

BEC MX-210 / MX-210NP

Mini 4G/LTE X-Range Wi-Fi Router

BEC
TECHNOLOGIES



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The BEC MX-210 series Mini 4G/LTE X-Range Wi-Fi Router is a compact, affordable and high-performance fixed 4G/LTE Router incorporating long range Wireless LAN technology and offers flexible options such as dual-WAN failover by seamless connecting to other Internet Service Provider to avert internet downtime, redundant power source for safe & quick power installation via one of the versatile LAN/PoE-PD ports. The flexible firewall policies and QoS bandwidth control help to filter and monitor all inbound/outbound activities to enhance network security and connection. MX-210 series offers an optional A-GPS, a suite of advanced software and management tools enabling high availability, reliable and security for business-critical operations and continuity.

Versatile WAN Options

The MX-210/MX-210NP is a classic 4G/LTE router with dual WAN interfaces for redundancy or seamless failover between mobile carrier network and the wireline, an interchangeable Gigabit Ethernet LAN/WAN, to ensure continuous Internet connectivity. The load balancing and traffic prioritization mechanisms can be enabled to enhance failover performance and maximize bandwidth utilization for critical applications delivery. In the event of a connectivity failure of the primary WAN interface, traffic will automatically redirect to the secondary WAN interface and seamless fallback when the primary interface connection is restored.

Secure Network Privacy Protection (MX-210/MX-210NP)

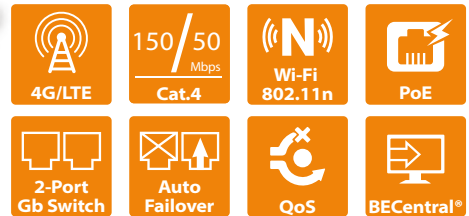
With hardware-based VPN engine, MX-210NP supports simultaneous and multiple VPN remote and/or site-to-site connection access without network performance degradation. All online data transmissions including phone call, database access, etc. are encrypted and protected via the VPN technologies offered by the MX-210NP including PPTP, IPSec, L2TP, GRE, OpenVPN and compatible with most major servers and platforms by establishing private tunnels and enabling office environment for Remote/Branch employees to work without being present in the headquarter office to ensure business continuity.

Optimize Wi-Fi Coverage and Hotspot Sharing (MX-210)

The MX-210 integrates an 802.11n access point supporting data rates of up to 300Mbps. Security functionality includes: WEP 64/128 bit, WPA, WPA2 (PSK, TKIP and AES, SSID broadcast disable and wireless MAC address filtering and MSSID with Client Isolation to enhance the level of transmission security and access control over the Wireless LAN. The router also supports the Wi-Fi Protected Setup (WPS) standard, allowing users to establish a secure wireless network by simply pushing a button. If the network requires wider coverage, the built-in Wireless Distribution System (WDS) repeater function allows users to expand the wireless network without the need for any external wires or cables. The Hotspot user login page (also known as a captive portal) enables secure Internet sharing and connectivity with multiple authentication options and extensive controls for access and bandwidth management. Customization options allow for operator logos, branding or advertisement placement.

Key Application

- Primary Connectivity
- Business Continuity
- Retail Networks
- SD-WAN Deployments
- ATMs/Kiosks/Digital Signage
- M2M/IoT
- Healthcare and much more



Always-On Internet Service

- Offer 4G/LTE and/or Ethernet IP broadband connectivity
- Automatic carrier or wireline failover & fallback
- Optional A-GPS tracking and location-based applications

High Performance & Easy Access

- Support redundant power sources: DC or PoE
- SX Antenna Technology for increased coverage, signal reception and efficiency
- Local and Remote management via SNMP
- BECentral® Remote Management System
- Virtual Routing Redundancy Protocol (VRRP)
- QoS (Quality of Service)
- IEEE 802.1Q VLAN
- Outbound Load Balancing
- Bandwidth Management and Control

Secure Wireless LAN (MX-210)

- 2x2 MIMO Wireless LAN up to 300Mbps
- mSSID with Client Isolation
- Unique, Strong Wi-Fi Encryption Password
- Wi-Fi Multimedia (WMM) wireless QoS
- Wi-Fi Hotspot with Captive Portal

Enterprise Class Routing and Security

- Dynamic Routing Protocols (BGP, OSPF)
- Secured VPNs (IPSec, GRE, L2TP, PPTP, OpenVPN)

Ultra-Compact and Lightweight Design

- Small Form Factor 4G/LTE Router
- Fits in the palm on your hand
- Simplified deployments, easily mounted discretely anywhere

Carrier Certifications

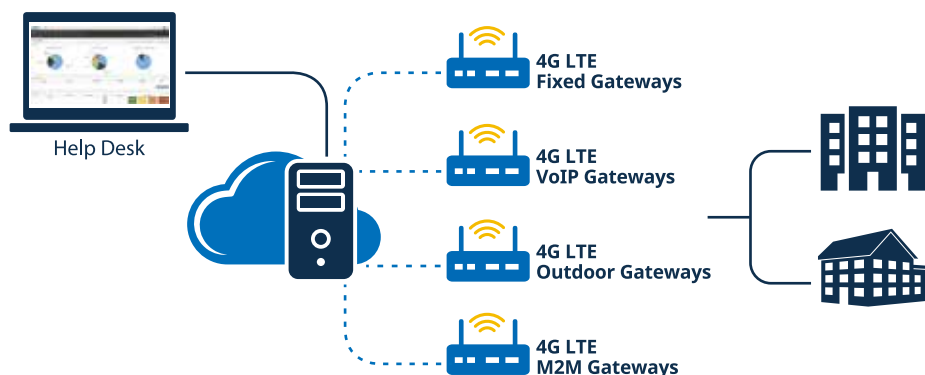


MX-210 / MX-210NP Model Variants

MX-210: PoE and Wi-Fi

24/7 Cloud Management and Network Visibility

Remote monitoring, management and control of devices in real-time is essential for IoT networking devices, M2M and critical applications. BECentral®, BEC's Cloud Based Remote Management, is a comprehensive device management platform designed to minimize deployment, lower support expenses and maximize the operational efficiency and profitability of the operator. BECentral® provides access to critical information for LTE Network diagnostics and troubleshooting, such as: signal quality measurements (RSSI, RSRP, RSRQ and SINR), network status/APN, location ID and Cell ID. Additional functionality includes OTA firmware upgrades (individual or batch), multi-user account management, local network configuration settings on the MX-210 series routers.



Features & Specifications

Availability and Resilience

- Dual-WAN ports (4G & Ethernet WAN)
- Load balancing - Maximizing bandwidth of outbound traffic
- Automatic failover and fallback

Supported Frequency Bands

- **Supporting North America Bands**
LTE Bands FDD, TDD & 3G/2G fallback options (LTE Bands dependent on model variant)
- **Model: MX-210/210NP R7-Q**
CAT 4
LTE Band: TDD B41
- **Model: MX-210/210NP R17-AF**
CAT 4
LTE Bands: FDD B2, 4, 5, 12, 13, 14, 66 & 71
WCDMA: B2 / B4 / B5
- **Channel Bandwidth**
1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz & 20MHz
- **RF Characteristics**
Maximum Transmit Power: 23 ± 2dBm
- Web-based GUI for Configuration and Management

Network Protocols and Features

- IPv4, IPv6, IPv4 / IPv6 dual stack
- IP Tunnel IPv6 in IPv4 (6RD)
- IP Tunnel IPv4 in IPv6 (DS-Lite)
- NAT, static routing and RIP-1/2
- Universal Plug and Play (UPnP) compliant
- Dynamic Domain Name System (DDNS)
- Virtual server and DMZ
- SNTP, DNS relay, IGMP proxy and IGMP snooping for video service
- MLD proxy and MLD snooping for video service

Dynamic Routing Protocols

- BGP
- OSPF

Quality of Service Control

- IEEE 802.1Q VLAN
- Bandwidth Management
- Outbound Load Balancing (Round Robin, Weight or IP Hash)

Firewall

- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including Land Attack, Ping of Death, etc.
- Access Control
- IP Filtering, MAC Filtering, URL Filtering
- Password protection for system management
- VPN Passthrough

Secured Wi-Fi Access Point (MX-210)

- Compliant with IEEE 802.11 b/g/n standards
- 2.4GHz frequency range up to 300Mbps data rate
- 64/128 bits WEP supported for encryption
- Wireless security with WPA-PSK, WPA2-PSK, Mixed WPA/WAP2-PSK, (TKIP/AES)
- Multiple SSID (4 SSIDs), BSSID with Client Isolation
- Wireless MAC Filtering
- Wi-Fi Hotspot with captive portal (Guest / Event Wi-Fi)
- Dynamic, Wi-Fi client rate-limiting

Secured VPN

- IPSec VPN Tunneling
- PPTP VPN Tunneling
- L2TP over IPSec VPN Tunneling
- GRE
- Embedded PPTP / L2TP / IPSec Client and Server
- IKE Key Management
- MPPE Encryption for PPTP
- IPsec DES, 3DES and AES encryption
- OpenVPN

Management

- Quick Installation Wizard
- Web-based GUI for remote and local management
- Firmware upgrade and configuration data upload and download via web-based GUI
- Supports DHCP server/client/relay
- TR-069 supports remote management
- BECentral® Cloud Management
- Support SNMP
- Syslog monitoring

Hardware Specifications

Physical Interface

- 3G/4G LTE: Two (2) SMA Female Connectors
- Power On/Off Button
- Power Source: DC or PoE
- Reset Button
- Ethernet LAN: 2-port 10/100/1000Mbps auto-crossover (MDI/ MDI-X) switch
- 2 x Versatile Port
 - : LAN1 / PoE-PD
 - : LAN2 / EWAN
- GPS: One (1) SMA Female Connector (Optional)
- SIM Card: One (1) slot
- LED Indicators: Power / Ethernet 1-2 / Wi-Fi / LTE Signal Strength / Internet

Power Specifications

- Input: DC 12V 1.2A or PoE-PD (802.3at PD complaint (25.5W))

Physical Requirements

- Dimensions: 5.19"(W) x 1.38"(H) x 3.71"(D) (132mm x 35 mm x 94 mm)

Operating Environment

- Operating temperature: 0° to 40° F (32° to 104° C)
- Humidity: 20 ~ 95% non-condensing