



Ideal Use Cases

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

The AirConnect® by BEC 8230 of 5G NR / LTE Dual Mode Outdoor Router adapts the latest fifth-generation of mobile network technology, 5G Sub-6 GHz and 4G/LTE new radio dual-connectivity. The BEC 8230 integrates high-gain MIMO antenna technology to increase transmission efficiency and extend distance coverage in the line-of-sight (LOS) networks. By supporting both 5G SA and NSA network modes, the BEC 8230 can deliver faster internet connectivity and also use 4G/LTE as alternative whereas the areas do not have the 5G network ready. The BEC 8230 simplifies implementation, increase deployment flexibility, boost network performance, and most importantly, it will bring you a whole new 5G NR internet experience.

New 5G Radio Technology Overthrow Your Imagination

The BEC 8230 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 adaptation to any 5G NR or LTE networks.

Rugged Weatherproof Design

The AirConnect® by BEC 8230 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 8230 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 15 NSA/SA Operation, Sub-6 GHz
 - : SA (Max.) DL 2.1Gbps (DL) / 450Mbps (UL)
 - : NSA (Max.) DL 2.5Gbps (DL) / 650Mbps (UL)
- **4G/LTE Cat.16** (Max.) 1Gbps (DL) / 200Mbps (UL)
 - : 3 x CA (Carrier Aggregation) RF bandwidth
- Advanced IP networking functionalities including bridge and 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.

24/7 Cloud Management and Network Visibility

Remote monitoring, management, and control of devices in real-time is essential for IoT networking devices, M2M and critical applications. BECentral®, BEC's Cloud Remote Management, is a comprehensive device management platform designed to minimize deployment, lower support expenses, and maximize the operational efficiency and profitability of the operator.

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 Sub-6 GHz**
 - : Comply 3GPP Rel.15
 - : Support Frequency Range 1 Bands (SA & NSA): n1 / n2 / n3 / n5 / n7 / n8 / n12 / n20 / n25 / n28 / n38 / n40 / n41 / n48 / n66 / n71 / n77 / n78
 - : Modulation
 - Uplink: $\pi/2$ -BPSK, QPSK, 16QAM, 64QAM, and 256QAM
 - Downlink: QPSK, 16QAM, 64QAM, and 256
- 4G / LTE (Cat.16)**
 - : Support Frequency Bands (FDD & TDD)
 - : FDD: B1 / B2 / B3 / B4 / B5 / B7 / B8 / B9 / B12 / B13 / B14 / B17 / B18 / B19 / B20 / B25 / B26 / B28 / B29 / B30 / B32 / B66 / B71
 - : TDD: B34 / B38 / B39 / B40 / B41 / B42 / B43 / B48
- Data Transmission**
 - 5G NSA: DL 2.1Gbps / UL 450Mbps
 - 5G SA: DL 2.5Gbps / UL 650Mbps
 - LTE: DL 1.0Gbps / UL 200Mbps
- 4G/LTE/5G SX Antenna**
 - : Directional (Dual Polarization & Dual Slant)
 - : Frequency Range: 617-698MHz, 1710-2170MHz, 2300-2690MHz, and 3400-4000MHz
 - : 2x2 MIMO in Low Band
 - : 4x4 MIMO (DL Only) in Mid Band / High Band
 - : 4G/5G Management Center in web-based GUI

Quality of Service Control

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

Operational Modes

- Router or Bridge

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

- : Gigabit LAN 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

Operating Environment

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

Surge/ESD Protection

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

