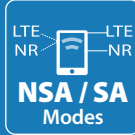


AirConnect® BEC 8243

5G NR mmWave Outdoor Router



Ideal Use Cases

- Fixed Wireless Access (FWA)
- Last Mile Connectivity
- Mission-Critical & Performance Intensive Networks
- Industrial Connectivity Applications
- Urban and Rural Environments

The BEC AirConnect® 8243 5G NR mmWave unlocks diverse fixed wireless access (FWA) market opportunities and provides subscribers with a broadband experience surpassing your rivals. Specifically designed for performance, the AirConnect® 8243 is 3GPP Release 16 compliant supporting 5G Non-Standalone (NSA) and Standalone (SA) modes for both mmWave and sub-6 GHz as well as Gigabit LTE CAT 20. Invest in technology innovation from BEC that enables the delivery of extreme data speeds, lower latencies, broader coverage, and increased network capacity. Our connectivity solutions are trusted and widely deployed to help customers broaden their service offerings create value and drive revenue growth.

Redefining Fixed Wireless Access

The AirConnect® 8243 supports 5G mmWave, 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 adaptation to any 5G NR or LTE networks.

Rugged Weatherproof Design

The AirConnect® 8243 is built to last, fully ruggedized with industrial-grade components. Unique to BEC devices are GORE® Vents for pressure equalization, humidity, and airflow. The BEC 8243 is also accompanied with lightning/ESD Protection and the IP68/UL 50E enclosure ensure protection against dirt, harmful ingress of water and extreme temperatures for years of dependable operation.

High Performance & Support for 5G NR & LTE Networks

- 5G NR
 - : 3GPP Release 16 Operation, mmWave
 - : 3GPP Release 16 NSA/SA Operation, sub-6 GHz
 - : 5G NSA mmWave: 8.8 Gbps (DL)/2.6 Gbps (UL)
 - : 5G SA /NSA sub-6 GHz: 4.0 Gbps (DL)/900 Mbps (UL) NSA: 550 Mbps (UL)
- 4G/LTE Cat.20 (Max.) 2 Gbps (DL) / 200Mbps (UL)
 - : Carrier Aggregation) RF bandwidth
- Advanced IP networking functionalities including bridge & router modes
- Advanced secure VPN sessions (Optional)

Designed for Challenging and Rugged Deployments

- IP68 / UL-50E Hardened enclosure for protection against dust and water ingress
- Industrial-grade components for greater reliability
- GORE™ vent for pressure equalization, humidity, and air flow
- Electrostatic Discharge (ESD) & Surge protection
- Wind tunnel tested/rated for successful operation up to 132mph (F2 Tornado Speeds)



Innovative MIMO Antenna Technology

Operators need innovative antenna technology to meet capacity and throughput demands in challenging deployment scenarios such as Fixed Wireless Access (FWA). The MIMO high-gain embedded dual-polarization/dual slant antenna technology ensures faster and efficient bi-directional transmission for maximum bandwidth and 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 realtime analytics, detailed reporting, historical analysis, performance monitoring, proactive alerts/notifications, and API extensibility for 3rd party integration.

Patented Dual-Polarization & Dual Slant Antenna

- Embedded High-Gain 4x4 MIMO Antenna
- H-Plane & V-Plane Polarization
- Ensures exceptional RF performance for maximum bandwidth and coverage
- Precise alignment achievable with multi-angle and multi-position pole mount brackets
- High isolation for stable and reliable connectivity

Package includes Gigabit PoE injector and Mounting Kit

Features & Specifications

Supported Frequency Band

• 5G NR mmWave

- : Comply 3GPP Rel.16
- : Support Frequency Range 2 Bands (SA & NSA): n257 (28GHz), n258 (26GHz), n259 (41GHz), n260 (39GHz), n261 (28GHz)
- : Modulation: 256QAM DL / 256QAM UL
- : NR Dual Connectivity (NR-DC)
- : Bandwidth: Up to 1000 MHz

• 5G NR Sub-6 GHz

- : Comply 3GPP Rel.16
- : Support Frequency Range 1 Bands (SA & NSA): n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n29, n30, n38, n40, n41, n48, n66, n70, n71, n75, n76, n77, n78
- : Modulation: 256QAM DL / 256QAM UL
- : Carrier Aggregation: (FDD + FDD, TDD + TDD, FDD + TDD) DL 3CA / UL 2CA
- : Bandwidth: Up to 300 MHz

• 4G / LTE (Cat.20)

- : Support Frequency Bands (FDD & TDD): 1, 2, 3, 4(66), 5(18,19,26), 7, 8, 12(17), 13, 14, 20, 25, 26, 28, 29, 30, 38, 40, 41, 42, 43, 46A), 48, 71
- : Modulation: 256QAM DL / 64QAM UL
- : Carrier Aggregation: 7CA DL / 2CA UL
- : Bandwidth: 1.4 / 3 / 5 / 10 / 15 / 20 MHz

• Data Transmission (theoretical only)

- 5G NSA mmWave: 8.8 Gbps (DL)/2.6 Gbps (UL)
- 5G FDD + mmWave: 8.9 Gbps (DL)/2.7 Gbps (UL)
- 5G TDD + mmWave: 8.0 Gbps (DL)/3.4 Gbps (UL)
- 5G SA /NSA sub-6 GHz: 4.0 Gbps (DL)/900 Mbps (UL) NSA: 550 Mbps (UL)
- LTE: DL 2.0Gbps / UL 200Mbps

• Embedded Antenna

- : Directional (Dual Polarization & Dual Slant)
- : Frequency Range: 617-698MHz, 1710-2170MHz, 2300-2690MHz, and 3400-4000MHz
- : 4x4 MIMO in Mid Band / High Band | 2x2 MIMO in Low Band

Operational Modes

- Router or Bridge

Quality of Service Control

- DiffServ
- 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® CloudEdge
- SNMP and Syslog monitoring

Hardware Specifications

• Physical Interface

- : 2.5GbE Interface with IEEE 802.3at compliant PoE P.D (25.5W)
- : SIM Card Slot: One (1), Mini SIM (2FF)
- : LED Indicators: Power, LAN(PoE), LTE Signal Strength, and Internet

• Dimensions and Weight

- : 12 x 8.2 x 3.8 in (321 x 210 x 97.9 mm) | 2.5 kg (5.5 lbs.)

• Operating Environment

- : Operating temperature: -40°C to 70°C (-40°F to 158°F)

• Surge/ESD Protection

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

