



### **Product Overview**

With wireless WAN technologies becoming faster, more reliable, and available everywhere, 3G is a viable option for branch office, short-term, and kiosk connectivity. 3G is also an outstanding backup option due to its low cost, rapid deployment, and relatively high performance.

Juniper blends multiple 3G connectivity options with its awarding winning Juniper Networks SRX Series Services Gateways for the branch to provide the industry's most reliable, simple, and flexible choice for high-performance remote networks.

Juniper's 3G products include the CX111 external 3G bridge and 3G ExpressCard integrated on the Juniper Networks SRX210 Services Gateway.

# Product Description

# CX111 3G Bridge

Juniper Networks® CX111 3G Cellular Broadband Data Bridge delivers simple and flexible cellular data connectivity for small and large branch offices. It is the industry's first all Ethernet cable plant that does not require coaxial cable or antenna for installation. The 3G Bridge supports 802.3af Power over Ethernet (PoE) for additional ease of installation.

The CX111 is the only 3G solution with a built-in 3G LED signal indicator that can be installed anywhere for optimal 3G performance. It acts as a transparent Layer 2 bridge to provide quick and simple 3G access. The 3G Bridge integrates seamlessly with existing Juniper branch devices, including the Juniper Networks SRX Series Services Gateways for the branch, J Series Services Routers, and SSG Series Secure Services Gateways.

CX111 offers more modem options and deployment choices than any other vendor provides. It supports 50+ USB or ExpressCard modems purchased from leading global carriers for worldwide 3G coverage, flexibility, and choice. Customers can upgrade their wireless technology or change carriers without system downtime.

The CXIII is Long Term Evolution (LTE) and 4G ready to leverage existing investments in emerging wireless WAN technologies. It has Clearwire and Sprint WiMAX modem support with future firmware upgrades to global WiMAX networks.

#### 3G ExpressCard Slot on SRX210

The 3G ExpressCard is an ideal backup option for small branch deployments with adequate 3G coverage. The SRX210 Services Gateway has a built-in 3G ExpressCard slot for single box 3G connectivity. The 3G ExpressCard ships with an external antenna for improved performance.

3G ExpressCard configuration options include the command-line interface (CLI) on the SRX210, and centralized policy and device management from Juniper Networks Network and Security Manager (NSM).

1

#### **Features and Benefits**

#### CX111 3G Bridge

- All Ethernet plant—quick and low cost installation since neither coaxial cable nor antenna is required
- · Install anywhere
  - LED signal strength meter
  - 802.3af PoE
  - Trouble free 3G installation with optimal performance
- · Freedom of choice
  - Connect to your carrier of choice for 3G
  - 50+ USB and ExpressCard modems supported
- Future ready
  - Clearwire and Sprint WiMAX supported
  - LTE/4G ready
- · Platform flexibility
  - Works with all Juniper branch devices—SRX Series, J Series, and SSG Series
  - Tight wired/wireless WAN integration for primary or backup connectivity

#### SRX210 with 3G ExpressCard slot

- · Compact form factor
- · Integrated, single box wireless WAN backup
- ExpressCard ships with external antenna for improved performance
- · Single sourced Juniper solution



# Specifications (CX111 3G Bridge)

#### **Ethernet**

· 1x10/100 Auto MDIX

#### PoE

• 802.3af (<5 W typical with one modem connected)

### **USB** ports

• 3 x USB 2.0

# **ExpressCard ports**

· ExpressCard/34

### Modem types supported

• EV-DO, High Speed Packet Access (HSPA), and WiMAX\*

#### \* Please visit www.juniper.net for a complete list of supported modems

#### Modem usage

 Up to 4 can be connected with one modem used at a time (Default dial order: EXPCD, USB1, USB2, USB3)

#### Modem cap

· Can be used to conceal modems

#### **Buttons**

- · Signal strength button
- · Activation button
- Reset button (recessed)

#### **Switches**

- · Mode selector (pass-through (default) or local management)
- Power on/off

#### Power plug

 12 V DC input (used if PoE not available). Automatic failover between PoE and DC input.

#### Power supply

· 30 W (included)

#### **LEDs**

- Power
- USB modem status (x3)
- ExpressCard modem status (x1)
- Modem signal strength (x4)
- · LAN activity
- Data
- Info LEDs
- Failover
- · Low-speed
- PoE power
- · Config mode
- Attention
- Activation

### **Dimensions Without Modem Cap**

Width: 130 mmDepth: 230 mmHeight: 40 mmWeight: 450 gms

# Safety and Emissions, Certifications

#### USA

• EMC: FCC Class B, UL 60950-1

#### Canada

• EMC: ICES Class B, CAN/CSA-C22.2 No. 60950-1

#### EU

Safety: EN 60950-1EMC: EN 55022 Class B

#### **Australia**

· Safety: CB Scheme

· EMC: AS/NZS CISPR22 Class B

#### NZ

· Safety: CB Scheme

• EMC: AS/NZS CISPR22 Class B

### Japan

Safety: CB Scheme

· EMC: VCCI Class B

### Specifications (3G ExpressCards for SRX210)

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3G EXPRESSCARD MODEL	WIRELESS TECHNOLOGY AND BAND	BANDS	REGION	PERFORMANCE
EXPCD-3G-CDMA-V	ExpressCard34 modem	Cellular/800/1900 MHz	USA	Download speed (DL): Up to 3.1 Mbps
	CDMA 1xEV-DO (Revision A)	Transmit 1850 to 1910 MHz		Upload speed (UL): Up to 1.8 Mbps
	CDMA 1xEV-DO (Release 0)	Receive 1930 to 1990 MHz		
	CDMA 1xRTT	Receive diversity (both bands)		
	CDMA IS-95			
EXPCD-3G-CDMA-S	ExpressCard34 modem	Cellular/800/1900 MHz	USA	Download speed (DL): Up to 3.1 Mbps
	CDMA 1xEV-DO (Revision A)	Transmit 1850 to 1910 MHz		Upload speed (UL): Up to 1.8 Mbps
	CDMA 1xEV-DO (Release 0)	Receive 1930 to 1990 MHz		
	CDMA 1xRTT	Receive diversity (both bands)		
	CDMA IS-95			
3G EXPRESSCARD ACCESSORY	DESCRIPTION			
ANT-EXPCD-3G-MAG-TS9	Omni-directional OdBi multi-band Antenna with a TS9 connector and 5-ft extension cable for desktop or wall-mount deployment. Features an adhesive bottom. Used to replace the built-in antenna of the ExpressCards for improved performance.			

Note: All 3G ExpressCard SKUs ship with a 5 ft 0dBi omni-directional antenna to help reduce interference and improve signal quality.

# Juniper Networks Services and Support

Juniper Networks is the leader in performance-enabling services and support, which are designed to accelerate, extend, and optimize your high-performance network. Our services allow you to bring revenue-generating capabilities online faster so you can realize bigger productivity gains and faster rollouts of new business models and ventures. At the same time, Juniper Networks ensures operational excellence by optimizing your network to maintain required levels of performance, reliability, and availability. For more details, please visit www.juniper.net/us/en/products-services/.

# **Ordering Information**

PART NUMBER	DESCRIPTION			
CX111 3G Bridge				
CX111-3G-BRIDGE	External Ethernet-based 3G bridge for terminating 3G wireless WAN data for SRX Series, J Series, and SSG Series platforms. Does not include 3G modem.			
3G ExpressCard				
EXPCD-3G-CDMA-V <sup>1</sup>	CDMA/EV-DO ExpressCard for Verizon Wireless. For SRX Series and CX111 products. Ships with an external antenna.			
EXPCD-3G-CDMA-S <sup>2</sup>	CDMA/EV-DO ExpressCard for Sprint. For SRX Series and CX111 products. Ships with an external antenna.			
ANT-EXPCD-3G-MAG-TS9	Spare external multi-band omnidirectional antenna with TS-9 connector, for 3G ExpressCards for SRX Series.			

<sup>1</sup>Orderable as of December 2009 <sup>2</sup>Orderable as of Q1 2010

### **About Juniper Networks**

Juniper Networks, Inc. is the leader in high-performance networking. Juniper offers a high-performance network infrastructure that creates a responsive and trusted environment for accelerating the deployment of services and applications over a single network. This fuels high-performance businesses. Additional information can be found at www.juniper.net.

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