) Information Technology Equipment Immunity Characteristics • EN-61000-3-2 (2006) Power Line Harmonics • EN-61000-3-3 +A1 +A2 +A3 (1995) Power Line Voltage Fluctuations • EN-61000-4-2 +A1 +A2 (1995) Electrostatic Discharge • EN-61000-4-3 +A1+A2 (2002) Radiated Immunity • EN-61000-4-4 (2004) Electrical Fast Transients • EN-61000-4-5 (2006) Surge • EN-61000-4-6 (2007) Immunity to Conducted Disturbances • EN-61000-4-11 (2004) Voltage Dips and Sags	• EN 55024 +A1+A2 (1998) Information Technology Equipment Immunity Characteristics • EN-61000-3-2 (2006) Power Line Harmonics • EN-61000-3-3 +A1 +A2 +A3 (1995) Power Line Voltage Fluctuations • EN-61000-4-2 +A1 +A2 (1995) Electrostatic Discharge • EN-61000-4-3 +A1+A2 (2002) Radiated Immunity • EN-61000-4-4 (2004) Electrical Fast Transients • EN-61000-4-5 (2006) Surge • EN-61000-4-6 (2007) Immunity to Conducted Disturbances • EN-61000-4-11 (2004) Voltage Dips and Sags • EN 55024 +A1+A2 (1998) Information Technology Equipment Immunity Characteristics • EN-61000-3-2 (2006) Power Line Harmonics • EN-61000-3-3 +A1 +A2 +A3 (1995) Power Line Voltage Fluctuations • EN-61000-4-2 +A1 +A2 (1995) Electrostatic Discharge • EN-61000-4-3 +A1+A2 (2002) Radiated Immunity • EN-61000-4-4 (2004) Electrical Fast Transients • EN-61000-4-5 (2006) Surge • EN-61000-4-6 (2007) Immunity to Conducted Disturbances • EN-61000-4-11 (2004) Voltage Dips and Sags

Juniper Networks Services and Support

Juniper Networks is the leader in performance-enabling services that are designed to accelerate, extend, and optimize your high-performance network. Our services allow you to maximize operational efficiency while reducing costs and minimizing risk, achieving a faster time to value for your network. Juniper Networks ensures operational excellence by optimizing the network to maintain required levels of performance, reliability, and availability. For more details, please visit www.juniper.net/us/en/products-services.

Ordering Information

Model Number	Description
NS-SM-A2-BSE	NSMXpress, 25 devices
NS-SM-XL-A-BSE	NSM3000, 25 devices
NS-SM-S-BSE	Network and Security Manager, 25 devices
NS-SM-ADD-25D	Network and Security Manager, additional 25 devices
NS-SM-ADD-50D	Network and Security Manager, additional 50 devices
NS-SM-ADD-100D	Network and Security Manager, additional 100 devices
NS-SM-ADD-500D	Network and Security Manager, additional 500 devices
NS-SM-ADD-1KD	Network and Security Manager, additional 1,000 devices

Spare SKU

UNIV-MR2U-B-FAN	Replacement fan for NSMXpress II, NSM3000, and JA1500
UNIV-250G-35-SATA-B-HDD	Replacement HDD for NSMXpress II
UNIV-1TB-SAS-HDD	Replacement 1 TB hard drive for NSM3000 and JA1500
UNIV-250W-PS-AC	AC power supply (250 W) for NSMXpress II, NSM3000, and JA1500
UNIV-2U-RAILKIT	Rail kit for NSM3000
UNIV-560W-PS-DC	Replacement DC power supply for NSMXpress II, NSM3000, and JA1500

Juniper Networks Device and Software Support

- **EX Series Ethernet Switches**
- **IC Series Unified Access Control Appliances**
IC Series version 2.2 and above
- **ISG Series Integrated Security Gateways**
- **IDP Series Intrusion Detection and Prevention Appliances**
IDP Series version 4.0 and above
- **J Series Services Routers**
- **M Series Multiservice Edge Routers**
- **MX Series 3D Universal Edge Routers**
- **SRX Series Services Gateways**
- **NetScreen Series Security Systems**
ScreenOS version 5.0.0 and above
- **SA Series SSL VPN Appliances**
SA Series version 6.3 and above
- **SSG Series Secure Services Gateways**
- **Junos® Operating System Support**
Junos OS version 9.0 and above; forward support for Junos OS 9.6 software through schema update

Note: For more information on Network and Security Manager, please refer to the datasheet.

About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at www.juniper.net.

Corporate and Sales Headquarters

Juniper Networks, Inc.
1194 North Mathilda Avenue
Sunnyvale, CA 94089 USA
Phone: 888.JUNIPER (888.586.4737)
or +1.408.745.2000
Fax: +1.408.745.2100
www.juniper.net

APAC and EMEA Headquarters

Juniper Networks International B.V.
Boeing Avenue 240
1119 PZ Schiphol-Rijk
Amsterdam, The Netherlands
Phone: +31.0.207.125.700
Fax: +31.0.207.125.701

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