



RidgeWave® 5GHz Base Station

Ideal Use Case

- Fixed Wireless Broadband
- Last Mile Broadband Wireless Access
- Rural Connectivity
- Municipal Connectivity
- Video Surveillance Backhaul
- Remote Monitoring
- Construction Sites

The BEC RidgeWave® 4700FWB 5GHz Base Station is designed to provide a cost-effective alternative to traditional fixed wireless broadband utilizing license-free 5GHz spectrum. Operating the 4700FWB with both the RidgeWave® S518 Sector Antenna and RidgeWave® AC867 Subscriber Unit create an end to end solution delivering secure, reliable connectivity with high-data rates and expanded coverage to meet today's networking demands.

Superior Antenna

When paired with BEC's RidgeWave S518 5GHz High-Gain sector antennas the 4700FWB provides reduced interference and superior gain for optimal performance. The S518 incorporates 4x4 MIMO advanced dual polarization technology, 18dBi Gain, 65° beamwidth for ideal performance in PtMP Base station applications. The S518 has a rated wind velocity of 145 km/h (90 mph) and includes heavy-duty aluminum brackets for safe, secure mounting.

Rugged Weatherproof Design

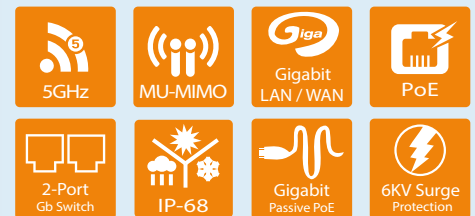
BEC 4700FWB is an industrial-grade 5GHz Base Station with an IP-68/UL-50E rated enclosure to withstand extreme weather conditions, harsh rugged environments, humidity and extreme temperatures for years of dependable operation. In addition, built-in 6KV lightning and 15KV ESD protection design protects against storm/lightning surges and ensuring robust and reliable operation. The 4700FWB supports an extended temperature range from -40° to 140° F (-40° to 60° C).

Optimized Performance

Both 4700FWB and RidgeWave® AC867 Subscriber Units are equipped with Multi-User (MU) MIMO, the 4700FWB communicates with multiple subscriber units simultaneously enable them to receive multiple data streams. This decreases the time each subscriber unit has to wait for a signal and dramatically speeds up your network.

Network Visibility

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 easy configuration, information access, network diagnostics and troubleshooting from/to any remote BEC routers at the same time. Additional functionality includes OTA firmware upgrades (individual or batch), multi-user account management, local network configuration settings on the BEC series routers.



High Performance

- High Power: 30 ±2 dBm (1 Watt) Output Power
- Up to 1 Gbps Base Station Capacity
- (2) Gbps Ethernet Interfaces WAN/PoE & LAN
- 4 x 4: 4 MU-MIMO External N-Type Connectors
- 18 dBi High-Gain when paired with the BEC RidgeWave S518 5GHz Sector Antenna
- Client Capacity: 100 Clients

Designed for Outdoor Environments

- IP-68 hardened enclosure with industrial-grade components
- GORE® Vent for pressure equalization, humidity, and air flow
- Wind Tunnel Tested up to 132mph (F2 Tornado)
- Electrostatic Discharge (ESD) & Surge Protection
- SurTec Die-cast alloy for corrosion protection

Compact and Lightweight Design

- Under 5lbs of weight
- Easily installed by single person
- Can be mounted onto lightweight poles or exterior walls

BECentral® Cloud Management

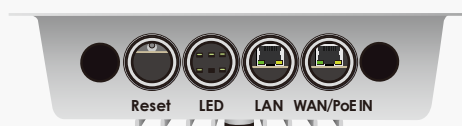
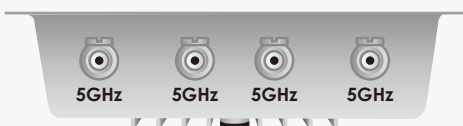
- BECentral® (BEC's Cloud Based Remote Management) to extend network visibility and control of devices remotely
- Simplified cloud complexity - easy to deploy, manage and control
- Enhance security for accessing BECentral® portal

Package Includes

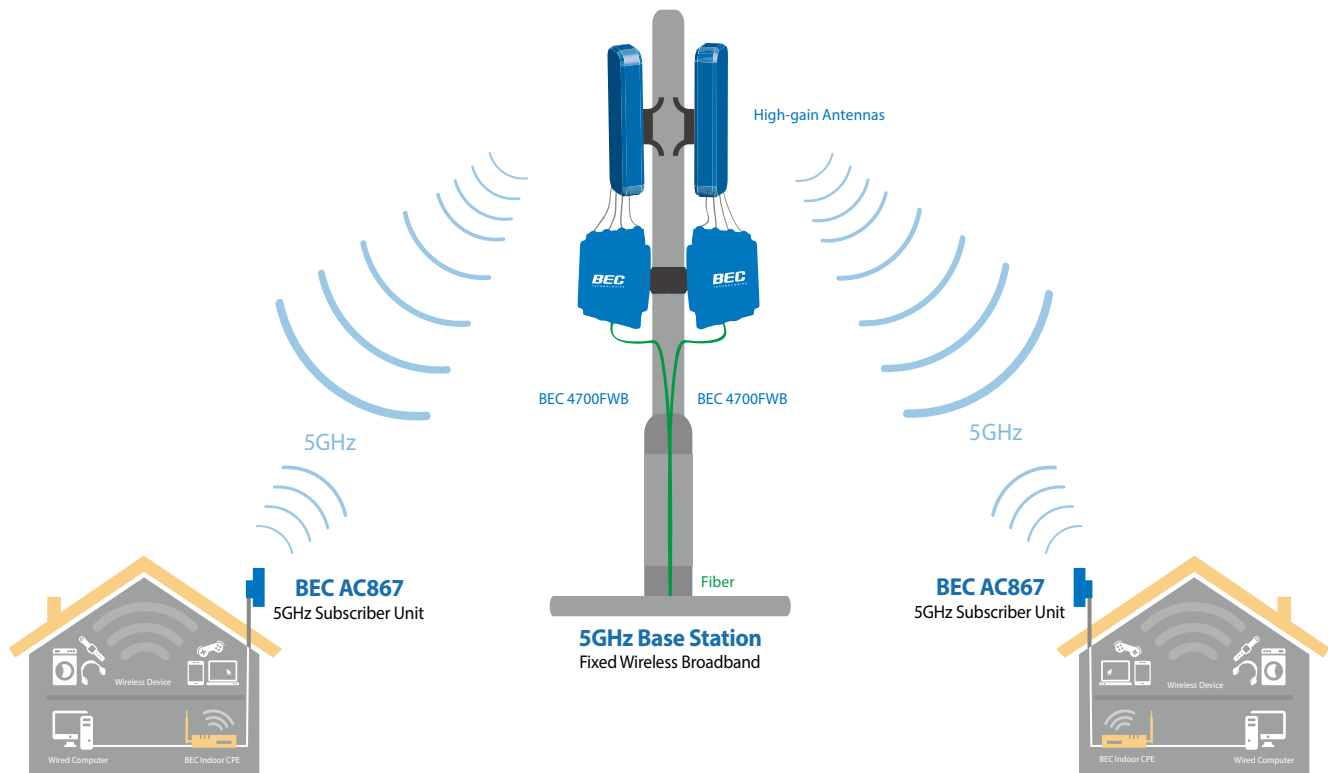
- BEC RidgeWave® 4700FWB 5GHz Base Station
- M25 Cable Gland
- Quick Installation Guide
- Grounding Cable
- IEEE 802.3at Compliant PoE Injector
- Mounting Kit

Top

Bottom



Application Diagram



Features & Specifications

WIRELESS SPECIFICATIONS

Radio

- Wireless Standard (IEEE) : 802.11a/n/ac and 802.11i / d / e / w / h / k / r / s (Draft)
- Frequency: 4.9 - 5.85GHz (Operation frequency may vary by countries)
- MIMO: 4 x 4 : 4 MIMO
- Modulation: OFDM up to 256-QAM
- Max. Phy Data Rate up to 1.7Gbps
- Max. Output Power: 30±2 dBm (EIRP)
- Channel Bandwidth: 20 / 40 / 80 MHz
- Sensitivity (MCS 0): -84 dBm @ 80 MHz : -87 dBm @ 40 MHz and -90 dBm @ 20 MHz

Antenna (BEC RidgeWave S518)

- Frequency Range: 5150-5850MHz
- Gain: 18 x 4 dBi, VSWR: ≤ 1.6
- Beamwidth: 65±5° (Horizontal) 7±2° (Vertical)
- Polarization Type: ±45°
- Front-to-Back Ratio: >28 dB
- Dimensions: 5.04" (W) x 39.37" (H) x 2.28" (D) (128mm x 1000 mm x 58mm)
- Weight: 3.5kg (7.72lbs)
- Rated Wind Velocity: 140km/h

Features

- Operating Modes: AP Router and Repeater
- Selectable Channel Bandwidth: 20 / 40 / 80 MHz
- Security: WPA-PSK, WPA2-PSK, Mixed WPA / WAP2-PSK (TKIP/AES)

SOFTWARE FEATURES

Network Protocols

- IPv4, IPV6 or IPv4 / IPV6 Dual Stack
- DHCP v4 / v6
- NAT, static routing and RIP-1/2
- Dynamic Domain Name System (DDNS)
- Virtual server and DMZ

Firewall

- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- Access Control
- IP Filtering, MAC Filtering, URL Filtering
- Password Protection for System Management

Quality of Service Control

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

Management

- Web-based GUI for Remote and local Management
- Access control by services or protocols
- Firmware upgrade and configuration data upload and download via web-based GUI and Cloud.
- BECentral® Cloud Management
- Syslog Monitoring

HARDWARE FEATURES

Interface

- (2) Gigabit Ethernet Interfaces. : LAN : WAN/PoE
- Wireless N-Type Connectors with Arrester : (4) External 5GHz N-Type Antennas : (2) External 2.4GHz N-Type Antennas*
- Reset Button
- LED Indicators: Power/Boot, WAN/PoE, LAN, Wi-Fi, Internet

Power & Protections

- PoE Injector: IEEE 802.3at compliant PoE P.D
- Max Power Consumption: 18.5W
- Surge Protection: K.21 enhanced mode ±6KV
- ESD Protection: Contact: ±8KV / Air: ±15KV

Enclosure

- Dimensions: 8.5" (W) x 7.5" (H) x 3.0" (D) (257mm x 227 mm x 91mm)
- Weight: 2kg (4.4lbs) (Without Mount)
- Industrial-grade IP68 and Vent integration enclosure
- Top cover material UL-746C compliant for UV-resistant

Environment

- Operating: -40° ~ 60°C (-40°~140°F)
- Storage: -40° ~ 65°C (-40°~149°F)