

Outdoor Wi-Fi Router

Wireless & Broadband Access
All-in One Solution

BEC 4700A



Key Features

High Performance and Network Resilience

- Dual-WAN interfaces: Wi-Fi WAN and Gigabit EWAN for network resilience and reliable connectivity

Carrier-Grade Wireless-LAN

- High-Power Design - 700mW Transmit Power
- 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, AP-Client, and Bridge

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

Lightweight, Compact and Unobtrusive Design

- Easily installed by single person
- Supports passive Power over Ethernet (PoE)

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

Ideal Use Case

- Hotel, Campus / Outdoor Areas
- Campgrounds / RV Parks / Public Park
- Remote Connectivity

Package includes Gigabit PoE injector and Mounting Kit

Overview

BEC 4700A, the Outdoor Wireless 11ac Router - featuring dual Internet interfaces, Gigabit LAN / PoE port, IEEE 802.11ac technology, dual-band Wi-Fi hotspot APs capability with six (6) N-type antenna connectors. The 4700A brings secure, high performance cellular connectivity to outside locations and harsh environments. The second-WAN option, utilizing the existing wired-broadband infrastructure, with wired Internet can be easily deployed using preferable broadband device when wireless connection is not accessible. 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.

Advanced Hardware Functionalities

Designed for flexibility, easy-to-use, and easy-to-install, the Gigabit LAN/PoE port, IEEE 802.3at compliant, is designed to transmit electrical power safely along with data over an Ethernet connectivity to eliminate the need for separate power and data cables make installation faster and simpler. The concurrent dual-band Wi-Fi access points (APs), a carrier-grade 802.11ac with 4x4 MIMO and 802.11n with 2x2 MIMO technologies, over two dedicated Wi-Fi networks avoid interference. The Wi-Fi Hotspot functionality is also available and offers convenient and quick Internet access to Wi-Fi enabled devices in public places, hotels, airports, coffee shops, and more. With the wireless and wired Ethernet WAN interfaces built into the BEC 4700A, it can work with any networking devices with preferred WAN connection.

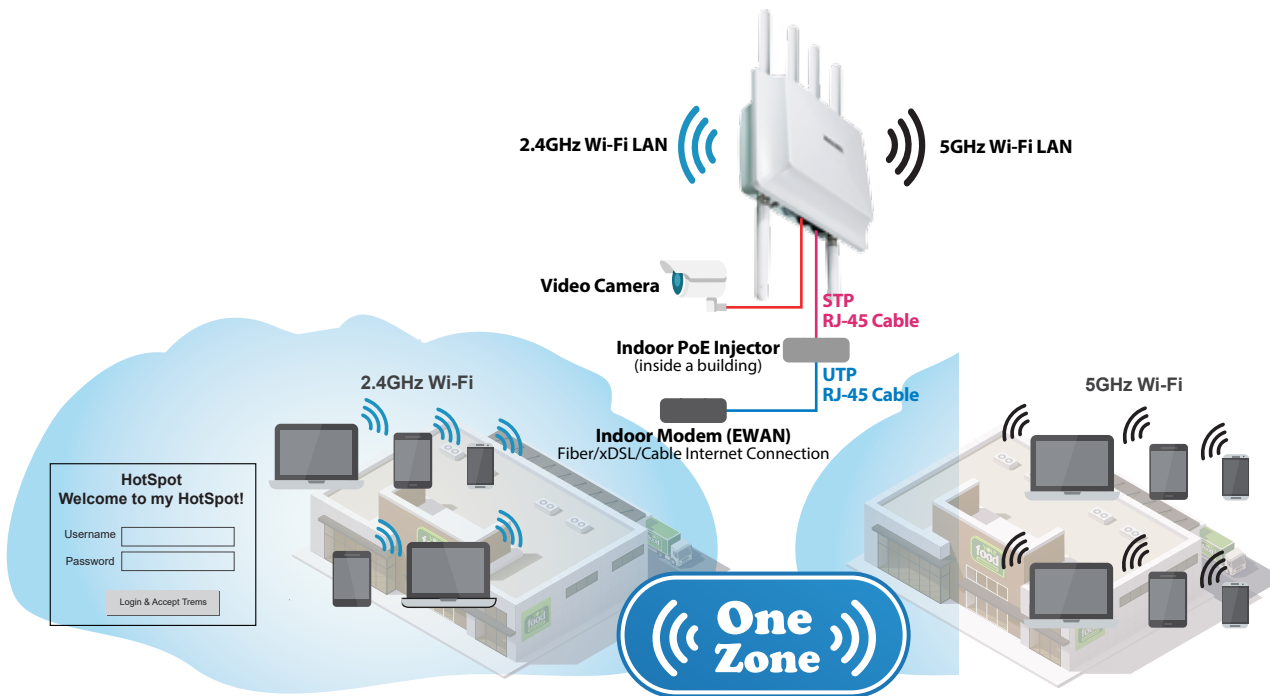
New Experience with Wi-Fi Speed and Coverage

With the next wireless generation, 802.11ac, integrated in the BEC 4700A, the router delivers fast Wi-Fi speeds of up to 2000Mbps. The BEC 4700A 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 4700A also supports the Wi-Fi Protected Setup (WPS) standard for easy and secure establishment of a wireless home network. If the user's network requires wider coverage, the built-in Wireless Distribution System (WDS) repeater function expands the wireless network without needing any external wires or cables.

Rugged Weatherproof Design

BEC 4700A is an industrial-grade outdoor fixed wireless router with an IP68 rated enclosure to withstand extreme weather conditions, harsh rugged environments, humidity and extreme temperatures for years of dependable operation. In addition, built-in 8000V lightning and 15KV ESD protection design protects against storm/lightning surges and ensuring robust and reliable operation.

Application Diagram



Features & Specifications

Availability and Resilience

- Dual-WAN ports (Wireless & Ethernet WAN)
- Auto fail-over between Wireless and E-WAN

Wi-Fi Antennas

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

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
- SNTP, DNS proxy
- IGMP snooping and IGMP proxy
- MLD snooping and MLD proxy
- Transparent Bridging

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

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, AP-Client, Bridge(WDS) Operational Modes
- Multiple SSID (4 SSIDs), BSSID
- Wireless MAC filtering
- Wireless Client Isolation
- Dynamic, Wi-Fi client rate-limiting

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)

Management (Cont.)

- 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 (2.4GHz / 5GHz), and Internet

Physical Specifications

- Dimensions: 8.5" (W) x 7.5" (H) x 3.0" (D) (257mm x 227 mm x 91mm)
- Weight: 2kg (4.4lbs)
- Industrial-grade IP68 and Vent integration enclosure
- Top cover material UL-746C compliant for UV-resistant

Temperature Requirements

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

Surge/ESD Protections

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