

The SRX4100 and SRX4200 Services Gateways offer outstanding protection, performance, scalability, availability, and integrated security services. Designed for high-performance security services architectures and seamless integration of networking and security in a single platform, the SRX4100 and SRX4200 are best suited for enterprise data centers, campuses, and regional headquarters, with a focus on application visibility and control, intrusion prevention, advanced threat protection, authentication, confidentiality of information, and integrated cloud-based security. Both devices are powered by Junos OS, the industry-leading operating system that keeps the world's largest mission-critical enterprise networks secure.

SRX4100 AND SRX4200 SERVICES GATEWAYS

Product Description

The Juniper Networks® SRX4100 and SRX4200 Services Gateways are high-performance, next-generation firewalls and hardware-accelerated security services gateways that protect mission-critical data center networks, enterprise campuses, and regional headquarters. The SRX4100 and SRX4200 provide best-in-class security and advanced threat mitigation capabilities and integrate carrier-class routing.

The SRX4100 and SRX4200 deliver fully automated SD-WAN to both enterprises and service providers. Their high performance and scale allow the SRX4100 and SRX4200 to act as VPN hubs, terminating VPN/secure overlay connections in various SD-WAN topologies.

The SRX4100 and SRX4200 deliver a next-generation security solution that supports the changing needs of cloud-enabled enterprise networks, helping organizations realize their business objectives whether rolling out new services in an enterprise data center or campus, or connecting to the cloud. The SRX4100 and SRX4200 comply with industry standards, delivering the scalability, ease of management, secure connectivity, and advanced threat mitigation capabilities businesses need.

The SRX4100 and SRX4200 protect critical corporate assets such as next-generation firewalls, act as enforcement points for cloud-based security solutions, and provide application visibility and control to improve the user and application experience.

Architecture and Key Components

The SRX4100 and SRX4200 hardware and software architecture provides cost-effective security performance in a small 1 U form factor. Purpose-built to protect up to 40 Gbps Internet Mix (IMIX) firewall throughput network environments, the SRX4100 and SRX4200 incorporate multiple security services and networking functions on top of the industry-leading Juniper Networks Junos® operating system.

The SRX4100 supports up to 20 Gbps (IMIX) of firewall performance, 9.5 Gbps of nextgeneration firewall (application security, intrusion prevention, enhanced URL filtering, and logging), and 5 Gbps of IPsec VPN in data center, enterprise campus, and regional headquarter deployments with IMIX traffic patterns. The SRX4200 supports up to 40 Gbps of firewall performance, 19 Gbps of next-generation firewall, and up to 9.6 Gbps of IPsec VPN in data center, enterprise campus, and regional headquarter deployments with IMIX traffic patterns.

SRX4100 and SRX4200 Services Gatewa

Table 1. SRX4100 and SRX4200 Statistics¹

	SRX4100	SRX4200
Firewall throughput	40 Gbps	80 Gbps
Firewall throughput—IMIX	20 Gbps	40 Gbps
Firewall throughput with application security	27.5 Gbps	55 Gbps
IPsec VPN throughput—IMIX	4.8 Gbps	9.6 Gbps
Intrusion prevention	15 Gbps	30 Gbps
NGFW ² throughput	9.5 Gbps	19 Gbps
Connections per second	250,000	500,000
Maximum session	5 million	10 million

¹ Performance, capacity and features listed are based on systems running Junos OS 19.3R1 and are measured under ideal testing conditions. Actual results may vary based on Junos OS releases and by deployments. ² Next-generation firewall (NGFW) is a combination of advanced features such as application security, IPS, and URL filtering in addition to the foundational services such as logging and stateful firewall.

The SRX4100 and SRX4200 recognize more than 3,500 applications and nested applications in plain-text or SSL-encrypted transactions. The firewalls also integrate with Microsoft Active Directory and combine user information with application data to provide network-wide application and user visibility and control.

Features and Benefits

Table 2. SRX4100 and SRX4200 Features and Benefits

Business Requirement	Feature/Solution	SRX4100/SRX4200 Advantages	
High performance	Up to 80 Gbps of firewall throughput (up to 40 Gbps of IMIX firewall throughput)	 Best suited for enterprise campus and data center edge deployments Ideal for secure router deployments at the head office Addresses future needs for scale and feature capacity 	
High-quality end-user experience	Application visibility and control	 Detects 3,500+ L3-L7 applications, including Web 2.0 Controls and prioritizes traffic based on application and use role Inspects and detects applications inside SSL-encrypted traffic 	
Advanced threat protection	IPS, antivirus, antispam, enhanced web filtering, Juniper Advanced Threat Prevention Cloud, Encrypted Traffic Insights, Threat Intelligence Feeds, and Juniper ATP Appliance	 Provides real-time updates to IPS signatures and protects against exploits Implements industry-leading antivirus and URL filtering Delivers open threat intelligence platform that integrates with third-party feeds Protects against zero-day attacks Restores visibility lost due to encryption, without the heavy burden of full TLS/SSL decryption 	
Professional-grade networking services	Routing, secure wire	Supports carrier-class advanced routing and quality of service (QoS)	
Highly secure	IPsec VPN, Remote Access/SSL VPN	 Provides high-performance IPsec VPN with dedicated crypto engine Offers diverse VPN options for various network designs, including remote access and dynamic site-to-site communications Simplifies large VPN deployments with auto VPN Includes hardware-based crypto acceleration Secure and flexible remote access SSL VPN with Juniper Secure Connect 	
Highly reliable	Chassis cluster, redundant power supplies	 Provides stateful configuration and session synchronization Supports active/active and active/backup deployment scenarios Offers highly available hardware with redundant power supply unit (PSU) and redundant fans Delivers dedicated control and fabric link with seamless high availability 	
Easy to manage and scale	On-box GUI, Junos Space Security Director	 Enables centralized management for auto-provisioning, firewall policy management, Network Address Translation (NAT), and IPsec VPN deployments Includes simple, easy-to-use on-box GUI for local management 	
Low TCO	Junos OS	Integrates routing and security in a single deviceReduces OpEx with Junos OS automation capabilities	





SRX4100 and SRX4200 Services Gateways Specifications

Software Specifications

Firewall Services

- Stateful and stateless firewall
- Zone-based firewall
- Screens and distributed denial of service (DDoS) protection
- Protection from protocol and traffic anomalies
- Unified Access Control (UAC)

Network Address Translation (NAT)

- Source NAT with Port Address Translation (PAT)
- Bidirectional 1:1 static NAT
- Destination NAT with PAT
- Persistent NAT
- IPv6 address translation

VPN Features

- Tunnels: Site-to-site, hub and spoke, dynamic endpoint, AutoVPN, ADVPN, Group VPN (IPv4/ IPv6/Dual Stack)
- Juniper Secure Connect: Remote access/SSL VPN
- Configuration payload: Yes
- IKE Encryption algorithms: Prime, DES-CBC, 3DES-CBC, AEC-CBC, AES-GCM, Suite B
- IKE authentication algorithms: MD5, SHA-1, SHA-128, SHA-256, SHA-384
- Authentication: Pre-shared key and public key infrastructure (PKI) (X.509)
- IPsec (Internet Protocol Security): Authentication Header (AH) / Encapsulating Security Payload (ESP) protocol
- IPsec Authentication Algorithms: hmac-md5, hmac-sha-196, hmac-sha-256
- IPsec Encryption Algorithms: Prime, DES-CBC, 3DES-CBC, AEC-CBC, AES-GCM, Suite B
- Perfect forward secrecy, anti-reply
- Internet Key Exchange: IKEv1, IKEv2
- Monitoring: Standard-based dead peer detection (DPD) support, VPN monitoring
- VPNs GRE, IP-in-IP, and MPLS

¹Offered as advanced security subscription license.

High Availability Features

- Virtual Router Redundancy Protocol (VRRP) IPv4 and IPv6
- Stateful high availability:
 - Dual box clustering
 - Active/passive
 - Active/active
 - Configuration synchronization
 - Firewall session synchronization
 - Device/link detection
 - In-Service Software Upgrade (ISSU)
- IP monitoring with route and interface failover

Application Security Services³

- Application visibility and control
- Application-based firewall
- Application QoS
- Advanced/application policy-based routing (APBR)
- Application Quality of Experience (AppQoE)
- Application-based multipath routing
- User-based firewall

Threat Defense and Intelligence Services³

- Intrusion prevention system
- Antivirus
- Antispam
- Category/reputation-based URL filtering
- SSL proxy/inspection
- Protection from botnets (command and control)
- Adaptive enforcement based on GeoIP
- Juniper Advanced Threat Prevention, a cloud-based SaaS offering, to detect and block zero-day attacks
- Adaptive Threat Profiling
- Encrypted Traffic Insights
- SecIntel to provide threat intelligence
- Juniper ATP Appliance, a distributed, on-premises advanced threat prevention solution to detect and block zero-day attacks

SRX4100 and SRX4200 Services Gatew

Routing Protocols

- IPv4, IPv6, static routes, RIP v1/v2
- OSPF/OSPF v3
- BGP with route reflector
- IS-IS
- Multicast: Internet Group Management Protocol (IGMP) v1/v2; Protocol Independent Multicast (PIM) sparse mode (SM) source-specific multicast (SSM); Session Description Protocol (SDP); Distance Vector Multicast Routing Protocol (DVMRP); Multicast Source Discovery Protocol (MSDP); reverse path forwarding (RPF)
- Encapsulation: VLAN, Point-to-Point Protocol over Ethernet (PPPoE)
- Virtual routers
- Policy-based routing, source-based routing
- Equal-cost multipath (ECMP)

QoS Features

- Support for 802.1p, DiffServ code point (DSCP), EXP
- Classification based on VLAN, data-link connection identifier (DLCI), interface, bundles, or multifield filters
- Marking, policing, and shaping
- Classification and scheduling
- Weighted random early detection (WRED)
- Guaranteed and maximum bandwidth
- Ingress traffic policing
- Virtual channels

Hardware Specifications

Table 3. SRX4100 and SRX4200 Hardware Specifications

Network Services

- Dynamic Host Configuration Protocol (DHCP) client/server/ relay
- Domain Name System (DNS) proxy, dynamic DNS (DDNS)
- Juniper real-time performance monitoring (RPM) and IP monitoring
- Juniper flow monitoring (J-Flow)

Advanced Routing Services

- Packet Mode
- MPLS (RSVP, LDP)
- Circuit cross-connect (CCC), translational cross-connect (TCC)
- L2/L2 MPLS VPN, pseudo-wires
- Virtual private LAN service (VPLS), next-generation multicast VPN (NG-MVPN)
- MPLS traffic engineering and MPLS fast re-route

Management, Automation, Logging, and Reporting

- SSH, Telnet, SNMP
- Smart image download
- Juniper CLI and Web UI
- Juniper Networks Junos Space Security Director
- Python
- Junos events, commit and OP scripts
- Application and bandwidth usage reporting
- Debug and troubleshooting tools

Connectivity	SRX4100	SRX4200
Total onboard ports	8x1GbE/10GbE	8x1GbE/10GbE
Onboard small form-factor pluggable plus (SFP+) transceiver ports	8x1GbE/10GbE	8x1GbE/10GbE
Out-of-Band (OOB) management ports	1x1GbE	1x1GbE
Dedicated high availability (HA) ports	2x1GbE/10GbE (SFP/SFP+)	2x1GbE/10GbE (SFP/SFP+)
Console (RJ-45)	1	1
USB 2.0 ports (type A)	2	2
Memory and Storage		
System memory (RAM)	64 GB	64 GB
Secondary storage (SSD)	240 GB with 1+1 RAID	240 GB with 1+1 RAID

Connectivity	SRX4100	SRX4200
Dimensions and Power		
Form factor	1 U	1 U
Size (WxHxD)	17.48 x 1.7 x 25 in (44.39 x 4.31 x 63.5 cm)	17.48 x 1.7 x 25 in (44.39 x 4.31 x 63.5 cm)
Weight (device and PSU)	Chassis with two AC power supplies: 29 lb (13.15 kg) Chassis with two DC power supplies: 28.9 lb (13.06 kg) Chassis with package for shipping: 47.5 lb (21.54 kg)	Chassis with two AC power supplies: 29 lb (13.15 kg) Chassis with two DC power supplies: 28.9 lb (13.06 kg) Chassis with package for shipping: 47.5 lb (21.54 kg)
Redundant PSU	1+1	1+1
Power supply	2x 650 W redundant AC-DC/DC-DC PSU	2x 650 W redundant AC-DC/DC-DC PSU
Average power consumption	200 W	200 W
Average heat dissipation	685 BTU / hour	685 BTU / hour
Maximum current consumption	4A (for 110 V AC power) 2A (for 220 V AC power) 9A (for -48 V DC power)	4A (for 110 V AC power) 2A (for 220 V AC power) 9A (for -48 V DC power)
Maximum inrush current	50 A by 1 AC cycle	50 A by 1 AC cycle
Acoustic noise level	70 dBA	70 dBA
Airflow/cooling	Front to back	Front to back
Operating temperature	32° to 104° F (0° to 40° C)	32° to 104° F (0° to 40° C)
Operating humidity	5% to 90% noncondensing	5% to 90% noncondensing
Meantime between failures (MTBF)	221,729 hours (about 25.3 years)	221,729 hours (about 25.3 years)
FCC classification	Class A	Class A
RoHS compliance	RoHS 2	RoHS 2
Performance and Scale		
Routing/firewall (IMIX packet size) throughput Gbps⁴	20	40
Routing/firewall (1,518 B packet size) throughput Gbps ⁴	40	80
IPsec VPN (IMIX packet size) Gbps⁴	5	9.6
Application visibility and control in Gbps ⁵	27.5	55
Recommended IPS in Gbps⁵	15	30
Next-generation firewall in Gbps⁵	9.5	19
IPsec VPN (1400 B packet size) in Gbps	10.6	21.3
Connections per second (CPS)	250,000	500,000
Maximum security policies	60,000	60,000
Maximum concurrent sessions (IPv4 or IPv6)	5 million	10 million
Route table size (RIB/FIB) (IPv4)	2 million/1.2 million	2 million/1.2 million
IPsec tunnels	7500	7500
Number of remote access/SSL VPN (concurrent) users	7500	7500
Multitenancy (LSYS/TSYS)	32/200	32/200

⁴Throughput numbers based on UDP packets and RFC2544 test methodology

^sThroughput numbers based on HTTP traffic with 44 KB transaction size and up to the numbers captured here

Juniper Networks Services and Support

Juniper Networks is the leader in performance-enabling services designed to accelerate, extend, and optimize your highperformance network. Our services allow you to maximize operational efficiency while reducing costs and minimizing risk, achieving a faster time to value. 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

To order Juniper Networks SRX Series Services Gateways, and to access software licensing information, please visit the How to Buy page at https://www.juniper.net/us/en/how-to-buy/.

	SRX4100-SYS-JB	SRX4200-SYS-JB
Hardware	Included	Included
Management (CLI, JWEB, SNMP, Telnet, SSH)	Included	Included
L2 Transparent, Secure Wire	Included	Included
Routing (RIP, OSPF, BGP, Virtual router)	Included	Included
Multicast (IGMP, PIM, SSDP, DMVRP)	Included	Included
Packet Mode	Included	Included
Overlay (GRE, IP-IP)	Included	Included
Network Services (J-Flow, DHCP, QoS, BFD)	Included	Included
Stateful Firewall, Screens, ALGs	Included	Included
NAT (static, SNAT, DNAT)	Included	Included
IPsec VPN (Site-Site VPN, Auto VPN, Group VPN)	Included	Included
Remote access/SSL VPN (concurrent users) ⁶	Optional	Optional
Firewall policy enforcement (UAC, Aruba CPPM)	Included	Included
Chassis Cluster, VRRP, ISSU	Included	Included
Automation (Junos scripting, auto-installation)	Included	Included
GPRS/GTP/SCTP	Included	Included
MPLS, LDP, RSVP, L3 VPN, pseudo-wires, VPLS	Included	Included
Application Security (AppID, AppFW, AppQoS, AppQoE, AppRoute)	Optional	Optional

Based on concurrent users; two free licenses included

Base System

Product Number	Description
SRX4100-SYS-JB- AC	SRX4100 Services Gateway includes hardware (8x10GbE, two AC PSUs, four fan trays, cables, and RMK) and Junos Software Base (firewall, NAT, IPsec, routing, MPLS)
SRX4100-SYS-JB-DC	SRX4100 Services Gateway includes hardware (8x10GbE, two DC PSUs, four fan trays, cables, and RMK) and Junos Software Base (firewall, NAT, IPsec, routing, MPLS)
SRX4200-SYS-JB-AC	SRX4200 Services Gateway includes hardware (8x10GbE, two AC PSUs, four fan trays, cables, and RMK) and Junos Software Base (firewall, NAT, IPsec, routing, MPLS)
SRX4200-SYS-JB-DC	SRX4200 Services Gateway includes hardware (8x10GbE, two DC PSUs, four fan trays, cables, and RMK) and Junos Software Base (firewall, NAT, IPsec, routing, MPLS)

Accessories

Product Number	Description
SRX4200-RMK	SRX4100/SRX4200 rack mount kit – rail
JPSU-650W-AC-AFO	Juniper 650W AC PSU, port side FRU side flow
JPSU-650W-DC-AFO	Juniper 650W DC PSU, port side FRU side flow
SRX4200-FAN	SRX4100/SRX4200 fan unit

SRX4100 Performance Upgrade License

Product Number	Description
SRX4100-E-P-UPG ⁷	SRX4100 Enhanced Performance Upgrade license; includes an upgrade to firewall IMIX performance (up to 20G IMIX to the base 20G IMIX firewall throughput supported on SRX4100 base SKU) and application security

Advanced Security Services Subscription Licenses

Product Number	Description
S-SRX4100-A1-1	SW, A1, IPS, AppSecure, content security, 1 year
S-SRX4100-A2-1	SW, A2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, content security, 1 year
S-SRX4100-A3-1	SW, A3, IPS, AppSecure, URL filtering, on box anti-virus, content security, 1 year
S-SRX4100-A1-3	SW, A1, IPS, AppSecure, content security, 3 year
S-SRX4100-A2-3	SW, A2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, content security, 3 year
S-SRX4100-A3-3	SW, A3, IPS, AppSecure, URL filtering, on box anti-virus, content security, 3 year
S-SRX4100-A1-5	SW, A1, IPS, AppSecure, content security, 5 year
S-SRX4100-A2-5	SW, A2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, content security, 5 year
S-SRX4100-A3-5	SW, A3, IPS, AppSecure, URL filtering, on box anti-virus, content security, 5 year
S-SRX4100-P1-1	SW, P1, IPS, AppSecure, ATP, content security, 1 year
S-SRX4100-P2-1	SW, P2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, ATP, content security, 1 year
S-SRX4100-P3-1	SW, P3, IPS, AppSecure, URL filtering, on box anti-virus, ATP, content security, $1\ {\rm year}$
S-SRX4100-P1-3	SW, P1, IPS, AppSecure, ATP, content security, 3 year
S-SRX4100-P2-3	SW, P2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, ATP, content security, 3 year
S-SRX4100-P3-3	SW, P3, IPS, AppSecure, URL filtering, on box anti-virus, ATP, content security, 3 year
S-SRX4100-P1-5	SW, P1, IPS, AppSecure, ATP, content security, 5 year
S-SRX4100-P2-5	SW, P2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, ATP, content security, 5 year
S-SRX4100-P3-5	SW, P3, IPS, AppSecure, URL filtering, on box anti-virus, ATP, content security, 5 year
S-SRX4200-A1-1	SW, A1, IPS, AppSecure, content security, 1 year
S-SRX4200-A2-1	SW, A2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, content security, 1 year
S-SRX4200-A3-1	SW, A3, IPS, AppSecure, URL filtering, on box anti-virus, content security, 1 year
S-SRX4200-A1-3	SW, A1, IPS, AppSecure, content security, 3 year
S-SRX4200-A2-3	SW, A2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, content security, 3 year
S-SRX4200-A3-3	SW, A3, IPS, AppSecure, URL filtering, on box anti-virus, content security, 3 year
S-SRX4200-A1-5	SW, A1, IPS, AppSecure, content security, 5 year
S-SRX4200-A2-5	SW, A2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, content security, 5 year

Product Number	Description
S-SRX4200-A3-5	SW, A3, IPS, AppSecure, URL filtering, on box anti-virus, content security, 5 year
S-SRX4200-P1-1	SW, P1, IPS, AppSecure, ATP, content security, 1 year
S-SRX4200-P2-1	SW, P2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, ATP, content security, 1 year
S-SRX4200-P3-1	SW, P3, IPS, AppSecure, URL filtering, on box anti-virus, ATP, content security, $1 \; \mbox{year}$
S-SRX4200-P1-3	SW, P1, IPS, AppSecure, ATP, content security, 3 year
S-SRX4200-P2-3	SW, P2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, ATP, content security, 3 year
S-SRX4200-P3-3	SW, P3, IPS, AppSecure, URL filtering, on box anti-virus, ATP, content security, 3 year
S-SRX4200-P1-5	SW, P1, IPS, AppSecure, ATP, content security, 5 year
S-SRX4200-P2-5	SW, P2, IPS, AppSecure, URL filtering, cloud anti-virus/anti-spam, ATP, content security, 5 year
S-SRX4200-P3-5	SW, P3, IPS, AppSecure, URL filtering, on box anti-virus, ATP, content security, 5 year

Remote Access/Juniper Secure Connect VPN Licenses

Product Number	Description
S-RA3-500CCU-S-3	SW, Remote Access VPN - Juniper, 500 Concurrent Users, Standard, with SW support, 3 Year
S-RA3-1KCCU-S-3	SW, Remote Access VPN - Juniper, 1000 Concurrent Users, Standard, with SW support, 3 Year
S-RA3-5KCCU-S-3	SW, Remote Access VPN - Juniper, 5000 Concurrent Users, Standard, with SW support, 3 Year

About Juniper Networks

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

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Engineering Simplicity