

## Key Features

### BEC SX-Series Wideband Adaptive Antenna

- Embedded Polarized multi element design
- Supported Frequency Bands:
- LTE: B2, B4, B5, B13, B17, B25
- UMTS/HSPA+: B1, B2, B4, B5, B8
- CDMA 1xRTT/EV-DO Rev A: BC0, BC1, BC10
- GSM/GPRS/EDGE (850/900/1800/1900)

### Designed for challenging/rugged deployments

- IP67 hardened enclosure with Industrial-grade components
- Designed for the toughest industrial environments
- Rugged compact design, deploys easily in space-constrained areas
- Electrostatic Discharge (ESD) & Surge protection
- IEEE 802.3at Power over Ethernet (PoE)

### Patented Dual-Pol dual polarization antenna technology ensures faster and efficient bi-directional transmission.

- H-Plane & V-Plane Polarization
- Precise alignment achievable with multi-angle, multi-position pole mount brackets
- Simplicity and high isolation for stable and reliable connections

### Ideal Use Case

- Mission-critical performance-intensive networks
- Industrial Connectivity Applications
- Urban and Rural Environments

**Package includes Gigabit PoE injector and mounting kit**

## Overview

The RidgeWave by BEC® 6900 of 4G/LTE Outdoor routers bring secure, high performance mission-critical cellular connectivity to outside locations and harsh environments. The rugged, compact IP-67 rated enclosure enables it to stand up to dirt, harmful ingress of water, humidity and extreme temperatures for years of dependable operation. The RidgeWave by BEC® 6900 is the ideal solution for industries, businesses, remote locations, residences, rural areas and the underserved.

## Innovative MIMO Antenna Technology

Homes and businesses with a weak or nonexistent wireless signal can benefit from the extended range and reach of the RidgeWave by BEC® 6900. Multiple MIMO antenna technology options allow service providers to select the optimal 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 RidgeWave by BEC® 6900, 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.

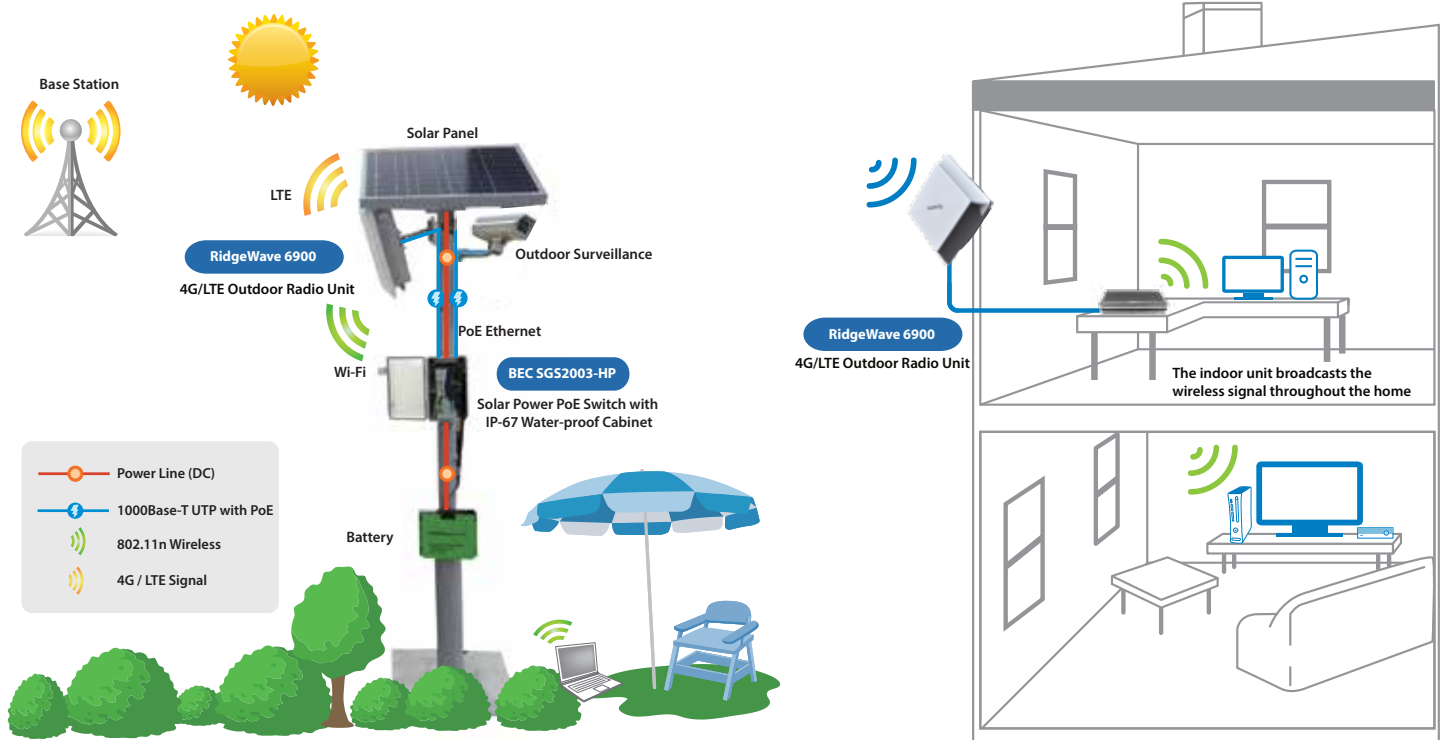
## Rugged Weatherproof Design

The RidgeWave by BEC® 6900 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.

The RidgeWave by BEC® 6900 of 4G/LTE Outdoor routers create value, enable new growth opportunities and helps operators maximize network ROI.

## Application Diagram



**WiFi Hot Spot Services & Remote Surveillance**

**Residential Services**

## Features & Specifications

### Supported Frequency Band

- LTE Band 2 (1900 MHz)
- LTE Band 4 (AWS)
- LTE Band 5 (850 MHz)
- LTE Band 13 (700 MHz)
- LTE Band 17 (700 MHz)
- LTE Band 25 (1900 MHz)
- UMTS/HSPA+: B1, B2, B4, B5, B8
- CDMA 1xRTT/EV-DO Rev A: BC0, BC1, BC10
- GSM/GPRS/EDGE (850/900/1800/1900)
- LTE FDD (Cat. 3) Data Rate: DL up to 100Mbps & UL up to 50 Mbps
- LTE Bandwidth: 5, 10, 15, 20 MHz
- Max. Output Power: 23dBm

### LTE Antenna

- Embedded MIMO Directional
- Gain  
700MHz -960Mhz: 7~9dBi  
1700~2170MHz: 8~10.5dBi

### Operational Modes

- Bridge or Routed

### Network Protocols and Features

- IPv4, IPv6 or IPv4 / IPv6 Dual Stack
- NAT, static (v4/v6) routing and RIP-1 / 2
- DHCPv4 / v6
- Virtual server and DMZ
- SNTP, DNS proxy/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 (IPv4/ IPv6)

### 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
- BEC LCMS remote management
- SNMP v1/v2/v3, MIB-1 and MIB-11
- Syslog monitoring

### Hardware Specifications

#### Physical Interface

- Gigabit LAN Interface with IEEE 802.3at compliant PoE P.D
- SIM slot (for the SIM from Telco / ISP)
- LED Indicators: Power, LAN(PoE), LTE, and Internet

#### Physical Specifications

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

#### Operating Requirements

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