



Key Features

BEC Multi-Band Antenna Optimizing Performance and Coverage

- Embedded polarized multi-element design
- Optimize MIMO 4x4 antenna design per band
- Supporting TDD Bands: 42 / 43 / 48 (CBRS)

High Performance and Network Resilience

- Offer 4G/LTE Broadband Connectivity
- Category 6 models with Carrier Aggregation with data rates of up to 300Mbps (DL) /50Mbps (UL)
- Multi-WAN interfaces: 4G/LTE, Wi-Fi WAN, Gigabit EWAN for network resilience and reliable connectivity
- Advanced IP networking functionalities including bridge and router modes
- Advanced secure VPN sessions (Optional)

Designed for challenging/rugged deployments

- IP68 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)

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 R18 of 4G/LTE Outdoor routers bring secure, high performance mission-critical cellular connectivity to outside locations and harsh environments. The rugged, compact IP68 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 R18 is the ideal solution for industries, businesses, remote locations, residences, rural areas and the under-served.

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 R18. 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 R18; 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.

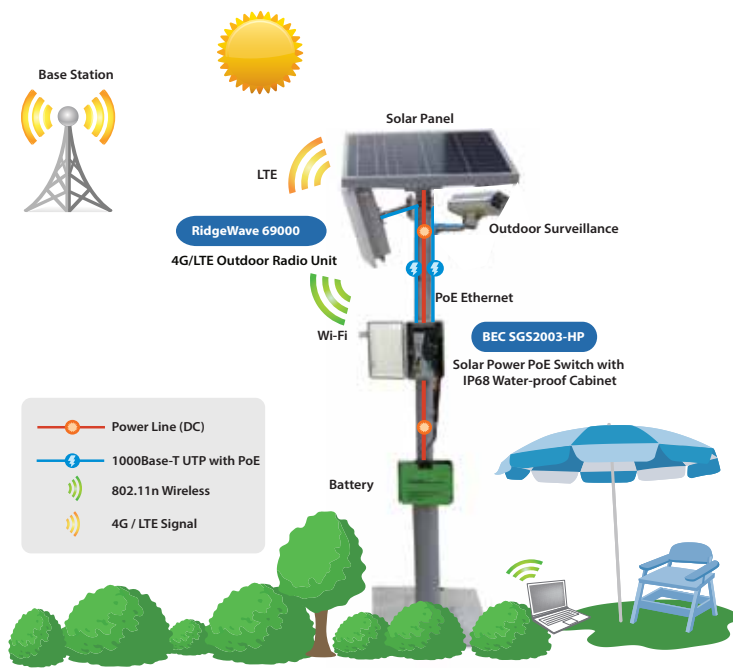
Rugged Weatherproof Design

The RidgeWave by BEC® 6900 R18 is an industrial-grade outdoor fixed wireless router with an IP68 rated enclosure to withstand extreme weather conditions and harsh rugged deployments.

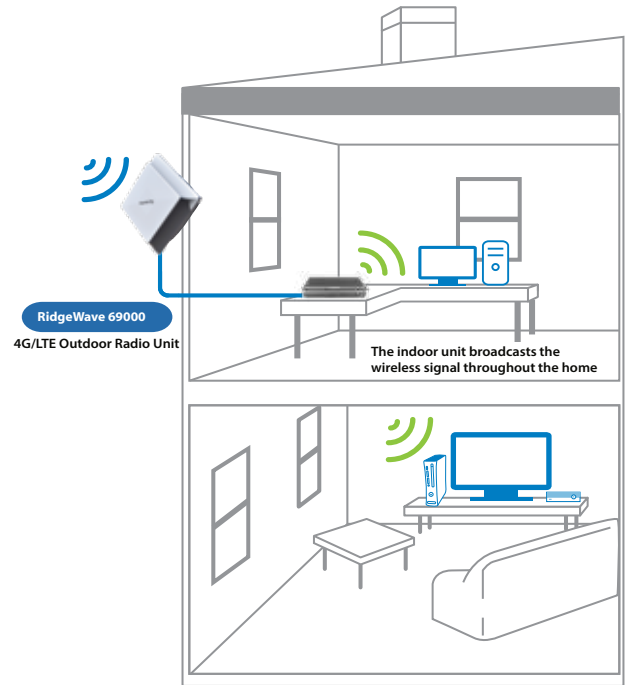
In addition to outdoor, it can be installed in environments such as: manufacturing plants, industrial automation, stadiums, convention halls, stadium facilities, school campuses or virtually any venue requiring a robust wireless solution.

The RidgeWave by BEC® 6900 R18 of 4G/LTE Outdoor routers create value, enable new growth opportunities and helps operators maximize network ROI.

Application Diagram



Critical Communication - Remote Video Surveillance



Fixed Wireless Broadband

Features & Specifications

Supported Frequency Bands

- Comply 3GPP Rel.10 with Carrier Aggregation
- 4G/LTE: TDD (Cat.6)
 - : B42 (3400MHz ~ 3600MHz)
 - : B43 (3600MHz ~ 3800MHz)
 - : B48 (3550MHz ~ 3700MHz)
- Downlink speeds up to 300Mbps
- Uplink speeds up to 50Mbps
- LTE Bandwidth: 5MHz/ 10MHz/ 15MHz/ 20MHz
- Maximum Transmit Power 23±2dBm

Operational Modes

- Bridge or Routed

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)

Firewall (Cont.)

- 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 & configuration data upload and download via web-based GUI
- BECentral® Cloud Management
- 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 91mm)
- Weight: 1.81kg (4lbs)
- IP68 Grade Enclosure

Operating Requirements

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