

### **Product Datasheet**

# BB-2JW0124Z-C868B

**CELLULAR / LTE Connector Mount** 

### **Key Features**

#### CELLULAR / LTE

- 698-960 MHz
- 1710-2170 MHz
- 2500-2700 MHz
Connector Mount
Ultra Wide band Antenna
High Performance
Ground Plane Independent
Hinged Connector
Dimensions 171 × 38 × 13.8 mm





### **1. Antenna Description**

### BB-2JW0124Z-C868B

#### Made for worldwide cellular applications

The BB-2JW0124z antenna is an ultra wideband performance connector mount antenna solution for worldwide cellular applications operating within the 4G, 3G and 2G standards. This series is compatible with GSM, CDMA, DCS, PCS, GPRS, WCDMA, UMTS, HSPA, EVDO and LTE technologies, covering all cellular bands ranging from 698-960, 1710-2170 and 2500-2700 MHz.

With a 75% high-efficiency, 3.0dB average gain, and omnidirectional properties, this antenna provides consistent and stable connectivity with high throughput data to access points, routers, small base station, femtocells, repeaters, boosters, fleet management devices and other telematics devices with cellular needs.

This antenna is ideal for major carrier approvals and certification process around the globe. The antenna can freely swivel 360 degrees and features a hinged connector up to 90 degrees, providing flexibility in orientation with respect to the device for easier installation or multiple antenna mounting options.

#### Installation

There are two variations of mounting swivels allowing for multiple antennas on devices with MIMO systems. Connector types can be selected between SMA-Male, RP SMA-Male or N-Male.

See the different swivel orientation on BB-2JW0124 antenna.

#### Durability

The BB-2JW0124 series is intended for indoor and internal use only. As a protective measure, the housing is built out of UV Stable PC/ABS with a range for an operating temperature of -40C to +85C. All antennas are manufactured using RoHS, REACH compliance.

#### **Typical applications**

- Infotainment systems
- HD video transmission
- Dash cameras
- Connected cars
- Self-driving cars
- Fleet management
- Gateways
- Routers
- Public transportation
- Logistics
- -And others

#### **Key Features**

- Variations with different swivel orientation, SMA-Male, RP SMA-Male or N-Male connectors
- Sustained High Efficiency and Performance
- NB-IoT and Portable Devices friendly
- Ground Plane Independent
- Ultra Wide band Antenna
- Easy Integration
- Hinged Connector
- Size smart and elegant
- Different colors available upon request

#### **Compatibility Standards**

LTE Connection

- CAT 1 2 3 4 5 6 8 9 10 11 12
- NB-IoT, LTE-NB1, CAT-M1, CAT-M2
- WCDMA, UMTS, HSPA, EDGE GRPS, GSM, CDMA

### 1. Antenna and electrical specifications

Parameters	CELLULAR / LTE Antenna		
Standards	2G,3G and 4G		
Technologies	GSM, CDMA, DCS, PCS, GPRS, WCDMA, UMTS, HSPA, EVDO and LTE		
Band (MHz)	700/850/900	1700/1800/1900/2100	2600
Frequency (MHz)	698-960	1710-2170	2500-2700
Return Loss (dB)	~-7.7	~-12.7	~-8.5
VSWR	~2.4:1	~1.6:1	~2.2:1
Efficiency (%)	~62	~75	~50
Peak Gain (dBi)	~0.4	~2.6	~1.3
Average Gain (dB)	~-2.1	~-1.3	~-3.0
Impendance (Ohm)		50	
Polarisation	Linear		
Radiation Pattern	Omni-Directional		
Max. Input Power (W)	25		
Connector Type	SMA-Male or RP SMA-Male		

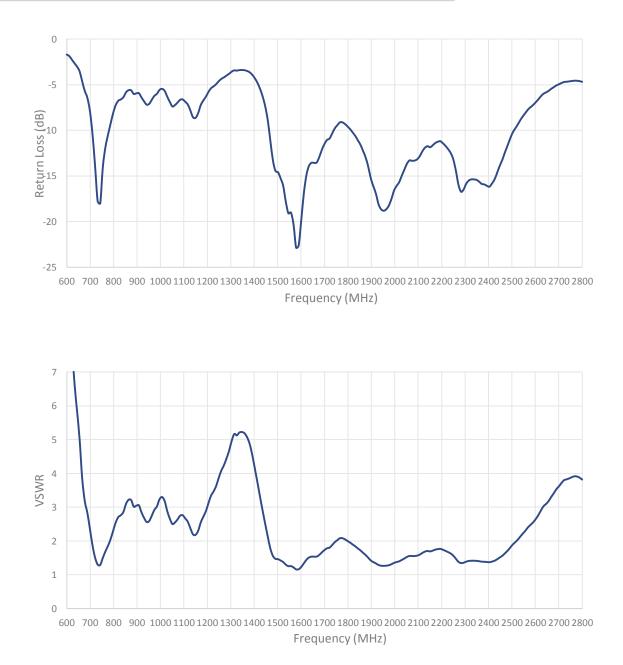
#### Antenna Measurement Conditions:

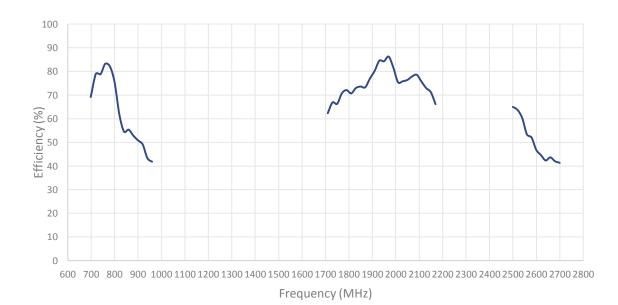
Free Space Measured in Certified CTIA 3D Anechoic Chamber

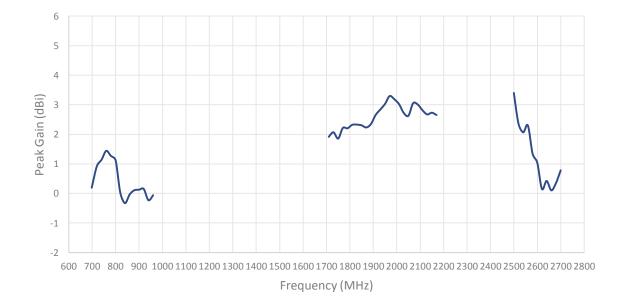
### 2. Mechanical and environmental specifications

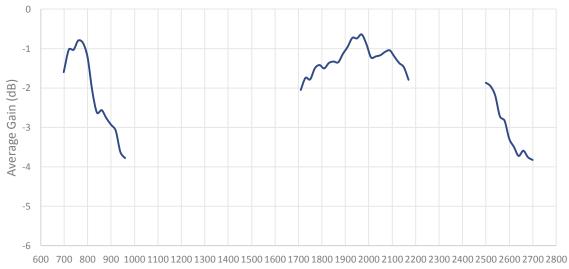
Specifications	BB-2JW0124Z-C868B
Mounting Type	Connector Mount
Dimensions (mm)	171 × 38 × 13.8
Radome	PC/ABS UV Stable
Radome color	Black or White
Connector Feature	Hinged
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Substance Compliance	RoHS, REACH

#### 3. Antenna parameters

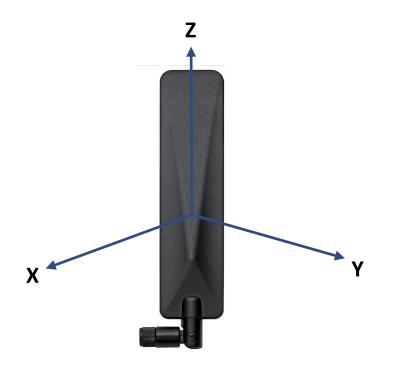




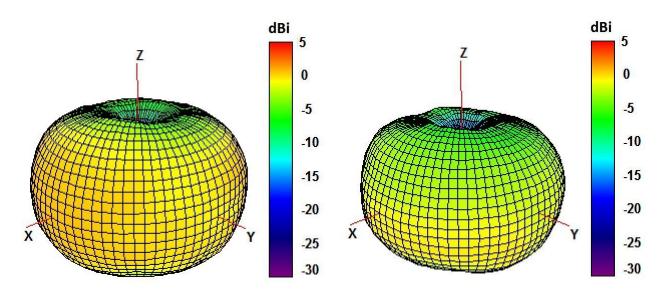




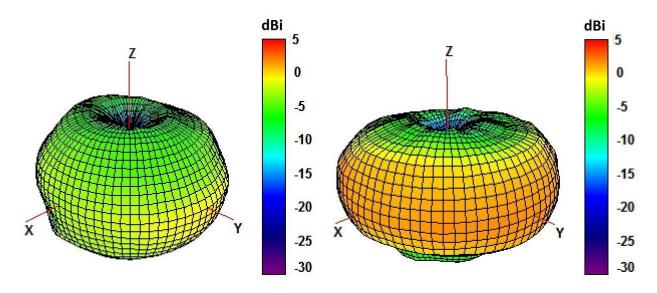
Frequency (MHz)



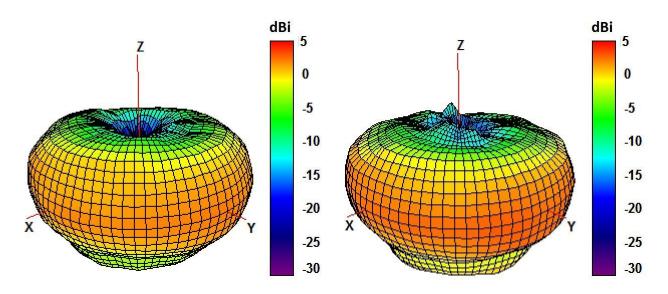
Radiation pattern reference



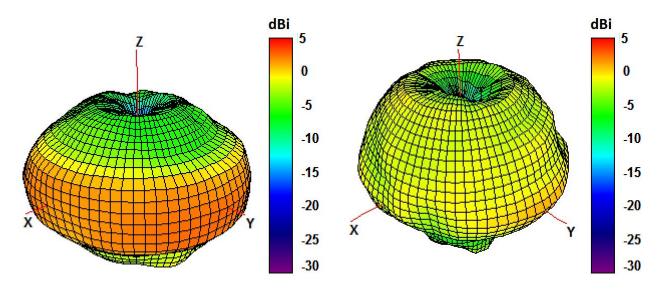
750 and 850 MHz Radiation pattern



940 and 1750 MHz Radiation pattern

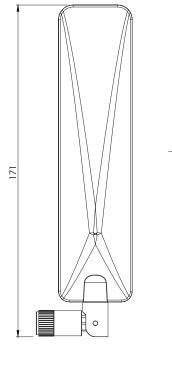


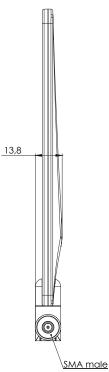
1850 and 1950 MHz Radiation pattern

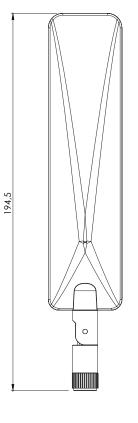


2100 and 2600 MHz Radiation pattern

### 4. Antenna drawings



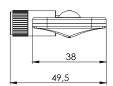




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### 5. Antenna Images

