Product Description
Juniper Networks® CX111 Cellular Broadband Data Bridge delivers simple and flexible 3G/4G Long Term Evolution (LTE) cellular data connectivity for small and large branch offices. An Ethernet cable plant supporting 802.3af Power over Ethernet (PoE), the CX111 also provides the following:
- Supports enterprise-grade LTE/EV-DO modem MC200LE-VZ, for Verizon Network.
- More modem options and deployment choices than any other vendor provides. It supports 50+ USB modems purchased from leading global carriers for worldwide 3G/4G coverage, flexibility, and choice. Customers can upgrade their wireless technology or change carriers without system downtime.
- The only 3G/4G LTE solution with a built-in 3G/4G LTE LED signal indicator that can be installed anywhere for optimal performance. It acts as a transparent Layer 2 bridge to provide quick and simple 3G/4G LTE access.
- Simple and flexible global cellular data connectivity for small and large remote sites. It is the industry's first all-Ethernet solution and doesn't require coaxial cable or antenna for installation.
- Support for 802.3af PoE for ease of installation.

Enterprise-grade LTE/EV-DO Modem CX-MC200LE-VZ
Purpose-built for the CX111 Bridge, the CX-MC200LE-VZ is a highly reliable and efficient LTE/EV-DO modem that connects to Verizon’s extensive LTE and EV-DO network in the USA. This all-in-one solution makes planning and deployment simple and elegant for small and large customers while delivering a higher level of performance and reliability for business continuity.

Delivers 4G LTE
Almost all Global System Mobile (GSM), Wideband Code Division Multiple Access (W-CDMA), Time Division Synchronous Code Division Multiple Access (TD-SCDMA), and Code Division Multiple Access (CDMA) operators are embracing LTE as their preferred next-generation mobile network technology. The CX111 is 3G and 4G LTE ready, making the transition from your reliable 3G networks to LTE easy while protecting your current investments with solutions that maximize spectrum utilization, reduce costs, and enable you to continue to deliver services throughout the migration process. 4G LTE provides an effortless, more consistent overall mobile broadband experience that includes the following:
- Unmatched performance for critical applications at 4G LTE speeds
- Maximum flexibility in site layout
- Industry-leading network security to meet stringent compliance requirements
- Supports VZW, ATT and other carriers’ LTE modems.
• Reduced network operating costs:
  - Our multi-standard base CX111 facilitates efficient mobile evolution and reduces operational, maintenance, and service costs.
  - A flat all-IP network reduces operating expenses across the entire network.
• Rapid launch with minimized risk:
  - Network agility and an open LTE ecosystem accelerate service deployment.
  - Smooth introduction of LTE and IP technologies enables service continuity.
• Unprecedented quality of experience (QoE):
  - Unmatched policy management, service routing, and rich IP communications enable end-to-end QoE.

Delivering an End-to-End Solution
The CX111 Cellular Broadband Data Bridge integrates seamlessly with the Juniper Networks Branch SRX Series Services Gateways. Branch SRX Series products are high-performance, carrier grade secure routers for enterprises and service providers that consolidate security, routing, and switching services into a single platform, helping to reduce cost, complexity, and risk.

Features and Benefits
• 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/4G LTE installation with optimal performance
• Freedom of choice
  - Connect to your carrier of choice for 3G/4G LTE
  - 50+ USB and ExpressCard modems supported
• Future ready
  - Clearwire and Sprint WiMAX supported
  - 4G LTE supported
• 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

CX111 Bridge Specifications
Ethernet
• 1 x10/100 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), WiMAX and LTE

Modem usage
• Up to 4 can be connected with one modem used at a time (Default dial order: EXPD, 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
• Info LEDs
• Failover
• Low-speed
• PoE power
• Config mode
• Attention
• Activation

Dimensions Without Modem Cap
• Width: 130 mm
• Depth: 230 mm
• Height: 40 mm
• Weight: 450 gms

* Please visit www.juniper.net/us/en/products-services/wireless/cx-series/cx111/#literature for a complete list of supported modems
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 60950-1
- EMC: 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

CX-MC200LE-VZ Modem Specifications

CX-MC200LE-VZ LTE/EV-DO enterprise-grade modem

Technology
- LTE 3GPP Rel. 8, EVDO RevA, A/O; CDMA 1x

Downlink Rates
- LTE 100 Mbps, EVDO 3.1 Mbps (theoretical)

Uplink Rates
- LTE 50 Mbps, EVDO 1.8 Mbps (theoretical)

Frequency Band
- LTE Band 13 (700MHz), Cellular/PCS (800MHz/1,900 MHz)

Power
- LTE 23 +/- 1 dBm, EVDO 24 +/- 1 dBm (typical conducted)

Module
- Sierra Wireless MC7750

Operator Certification
- Verizon ODI

Interface to CX111 Bridge
- USB 2.0

Antennas
- External Antennas: 2 SMA – Male (plug)
- Gain: 1 dB (LTE), 2 dB (Cellular/PCS) gain
- Antenna connectors: 2 SMA – female (socket)

Environmental
- Temperature: 0 to 40°C (32 to 104°F) operating,
  -20°C to 70°C (-4 to 158°F) storage
- Relative Humidity: 10% to 85%, operating; 5% to 90%, storage

Dimensions
- Weight: 230 g (8 oz)
- 54 x 230 x 43 mm (2.1x9.1x1.7 inches)

Industry Standards and Certifications
- FCC Part 15, 22, 24 & 27
- TIA/EIA/IS-2000, IS-95-B, 3GPP Rel 8
- Verizon IOT

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 juniper.net/us/en/products-services/.

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>CX111-3G-BRIDGE</td>
<td>Ethernet (PoE powered) Wireless WAN bridge supports 3G/HSPA/EVDO/WiMAX/LTE USB or ExpressCard Modems. Connects to SRX, J-Series and SSG platforms. Power supply and modem cover included. 3G/4G LTE modem NOT included.</td>
</tr>
<tr>
<td>CX111-MC200LE-VZ-BNDL</td>
<td>Bundle package includes CX111 Bridge and LTE/EV-DO business-grade modem for Verizon USA LTE connectivity.</td>
</tr>
<tr>
<td>CX-MC200LE-VZ</td>
<td>LTE/EV-DO business-grade modem for Verizon USA LTE connectivity. Requires CX111 Bridge (sold separately).</td>
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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 juniper.net.