

# 4G/5G Bracket Antenna

## B4BE[E]-6-60



- Cost Effective 2G/3G/4G/5G antenna solution
- Wall, Mast or Cabinet/Enclosure Mount
- Integrated Coaxial Cable

The B4BE[E] antenna is a cost effective omni-directional broad band antenna range for 4G/3G/2G and 5G devices. It covers 617-960/1710-6000MHz and is suitable for external or internal installation.

The mounting bracket enables simple wall/panel mounting using the supplied screws and wall plugs or mast mounting using a pipe clip or cable ties (not supplied).

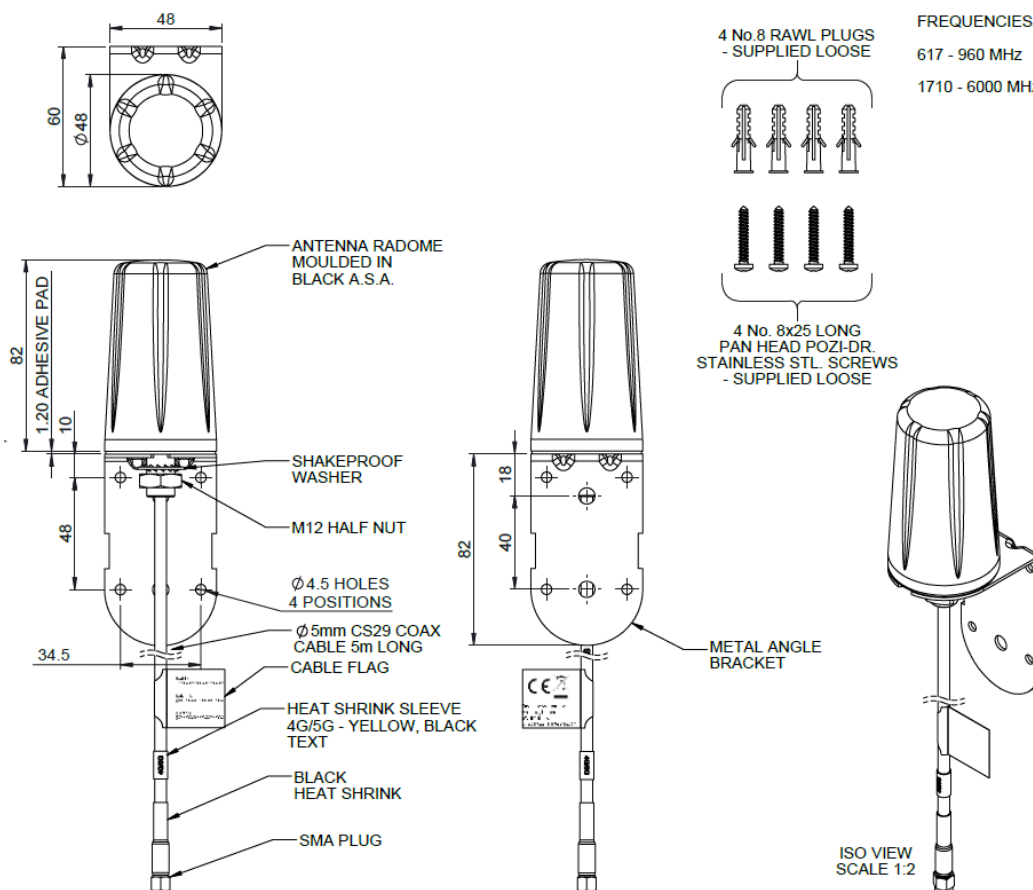
The omni-directional radiation pattern allows easy placement of the antenna in an elevated position, without requiring directional alignment.

The B4BE type is supplied with an integrated ultra-low loss CS29 coaxial cable and the B4BEE variant is supplied with RG174 cable, more suitable for shorter cable runs and direct fitment of micro type connectors.

This antenna is an ideal solution for IoT use in industrial and domestic environments for cellular modems/routers and Machine to Machine (M2M) wireless connectivity applications.

### Technical Drawing

B4BE-6-60-5SP Shown



# 4G/5G Bracket Antenna

## B4BE[E]-6-60

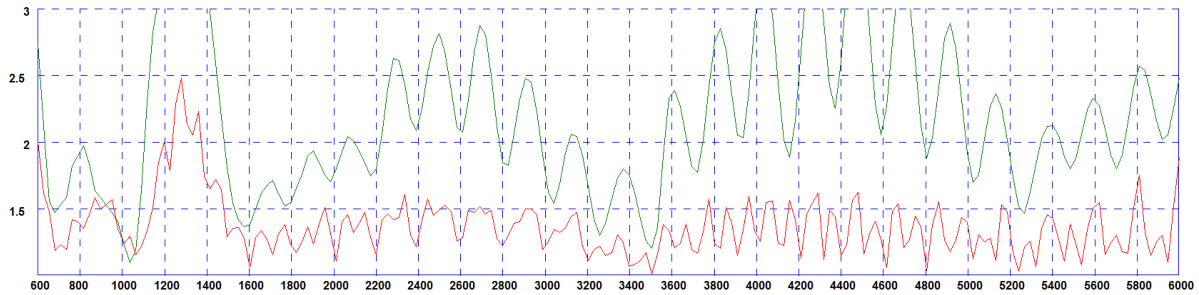
### Product Data

| Part No.                       |                | B4BE-6-60-05SP                             | B4BE-6-60-2SP | B4BE-6-60-5SP |
|--------------------------------|----------------|--------------------------------------------|---------------|---------------|
| <b>Electrical Data</b>         |                |                                            |               |               |
| Frequency Range (MHz)          |                | 617-960 / 1710-6000                        |               |               |
| Operational Band               |                | 2G/3G/4G/5G                                |               |               |
| Peak Realised Gain: Isotropic* | 617-960MHz     | 2dBi                                       |               |               |
|                                | 1710-2700 MHz  | 3.5dBi                                     |               |               |
|                                | 3400-3800MHz   | 5dBi                                       |               |               |
|                                | 4.9-6000Mhz    | 7dBi                                       |               |               |
| VSWR                           |                | <2.5:1                                     |               |               |
| Nominal Radiated Efficiency*   |                | > 70%                                      |               |               |
| Polarisation                   |                | Vertical                                   |               |               |
| Pattern                        |                | Omni-directional                           |               |               |
| Impedance                      |                | 50Ω                                        |               |               |
| Max Input Power (W)            |                | 30                                         |               |               |
| <b>Mechanical Data</b>         |                |                                            |               |               |
| Dimensions (mm)                | Height mounted | 164 (6.46")                                |               |               |
|                                | Diameter       | 48(1.89")                                  |               |               |
| Operating Temp (°C)            |                | -40° / +85°C ( -40° / 185°F )              |               |               |
| Material                       |                | ASA, aluminium, zinc plated steel          |               |               |
| Material Approvals             |                | Radome ASA Material - UL 746C F2, UL 94-HB |               |               |
| Colour                         |                | Black & natural                            |               |               |
| Ingress Protection             |                | IP66                                       |               |               |
| <b>Mounting Data</b>           |                |                                            |               |               |
| Fixing                         |                | Wall or mast mount                         |               |               |
| Mounting ScREW Diameter (mm)   |                | 4 (0.16")                                  |               |               |
| Weight (g)                     | 188            | 219                                        | 390           |               |
| <b>Cable Data</b>              |                |                                            |               |               |
| Type                           |                | CS29 (Double Shielded RG58)                |               |               |
| Diameter (mm)                  | 5 (0.19")      | 2.8 (0.1")                                 | 5 (0.19")     |               |
| Length (m)                     | 0.5 (1.5')     | 2 (6' 6")                                  | 5 (17')       |               |
| Termination                    |                | SMA Plug                                   |               |               |

\* Peak gain and efficiency simulated in CST microwave studio on a bracket excluding cable loss

### Electrical Data - Cell

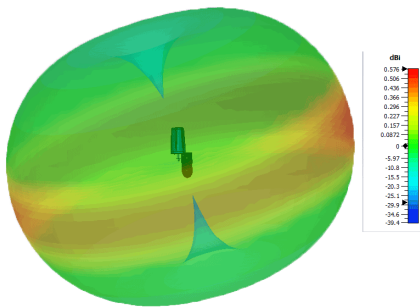
Typical VSWR\*



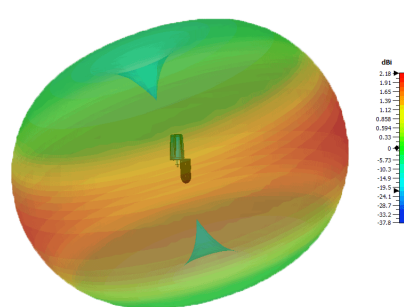
\*Red Plot =VSWR measured on supplied bracket with 5m (16') of CS29 cable. Green Plot = VSWR measured on supplied bracket with 0.5m (1.5') of CS29 cable.

### 3D Patterns - Cell

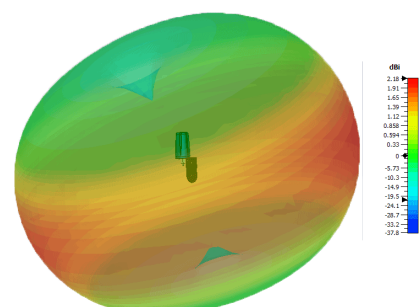
3D Plot (600 MHz)



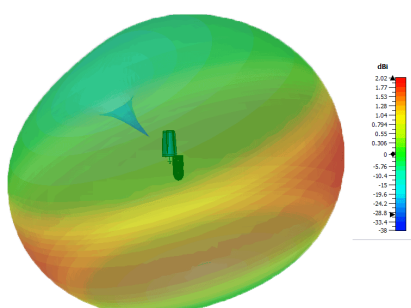
3D Plot (700MHz)



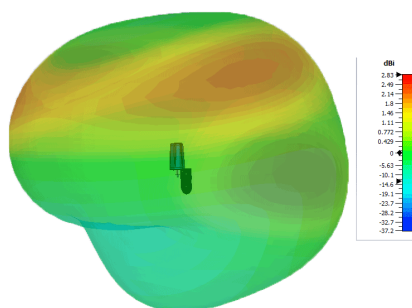
3D Plot (800MHz)



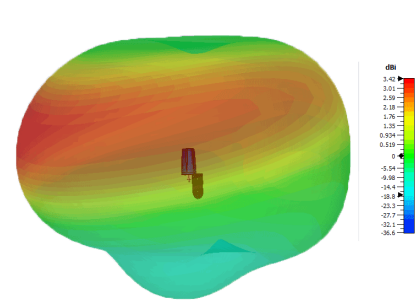
3D Plot (900MHz)



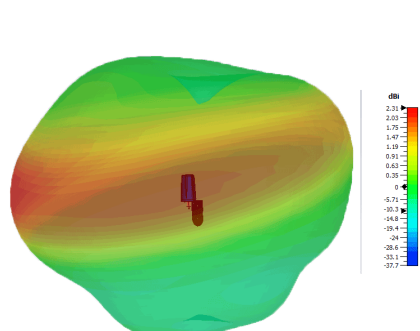
3D Plot (1800MHz)



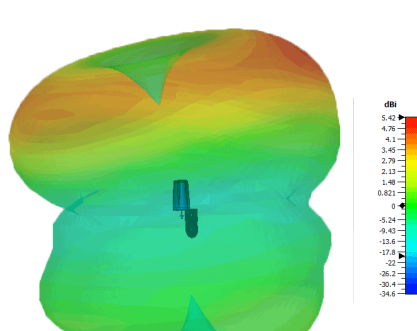
3D Plot (2100MHz)



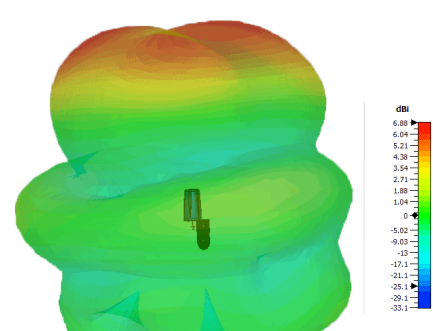
3D Plot (2600 MHz)



E Plane Plot (3600MHz)



H Plane Plot (5400MHz)



All measurements simulated in CST Microwave Studio without cable