



RidgeWave® 5GHz Subscriber Unit

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® AC867 5GHz Subscriber Unit offers client-side (subscriber) support for BEC's RidgeWave® 4700FWB Base Station. The BEC AC867 is a high-performance 5Ghz 802.11ac Wave 2 subscriber unit optimized for long-range, high-bandwidth, secure and reliable fixed wireless connectivity. Designed for outdoor deployments, the BEC AC867 withstands conditions including prolonged exposure to sunlight, snow, rainfall, hail, and humidity yet it's aesthetically pleasing and suitable for indoor use.

Maximized Speed and Performance

802.11ac Wave 2 introduces Multi-User (MU) MIMO and Transmit beamforming (TxBF) technologies to enhance network performance and strengthen Wi-Fi signals. MU-MIMO allows simultaneously communication with multiple streams to increase user capacities and improve network efficiency, reduce latency and Wi-Fi throughput.

Beamforming is another key feature in 802.11ac wave 2.0 improving signal quality and coverage range by creating an 1-on-1 signal exchange between the AC867 and its client for reliable connection.

Weatherproof Design for Outdoor Environments

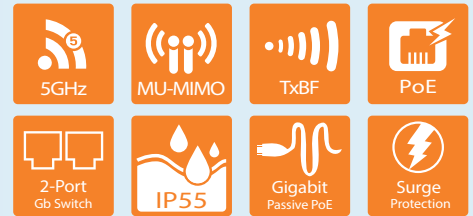
The compact IP55 rated enclosure is designed to withstand extreme weather conditions including sunlight, frost, snow, rainfall and humidity for years of dependable operation. In addition, built-in 2KV surge protection and 8KV ESD protection design to ensure robust and reliable operation.

Flexible Deployment with Simple Installation

Offering greater flexibility in deployment, the BEC AC867 comes equipped with two Gigabit Ethernet LAN interfaces with 802.3at compliant power-over-ethernet (PoE) support on one interface. Users can deploy, connect and power a second device in locations where power outlets are non-existent. Every installation is unique, the BEC AC867 is ultra-compact and lightweight enabling installation virtually anywhere, such as rooftops, walls or any pole. The 3-axis pivoting arm rotates 360 degrees for precise alignment for optimal signal strength.

Point-to-Point Connectivity with Network Protection

BEC AC867 is compatible with BEC 4700FWB, RidgeWave 5GHz Base Station. The embedded 19dBi high-gain directional antenna receives narrow signal from the 4700FWB to deliver a stable point-to-point connectivity and high-speed rate over extremely long distances. BEC AC867 can be protected by Wireless Encryption Protocol (WEP- 64bit / 128bit /152bit) WEP or Wi-Fi Protected Access (WPA/WPA2) using a temporal key integrity protocol (TKIP), 802.1X Radius authentication database or advanced encryption standard(AES) to encrypt and protect the network. Guest Wi-Fi Network(Client Isolation) provides Internet access but isolate users to access to the primary network. E-mail Alert system automatically sends out e-mail notification to inform administrator any threat triggered in the network.



High Performance

- Quad-Core ARM CPU
- Embedded high-gain 19dBi directional antenna
- Engine with 802.11ac Wave 2 technology
- Multi-User MIMO (MU-MIMO) up to 2 spatial streams
- Transmit beamforming (TxBF)
- Narrower Beamwidth for improved noise immunity
- Channel Utilization: 20/40/80 MHz

Designed for Outdoor Environments

- UV Resistant IP55 rated enclosure
- Electrostatic Discharge (ESD) & Surge Protection

Compact and Lightweight Design

- Fits in the palm of your hand
- Easily installed by single person

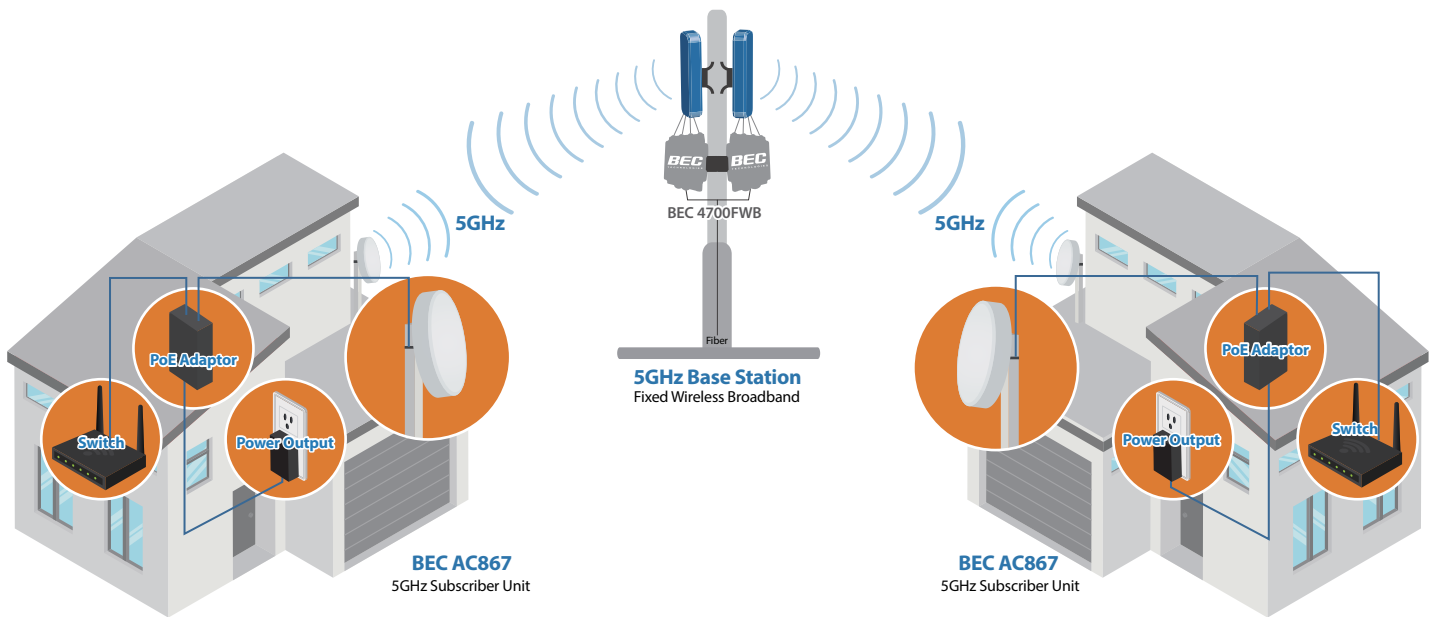
Secure Wireless Connectivity

- WEP Encryption: 64/128/152 bit
- WPA/WPA2 Personal/Enterprise (WPA-EAP using TKIP AES)
- 802.1X Authenticator
- Radius Provisioning
- MAC Filtering
- Unique SSID (up to 16), encryption per SSID

Package Includes

- BEC RidgeWave® AC867 5GHz Subscriber Unit
- IEEE 802.3at Compliant PoE Injector
- Mounting Bracket
- Pole Strap
- Screw Set/Sealing Nut

Application Diagram



Features & Specifications

WIRELESS SPECIFICATIONS

Radio

- Wireless Standard (IEEE) : 802.11a/n/ac (5GHz-Only)
- : 802.11ac/a/g/n: OFDM
- : 802.11n/ac: 2x2 MIMO with 2 streams
- : 802.11ac channel bandwidth 20/40/80 MHz
- : 802.11n channel bandwidth 20/40 MHz
- : 802.11n/ac packet aggregation: AMPDU, ASPDU
- Frequency
- : 5150MHz - 5250MHz
- : 5250MHz - 5350MHz
- : 5470MHz - 5725MHz
- : 5725MHz - 5850MHz
- (Operation frequency may vary on the figured regulatory domain)
- Modulation
- : 802.11a/n: BPSK, QPSK, 16-QAM, 64-QAM
- : 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
- Max. Phy Data Rate up 867Mbps
- Max. Output Power: 23dBm
- Support Tx Beamforming (TxBF)

Antenna

- Frequency Range: 5150-5925MHz
- Directional High Gain Antenna
- Gain: 19dBi

SOFTWARE FEATURES

Security & Features

- Operating Modes
- : Access Point (AP)
- : Client Bridge
- : WDS (WDS AP / WDS Bridge / WDS Station)

Security & Features (Cont.)

- Security
- : WEP 64/128/152 bit
- : WPA/WPA2 Enterprise (WPA-EAP using TKIP or AES)
- Hide SSID in beacons
- MAC address filtering, up to 32 MACs per SSID
- Wireless STA (Client) connection list
- Multicast Support
- Auto Channel Selection
- Support BSSID
- Multiple SSIDs up to 16
- Wireless MAC Filtering
- Wireless Guest Isolation/Network
- Wireless Scheduler

Network Protocols

- Support IPv4, IPv6
- Spanning Tree Protocol

Management

- Web-based GUI Management
- VLAN Tag / VLAN Pass-Through
- RADIUS Accounting
- Support SNMP v1 / v2 / v3
- Support MIB I/II, Private MIB
- Email Alert
- HTTPS
- SSL Tunnel
- CLI
- Save Configuration as Default

Quality of Service Control

- Compliant with IEEE 802.1e Standard
- Bandwidth Management

HARDWARE SPECIFICATIONS

Interface

- (2) 10/100/1000Mbps Gigabit Ethernet
- : LAN/PoE
- : LAN
- Reset Button
- LED Indicators
- : Power
- : LAN 1
- : LAN 2
- : WLAN
- : WLAN LED (Weak, Medium, Strong)

Power & Protections

- Proprietary 24V PoE Injector
- Max Power Consumption: 7W
- Surge Protection
- : Line to Line: 1KV
- : Line to Ground: 2KV
- ESD Protection: Contact: ±4KV / Air: ±8KV

Enclosure (Device only)

- Dimensions: 7.5" (D) x 1.5" (H) (190mm x 38 mm)
- Weight: 1.11lbs. (460g)
- IP55 Protected Enclosure

Environment

- Operating: -20° ~ 60°C (-4°~140°F)
- Storage: -30° ~ 80°C (-22°~176°F)