AirConnect® BEC 8355P
5G CPE

AIRCONNECT by BEC

3GPP Rel-16 | 5GNR sub-6 GHz | NSA / SA Modes | 4G LTE Cat.19 | MIMO DL 4 X 4 | Carrier Aggregation

2FF and eSIM | Wi-Fi 6 802.11ax | Firewall | VPN | IP65 | BECentral® CloudEdge

Ideal Use Cases

- Fixed Wireless Access (FWA)
- Last Mile Connectivity
- Private Networks
- Residential or SMB Users
- Remote Workers
- Delay Sensitive and Bandwidth Intensive Applications

The BEC AirConnect® 8355P 5G CPE boasts a versatile design suitable for indoor and outdoor installation, ensuring optimal signal reception regardless of placement. The 8355P 5G CPE offers exceptional performance with an industry-leading MIMO antenna design architecture, providing reliable capacity and extensive coverage.

Equipped with a robust multi-core CPU and sub-6 GHz carrier aggregation up to 4CA DL and 2CA UL, the 8355P delivers ultra-high data rates and lower latency. Additionally, it features 802.11ax Wi-Fi 6 Technology for faster speeds, greater capacity, and reduced network congestion, offering a transformative Wi-Fi experience.



Redefining Fixed Wireless Access

The AirConnect® 8335P supports 5G Sub-6 GHz and 4G/LTE with dual connectivity modes, standalone access (SA) fully benefiting from all the 5G capabilities and non-standalone access (NSA) attached to a 4G network up to a gigabit speed to ensure a quick and flexible deployment to any 5G NR or LTE network.

Subscriber Self-Installable

Many subscribers prefer the convenience and flexibility of self-installation over waiting for a technician to come, and operators benefit from reduced operational costs and faster deployments.

Advanced MIMO Antenna Technology

Operators need antenna technology to meet capacity and throughput demands in challenging deployment scenarios such as Fixed Wireless Access (FWA). The high-gain embedded 4X4 MIMO directional antenna ensures increased capacity, maximum bandwidth, and extended coverage.

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.

High Performance & Support for 5G NR & LTE Networks

- 5G NR
  3GPP Release 16 Compliant
  SA: 7 Gbps (DL) / 2500 Mbps (UL)
  NSA: 5.6 Gbps (DL) / 900 Mbps (UL)

- 4G/LTE Cat.19
  : LTE: 5CA DL / 2CA UL (Carrier Aggregation)
  : Peak Data Rate: 1.6 Gbps (DL) / 200 Mbps (UL)
  (The presented data rates are theoretical only, and the actual value depends on network conditions.)

Patented Antenna Design

- Embedded High-Gain 4x4 MIMO sub-6GHz Antenna
- H-Plane & V-Plane Polarization
- Frequency Range: 600 MHz - 4200 MHz
- Maximum Peak Gain: 10 dBi
- Ensures exceptional RF performance for maximum bandwidth and coverage
- High isolation for stable and reliable connectivity

Compact Weatherproof Enclosure

- IP65 enclosure for protection against dust and water ingress
- Industrial-grade components for greater reliability
- Electrostatic Discharge (ESD) & Surge protection

Package includes

- Paassive PoE Injector (2) RJ-45 - (1) Data+Power
- Desktop Stand
- Outdoor Mounting Kit

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Features & Specifications

Supported Frequency Band

- **5G NR sub-6 GHz**

: Support Frequency Band (SA & NSA):
US: n2, n5, n7, n12, n14, n25, n26, n29 (SA only), n30, n38, n41, n48, n66, n70, n71, n77, n78
Global: n1, n3, n5, n7, n8, n20, n28, n38, n40, n41, n75, n77, n78
: Carrier Aggregation: (FDD + FDD, TDD + TDD, FDD + TDD) 4CA DL / 2CA UL
: Channel Bandwidth: Up to 300 MHz bandwidth
: Modulation: 256QAM DL / 256QAM UL

- **4G / LTE (CAT 19 DL / CAT 18 UL)**

: Support Frequency Bands :
US: 2, 4, 5, 7, 12(17), 13, 14, 25, 26, 29, 30, 38, 41, 42, 43, 46, 48, 66, 71
Global: 1, 3, 5, 7, 8, 20, 28, 32, 38, 40, 41, 42, 43
: Carrier Aggregation: 5CA DL / 2CA UL
: Channel Bandwidth: 1.4/3/5/10/15/20 MHz
: Modulation: 256QAM DL / 64QAM UL

- **BEC SX High-Gain MIMO Antenna**
- 4x4 MIMO DL / 2x2 MIMO UL
- 2T4R Antenna Chain
- Omni-Directional (617~2700MHz)
: Maximum Peak Gain: 5 dBi
- Directional)3300~4200MHz)
: Maximum Peak Gain: 10 dBi

- **Maximum PHY-Data Transmission Rates**

5G SA: 7 Gbps (DL) / 2500 Mbps (UL)
5G NSA: 5.6 Gbps (DL) / 1450 Mbps (UL)
LTE: DL 1.6 Gbps / UL 200 Mbps
(The presented data rates are theoretical only, and the actual value depends on network conditions.)

Operational Modes

- Router or Bridge

WI-FI 6

- 2.4 GHz: IEEE 802.11ax/n/b/g | 5 GHz: IEEE 802.11ax/ac/n/a

- **Maximum PHY-Data Transmission Rates**
- 2.4 GHz: 574 Mbps (802.11ax) | 5 GHz: 1201 Mbps (802.11ax)

Quality of Service Control

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

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

Management

- Quick Installation Wizard
- Web-based GUI for remote and local management
- Firmware upgrade and configuration data upload & download via web-based GUI or BECentral®
- DHCP server/client/relay
- TR-069 supports remote management
- BECentral® Cloud Management
- SNMP and Syslog monitoring

Hardware Specifications

- **Physical Interface**

: (1) 2.5 Gigabit Ethernet PoE
: SIM Card Slot: (1) Mini SIM (2FF) | eSIM (*optional, built to order)
: LED Indicators: Power, LAN(PoE), LTE Signal Strength, and Internet

- **Operating Environment**

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

- **Dimensions and Weight**

- 9.06" × 2.17" (230 × 55 mm); 9.06" × 2.60" (230 × 66 mm) including screws
- 1.1 lbs. (460g)

- **IP Rating**

- IP65

Regulatory Compliance

- FCC Part15B, Part 96
- PTCRB
- UK PSTI
- RCM



