



Gigabit LTE Outdoor Router with Carrier-Grade Wi-Fi Hotspot BEC 7000 R26-W

Overview

Are you searching for reliable internet connectivity in areas with limited wireline options or remote settings? The BEC RidgeWave 7000 R26-W MaxRange Gigabit LTE Outdoor Hotspot is the solution you need. Specifically engineered to tackle this challenge, the 7000 R26-W seamlessly integrates Gigabit LTE and wireless LAN technologies, creating a fully wireless solution that operates without wired connectivity. The Gigabit LTE technology provides high-speed internet connectivity, achieving peak data rates of 1.2Gbps DL and 150Mbps UL over cellular networks. Simultaneously, it supports speeds of up to 2000Mbps for Wi-Fi clients connecting across both 2.4 GHz and 5 GHz frequencies, utilizing the enhanced capabilities of High-Power Wi-Fi 5 802.11ac with MU-MIMO features.

Innovative LTE Antenna Design

BEC 7000 R26-W integrates the BEC SX-Series wideband multi element adaptive antenna design into a single compact housing which provides improved signal quality, increased signal range, coverage and increased data transfer rates across multiple frequency bands. The antenna allows service providers to select the optimal solution for their environment or application whether LOS (Line of Sight) or NLOS (Non-Line of Sight).

New Experience with Wi-Fi Speed and Coverage

With the next wireless generation, 802.11ac, integrated in the BEC 7000 R26-W, the router delivers fast Wi-Fi speeds of up to 2000Mbps. The BEC 7000 R26W supports a link rate up to 300Mbps in 2.4GHz frequency range & 1700Mbps in 5GHz range and is also backward compatible with existing 802.11 a / b / g / n wireless equipment in the network. The Wireless Protected Access (WPA-PSK/WPA2-PSK) and Wireless Encryption Protocol (WEP) features enhance the level of transmission security and access control over Wireless LAN. BEC 7000 R26-W also supports the Wi-Fi Protected Setup (WPS) standard for easy and secure establishment of a wireless home network.

Rugged Weatherproof Design

The BEC RidgeWave® 7000 R26-W MaxRange Gigabit LTE Outdoor Hotspots are designed for durability, featuring industrial-grade components and IP68/UL50-E ruggedized enclosures to endure harsh weather conditions and challenging deployments. Integrated GORE® vents maintain pressure, humidity, and airflow balance. These enclosures also provide lightning/ESD Protection and have undergone wind-tunnel testing, confirming operation at speeds up to 132mph (F2 Tornado 113-157mph). With these attributes, the BEC RidgeWave® 7000 R26-W MaxRange Gigabit LTE Outdoor Hotspot will deliver dependable performance for many years.

BECentral® CloudEdge Services

BECentral® CloudEdge is an Industry-leading cloud-based service platform designed to accelerate LTE and 5G Wireless WAN connectivity for deployments of any scale. The platform enables zero-touch provisioning and provides visual dashboards with real time analytics, detailed reporting, historical analysis, performance monitoring, proactive alerts/notifications, and API extensibility for 3rd party integration. BECentral® CloudEdge is a powerful tool that provides valuable insights and essential network visibility at the edge.



Key Features

BEC SX-Series Wideband Adaptive Antenna

- Embedded High-Gain 4x4 MIMO Antenna
- H-Plane & V-Plane Polarization
- Ensures exceptional RF performance for maximum bandwidth and coverage

High performance and Network Resilience

- 3GPP Release 12, Category 18, with data rates of up to 2Gbps (DL) / 150Mbps (UL)
- Offers multiple LTE frequency band support
- Carrier Aggregation to increase data rates, 5CA DL and 2CA UL

Carrier-Grade Wireless-LAN

- High-Power Design
- Simultaneous Dual Band Wi-Fi
- Six external Omni-direction N-Type MIMO Antennas
- Supports Wi-Fi Multimedia (WMM) wireless QoS
- MSSID with Client Operation
- Multiple Operation Modes: Access Point, Client, and BridgeL

Designed for Challenging/Rugged Deployments

- IP68 hardened enclosure with Industrial-grade components
- Gore® Vent technology integration
- Designed for the toughest industrial environments
- Rugged compact design, deploys easily in space constrained areas
- Electrostatic Discharge (ESD) & Surge protection

BECentral® CloudEdge Services

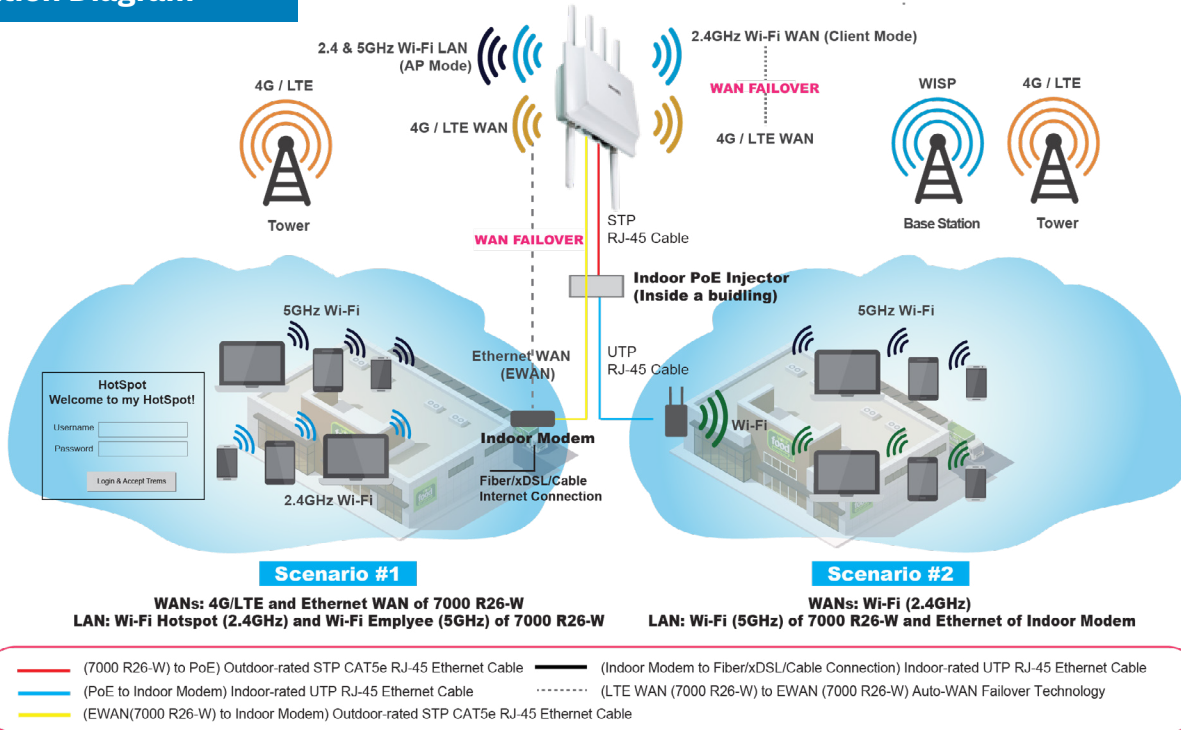
- BECentral® (BEC's Cloud Based Remote Management) to extend network visibility and control of devices remotely
- Simplified cloud complexity - easy to deploy, manage and control
- Enhance security for accessing BECentral® portal

Ideal Use Case

- Public Venues
- Boat Marina
- Campgrounds / RV Parks / Public Park, Urban Areas
- Smart Cities
- Remote Connectivity

Package includes Gigabit PoE injector and Mounting Kit

Application Diagram



Features & Specifications

Supported Frequency Bands

- Comply 3GPP Rel.12 with SCA DL & 2 CA UL
- 4G/LTE (Cat.18)
- Modulation: 256QAM DL / 64QAM UL

FDD Bands

- B1 (1920–1980 MHz UL | 2110–2170 MHz DL)
- B25 (B2) (1850–1915 MHz UL | 1930–1995 MHz DL)
- B3 (1710–1785 MHz UL | 1805–1880 MHz DL)
- B66 (B4) (1710–1780 MHz UL | 2110–2170 MHz DL)
- B26 (B5 / B8 / B19) (814–849 MHz UL | 859–894 MHz DL)
- B7 (2500–2570 MHz UL | 2620–2690 MHz DL)
- B8 (880–915 MHz UL | 925–960 MHz DL)
- B12 (B17) (699–716 MHz UL | 729–746 MHz DL)
- B13 (777–787 MHz UL | 746–756 MHz DL)
- B14 (788–798 MHz UL | 758–768 MHz DL)
- B20 (832–862 MHz UL | 791–821 MHz DL)
- B28 (703–748 MHz UL | 758–803 MHz DL)
- B29 (717–728 MHz DL Only)
- B30 (2305–2315 MHz UL | 2350–2360 MHz DL)
- B71 (663–698 MHz UL | 617–652 MHz DL)

TDD Bands

- B38 (2570–2620 MHz)
- B39 (1880–1920 MHz)
- B40 (2300–2400 MHz)
- B41 (2496–2690 MHz)
- B46 (5150–5925 MHz)
- B48 (3550–3700 MHz)
- 3G/WCDMA: B1 / B2 / B4 / B5 / B8 / B9 / B19

LTE Antenna

- 2x2 and 4x4 MIMO Directional
- Maximum Peak Gain: 10 dBi

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

Operational Modes

- Bridge or Routed
- Dynamic Routing (BGP and OSPF) - Optional
- VPN Termination (IPSEC, GRE, OpenVPN, L2TP, PPTP) - Optional

Network Protocols and Features

- IPv4, IPv6 or IPv4 / IPv6 Dual Stack
- DHCP v4 / v6
- NAT, static (v4/v6) routing and RIP-1/2
- NAT supports PAT and multimedia applications
- Dynamic Domain Name System (DDNS)
- Virtual server and DMZ
- SNT, DNS proxy
- IGMP & MLD snooping and IGMP & MLD proxy
- Transparent Bridging

Quality of Service Control

- Supports the DiffServ approach
- Traffic prioritization based-on protocol, port number and IP address
- 802.11e WMM (Wireless Multimedia)

Carrier Grade Wireless LAN

- Compliant with IEEE 802.11 a/b/g/n/ac standards
- 2.4GHz & 5GHz frequency range
- 20/40-MHz channel bandwidth
- Up to 300Mbps (2.4GHz) & 1700Mbps (5GHz) wireless data phy rate
- 64/128 bits WEP supported for encryption
- Wireless security with WPA-PSK, WPA2-PSK, Mixed WPA/WAP2-PSK, (TKIP/AES), 802.1x/Radius
- AP, Client, and Bridge(WDS) Operational Modes
- Multiple SSID (4 SSIDs), BSSID
- Wireless MAC filtering, Wireless Client Isolation
- Dynamic, Wi-Fi client rate-limiting

Wi-Fi Antennas

- (2) External 2.4GHz N-Type Antennas
- (4) External 5GHz N-Type Antennas

Management

- Web-based GUI for remote and local management
- Universal Plug & Play (UPnP)
- Access control by services or protocols
- Firmware upgrade and configuration data upload and download via web-based GUI
- Network Time Protocol (NTP)
- Physical layer/protocol diagnostic test tool
- Syslog monitoring
- Supports SNMP v1/v2/v3, MIB-1 and MIB-II
- BECentral® Cloud Management

Hardware Specifications

Physical Interface

- (2) Gigabit Ethernet Interfaces
- IEEE 802.3at PD compliant (25.5W)
- (6) Wireless N-Type Connectors with arrester
- SIM slot (for the SIM from Telco / ISP)
- Reset Button
- LED Indicators: Power/Boot, LAN(PoE), E-WAN,
- Wi-Fi, LTE RSSI, and Internet Physical Specifications
- Dimensions: 12.6" (W) x 12.6" (H) x 3.46" (D) (320mm x 320mm x 88mm)
- Weight: 2kg (4.4lbs)
- Industrial-grade IP68 and Vent integration enclosure
- Top cover material UL-746C compliant for UV-resistant

Temperature Requirements

- Operating: -40° ~ 70°C (-40°~158°F)
- Storage: -40° ~ 85°C (-40°~185°F)

Surge/ESD Protections

- Surge Protection: K.21 enhanced mode 6KV
- ESD Protection: Contact: 8KV / Air: 15KV