4G/LTE Outdoor Router
Broadband Access without Boundaries
BEC 6800RUL R7

4G LTE | **IP67** | **PoE** | **QoS**
MIMO | **100/50Mbps DL/UL** | **TR-069** | **Firewall**

Key Features

High Performance and support for Multiple LTE frequency Bands
- Category 3 UE, data rates of up to 100Mbps (DL) /50Mbps (UL)
- Advanced IP networking functionalities including bridge and router modes

Patented Dual Polarization MIMO antenna Technology
- Constant gain and efficient bi-directional transmission for maximum bandwidth and service coverage
- Optimize antenna design for LTE TDD

Lightweight, compact and unobtrusive design
- Multi angle/position mounting options, easily installed by single person
- Support Passive Power of Ethernet (PoE)
- Can be installed virtually anywhere

Designed for challenging/rugged deployments
- IP67 hardened enclosure with Industrial-grade components
- Designed for the toughest industrial environments
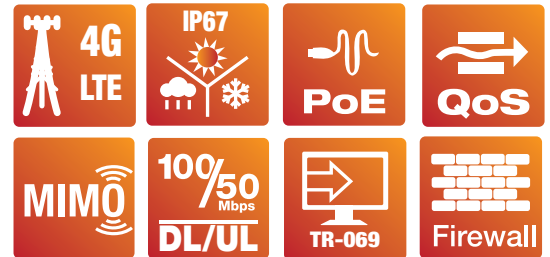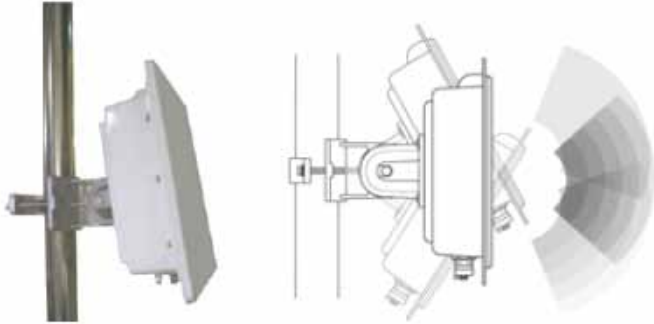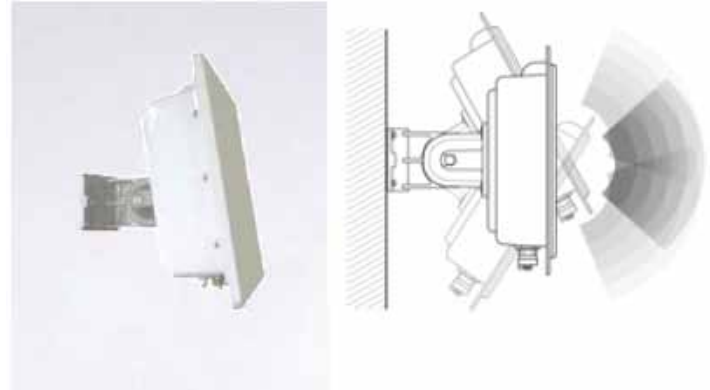
Package includes PoE injector and mounting kit

Overview

The BEC 6800RUL 4G LTE Outdoor Broadband Router supports the latest generation of LTE fixed wireless networks providing connectivity for homes, businesses, rural areas and the underserved. The 6800RUL integrates a high performance CPU with an embedded LTE module and advanced IP networking features enabling support of multiple high bandwidth applications at peaks speeds up to 100Mbps downlink and 50Mbps uplink.

Homes and businesses with a weak or nonexistent wireless signal can benefit from the extended range and reach of the 6800RUL. Advanced MIMO antenna technology allowing service providers to deploy a single solution for their environment or application whether LOS (Line of Sight) or NLOS (Non-Line of Sight). Physical size and weight were key design considerations of the 6800RUL, it can be mounted directly on exterior walls, chimneys, lightweight poles and used for retrofitting applications such as the replacement of older generation wireless technology.

The 6800RUL is an industrial-grade outdoor fixed wireless router with an IP67 rated enclosure to withstand extreme weather conditions and harsh rugged deployments. In addition to outdoor, it can be installed in environments such as: manufacturing plants, industrial automation, stadiums, convention halls, stadium facilities, school campuses or virtually any venue requiring a robust wireless solution.

Easy Installation is realized with integrated IEEE 802.3af Power over Ethernet (PoE) support, eliminating the need for seperate power and data cables. Site installation aides provide for rapid deployment and remote management via TR-069 minimize support expenses and maximize the operational efficiency and profitability for a service provider.

Application Diagram

Mounting Kit – Pole Mount

Mounting Kit – Wall Mount

Features & Specifications

LTE Antenna Options

• Embedded Dual Polarized MIMO
  Directional (2496MHz ~ 2690MHz)
• VSWR: < 1.8
• Polarization: Vertical and Horizontal
• Gain: 16dBi

Supported Frequency Bands

• LTE Band 41 (TDD)
  (2496MHz ~ 2690MHz) UL and DL
• Channel Bandwidth
  5MHz, 10MHz, 15MHz, 20MHz
• Maxiumum Transmit Power:
  +23dBm ± 2dB
• Receive Sensitivity
  -96dBm / 10Mhz
  -93dBm / 20MHz @ QPSK
• Modulation
  DL: QPSK, 16QAM, 64QAM
  UL: QPSK, 16QAM

Operational Mode

• Bridge or Routed

Operating Mode in Routed Mode

Network Protocols and Features

• NAT, static routing and RIP-1/2
• NAT supports PAT and multimedia
  applications
• Virtual server and DMZ
• SNTP, DNS relay and DDNS
• IGMP snooping and IGMP proxy
• Supports DHCP server/client/relay

Quality of Service Control

• Supports the DiffServ approach
• Traffic prioritization based-on protocol,
  port number and IP address

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 pass-through

Management

• Web-based GUI for remote and local
  management
• Firmware upgrade and configuration data
  upload and download via web-based GUI*
• TR-069 supports remote management
• Syslog monitoring

Hardware Specifications

Physical Interface

• 10/100 Ethernet LAN with IEEE 802.3af
  complaint PoE P.D
• SIM slot (for the SIM from Telco / ISP)
• LED Indicators: Power, LAN(PoE), Boot, LTE,
  and Internet

Physical Specifications

• Dimensions: 8.5" (W) x 7.5" (H) x 3.0" (D)
  (257mm x 227 mm x 91mm)
• Weight: 1.81kg (4lbs)
• IP-67 Grade Enclosure

Operating Requirements

• Operating temperature: -40℃ to 60℃
                          (-40°F to 140°F)