Product Description
The Juniper Networks® SRX550 and SRX650 Services Gateways, in conjunction with the 8-port SFP XPIM, offer customers the flexibility of deploying high-density LAN and WAN services in their branch, data center, and metro Ethernet networks. Juniper’s 8-port SFP XPIM for the SRX Series complements the onboard 10/100 and 10/100/1000 Ethernet interfaces with high-density fiber and copper Gigabit Ethernet connectivity choices for Layer 2 and Layer 3 services. It offers support for a variety of transceiver types, including short wavelength for GbE connectivity over multimode fiber, long wavelength for GbE connectivity over multimode and single mode fiber, 100BASE-FX for Fast Ethernet connectivity over multimode and single mode fiber, and 1000BASE-T for GbE connectivity over twisted pair.

Architecture and Key Components
The 8-port SFP XPIM provides highly flexible interfaces that give the network designer the tools to solve a wide variety of networking problems.

Network Segmentation
The XPIMs can be used to subnet or segment network traffic by configuring each Ethernet port as a separate routed network or subnet. This localizes broadcast and multicast traffic to a local segment and allows different security policies to be applied to each subnet. Alternatively, XPIM ports can be assigned to VLANs in Layer 2 switching mode to provide delineation and segmentation of the L2 broadcast domain.

Security Zones
Many organizations need to improve internal security and keep critical information private within departments. At the same time, they need to provide guest access and protect local resources. The XPIMs give the network designer the extra Ethernet ports necessary to implement security zones for departmental access.

Local Workgroups
The network designer can use the Ethernet switching capability of the XPIMs to create local workgroups. Integrating L2 switching in the SRX650 and SRX550 gateways saves space and simplifies management by using a single user interface to configure the switch and the SRX Series devices.
Features and Benefits
Table 1: XPIM Features and Benefits

<table>
<thead>
<tr>
<th>Feature</th>
<th>Feature Description</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-port GbE SFP module</td>
<td>• Provides GbE connectivity&lt;br&gt;• Deployment flexibility for various applications, including multiport copper or fiber applications&lt;br&gt;• Combined L2 or L3 services</td>
<td>• Provides current or new infrastructure in the local site and ports for future expansion&lt;br&gt;• Module capable of being used in copper and optical environments, providing maximum flexibility in a mix of copper and fiber environments&lt;br&gt;• Provides investment protection and flexibility when upgrading from copper infrastructure to fiber&lt;br&gt;• Offers flexibility of deploying the same module for both LAN and WAN services</td>
</tr>
<tr>
<td>SRX650: XPIM connected in the 20GbE slots (slots 6 and 2)&lt;br&gt;SRX550: XPIM connected in the 20GbE slot (slot 6) and 10GbE slot (slot 3)</td>
<td>• Provides up to 20GbE connectivity</td>
<td>• Provides up to 20 Gbps L2 switching between XPIM modules and high-performance backplane connection to the system for maximum L3-L7 security and routing throughput</td>
</tr>
<tr>
<td>Line-rate GbE local switching</td>
<td>• Provides GbE line-rate switching across ports within the same XPIM and across XPIMS</td>
<td>• Integrates switching into high-performance branch office and midrange secure routing platforms to reduce operational costs and consolidate the number of networking devices in the branch office or regional site</td>
</tr>
</tbody>
</table>

Specifications
Platforms supported
• SRX650 and SRX550 Services Gateways

Slots
• SRX650: Slot 2 (20GbE backplane connectivity)<br>Slot 6 (20GbE backplane connectivity)<br>SRX550: Slot 3 (10GbE backplane connectivity)<br>Slot 6 (20GbE backplane connectivity)

Connector
• Eight SFP transceiver connectors per XPIM (transceivers sold separately)

Hot swap
• Hot swap of XPIMs supported in SRX550 and SRX650 (requires Gigabit-Backplane Physical Interface Module in offline mode)<br>• Hot swap of SFP transceivers supported in SRX550 and SRX650

SFP optics
• Wide range of SFP transceivers that include LX, SX, FX, and 1000Base-T copper (complete list in Ordering Section below)

Medium-dependent interface (MDI/MDI-X)
• Auto-correcting MDI/MDI-X

Speeds
• Full and half duplex 10/100/1000 Mbps, autosensing; auto negotiation or manual setting

Switching
• Line-rate switching within and across XPIMS

IEEE 802.1Q VLANS
• 3,966 maximum VLANS, IEEE 802.1QinQ

MAC addresses
Maximum media access control (MAC) addresses per module:<br>• Static MAC entries: 8,000<br>• MAC addresses per module in hardware (static+dynamic): 32,000

Jumbo frames
• 9,192 bytes supported

Link aggregation group (LAG)
• IEEE 802.3ad Link Aggregation Control Protocol (LACP)

Protocols
• Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), Multiple Spanning Tree Protocol (MSTP), Internet Group Management Protocol (IGMP), Link Layer Discovery Protocol (LLDP)

Management
• Telnet/console/Web<br>• Remote and local configuration, monitoring, and troubleshooting

Dimensions and weight (W x H x D)
• 6.72 x 0.78 x 8.1 in (17.1 x 1.98 x 20.57 cm)<br>• 1.1 lb

Environmental
• Operating temperature: 32° to 104°F (0° to 40°C)<br>• Storage temperature: -40° to 158°F (-40° to 70°C)<br>• Relative humidity: 5% to 90% non-condensing

LEDs
Status:<br>• Green light to show that the XPIM is online and functioning normally<br>• Amber light to show that the XPIM is starting up, running diagnostics, or shutting down<br>• Red light to show that the XPIM has failed<br>• Green light to show that the port is online<br>• Light off to show that the port is offline<br>• Light blinking to show that the port is receiving or sending data
### Specifications (continued)

**Safety**
- CAN/CSA-C22.2 No. 60950-1 Information Technology Equipment
- UL 60950-1 Information Technology Equipment
- EN 60950-1 Information Technology Equipment
- IEC 60950-1 Information Technology Equipment

**EMC**
- FCC Part 15 Class A
- EN 55022 Class A
- AS/NZS 3548 Class A
- VCCI Class A

**Immunity**
- EN-61000-4-2 Electrostatic Discharge (ESD)
- EN-61000-4-3 Radiated Immunity
- EN-61000-4-4 EFT
- EN-61000-4-5 Surge
- EN-61000-4-6 Low Frequency Common Immunity

### 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](http://www.juniper.net/us/en/products-services).

### Ordering Information

<table>
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<tr>
<th>Model Number</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>XPIM</strong></td>
<td></td>
</tr>
<tr>
<td>SRX-GP-8SFP</td>
<td>8-port GbE copper, fiber SFP XPIM for SRX550 and SRX650 gateways</td>
</tr>
<tr>
<td><strong>SFP</strong></td>
<td></td>
</tr>
<tr>
<td>SRX-SFP-1GE-LH</td>
<td>SFP 1000BASE-LH GbE optical transceiver.</td>
</tr>
<tr>
<td>EX-SFP-1GE-LH</td>
<td></td>
</tr>
<tr>
<td>SRX-SFP-1GE-LX</td>
<td>SFP 1000BASE-LX GbE optical transceiver.</td>
</tr>
<tr>
<td>EX-SFP-1GE-LX</td>
<td></td>
</tr>
<tr>
<td>SRX-SFP-1GE-SX</td>
<td>SFP 1000BASE-SX GbE optical transceiver.</td>
</tr>
<tr>
<td>EX-SFP-1GE-SX</td>
<td></td>
</tr>
<tr>
<td>SRX-SFP-1GE-T</td>
<td>SFP 100BASE-T GbE copper transceiver (uses Cat 5 cable).</td>
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<tr>
<td>EX-SFP-1GE-T</td>
<td></td>
</tr>
<tr>
<td>SRX-SFP-FE-FX</td>
<td>SFP 100BASE-FX Fast Ethernet optical transceiver, LC connector.</td>
</tr>
<tr>
<td>EX-SFP-1FE-FX</td>
<td></td>
</tr>
<tr>
<td>EX-SFP-GE10KT13R14</td>
<td>SFP module supporting 1000BASE-BX10 uplink at 10 km (TX1310 nm/RX1550 nm). A single fiber is used for both transmit and receive. Uplink SFP must be matched with downlink SFP.</td>
</tr>
<tr>
<td>EX-SFP-GE10KT13R15</td>
<td>SFP module supporting 1000BASE-BX10 uplink at 10 km (TX1310 nm/RX1550 nm). A single fiber is used for both transmit and receive. Uplink SFP must be matched with downlink SFP.</td>
</tr>
<tr>
<td>EX-SFP-GE10KT14R13</td>
<td>SFP module supporting 1000BASE-BX10, downlink at 10 km (TX1490 nm/RX1310 nm). A single fiber is used for both transmit and receive. Uplink SFP must be matched with downlink SFP.</td>
</tr>
</tbody>
</table>

### Operating System Versions

<table>
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<tr>
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<tbody>
<tr>
<td>SRX-GP-8SFP</td>
<td>Juniper Networks Junos® operating system 12.3X44-D10</td>
</tr>
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</table>

### 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](http://www.juniper.net).