

# Powertec 4G High Gain Omni Antenna, 700 to 2700 MHz

**Model Number**

VCOL-6927.N2

**Order Code**

ANT-BH-OM-204

**Polarisation**

SISO

**Design Type**

Collinear

**RF Category**

Cellular



Blackhawk's 4G omnidirectional antennas provide high gain across the full cellular band 700 to 2700 MHz regardless of mounting direction, allowing quick and easy installation with no technical know-how required. This is the ideal omni-directional external antenna for Cel-Fi repeater systems.

Omni antennas are also great for moving plant and machinery. The antenna's 6 dBi gain is considered a sweet spot for maximum performance out to the horizon while still maintaining a wide enough vertical beam to tolerate tilting and pitching as equipment moves over rough ground, or deployed on uneven ground.

The true wideband performance has been achieved through a clever engineering design utilising multi-sized collinear radiators and microwave-grade combiners, demonstrating consistently high gain with exceptional azimuthal stability.

- 5 dBi gain across lower bands 698 to 960 MHz
- 6 dBi gain across mid bands 1695 to 2700 MHz
- Ruggedised construction for Australian conditions
- UV-stable PVC construction
- Stainless steel L-bracket included
- Integrated N Female connector

# Antenna Technical Data

## PHYSICAL CHARACTERISTICS

|                       |                      |                       |                       |
|-----------------------|----------------------|-----------------------|-----------------------|
| Construction Material | PVC, Stainless Steel | RF Connections        | 1                     |
| Radome Colour         | White                | Environmental Rating  | No Data               |
| Dimensions            | 680 x 63 mm          | Operating Temperature | -40 °C to 65 °C       |
| Weight                | 1.9 kg               | Mounting              | Pole mount Ø 25-52 mm |

## ELECTRICAL SPECIFICATIONS

## MECHANICAL SPECIFICATIONS

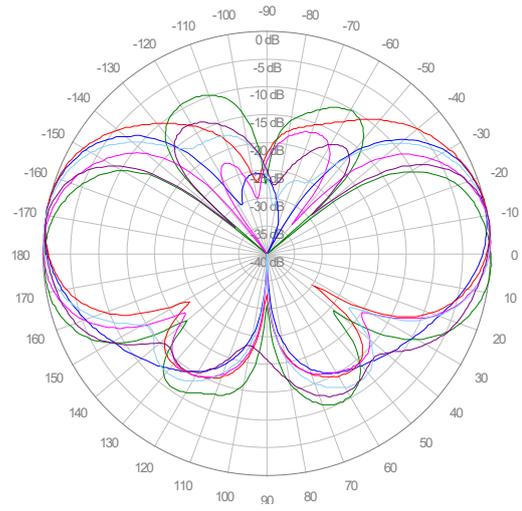
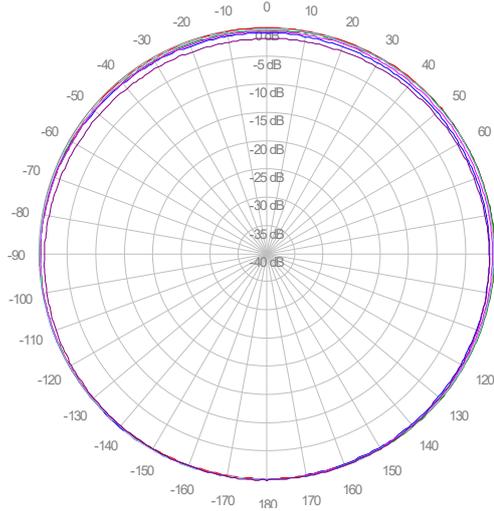
|                  |              |                        |        |
|------------------|--------------|------------------------|--------|
| Input Impedance  | 50 Ω         | Input Connector        | N      |
| Polarisation     | Vertical (V) | Input Connector Gender | Female |
| Max. Input Power | 100 W        | Cable Series           | None   |
| PIM, 3rd Order   | -            | Cable Length           | None   |

| FREQUENCY RANGE  | PEAK GAIN | VSWR    | AZ.  | EL. | EFFICIENCY | AVG. GAIN | INTER-PORT |
|------------------|-----------|---------|------|-----|------------|-----------|------------|
| 698 to 890 MHz   | 5.0 dBi   | < 1.6:1 | 360° | 38° |            |           |            |
| 890 to 960 MHz   | 4.5 dBi   | < 1.9:1 | 360° | 40° |            |           |            |
| 1695 to 2200 MHz | 6.0 dBi   | < 2.0:1 | 360° | 20° |            |           |            |
| 2200 to 2700 MHz | 6.5 dBi   | < 2.3:1 | 360° | 15° |            |           |            |

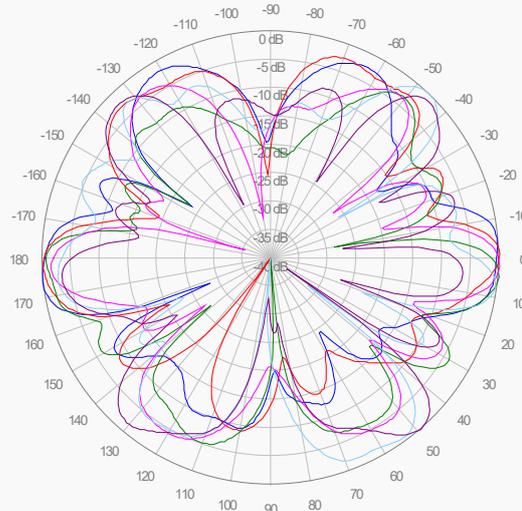
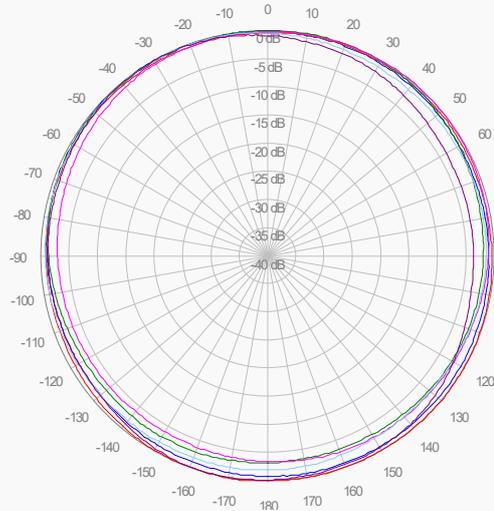
AZIMUTH POLAR PLOT

ELEVATION POLAR PLOT

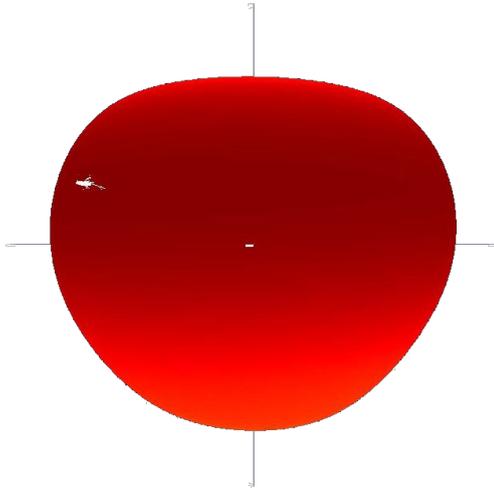
698 to 960 MHz



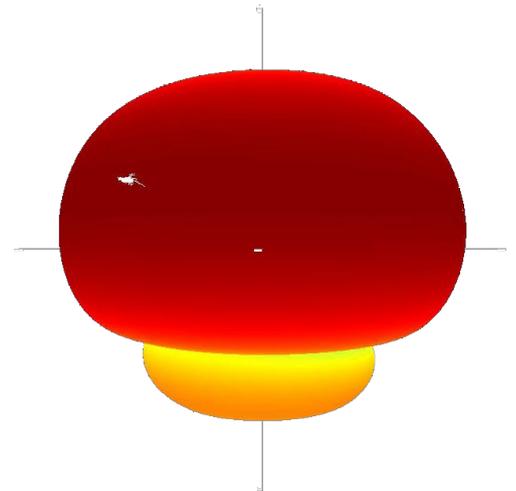
1695 to 2700 MHz



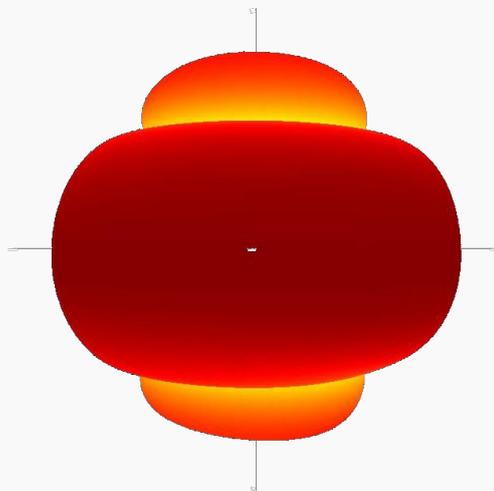
723 MHz



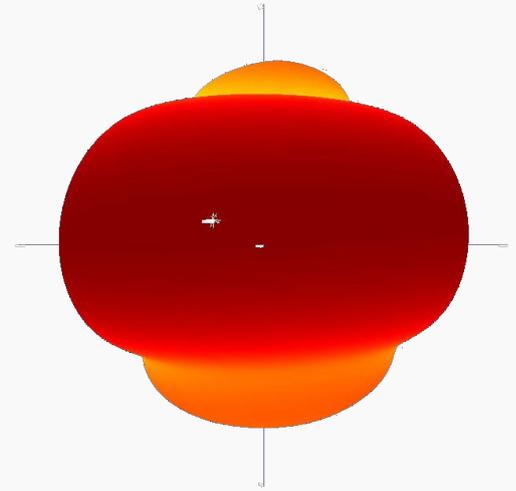
778 MHz



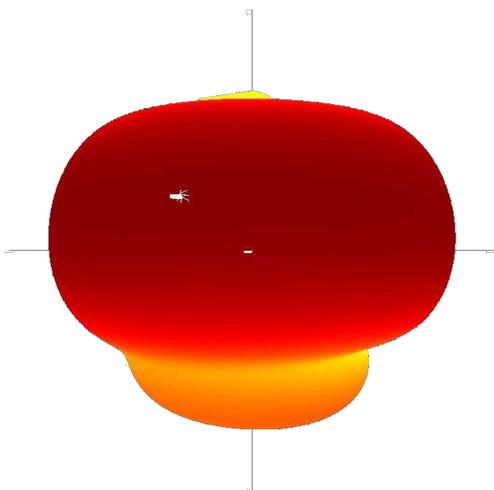
840 MHz



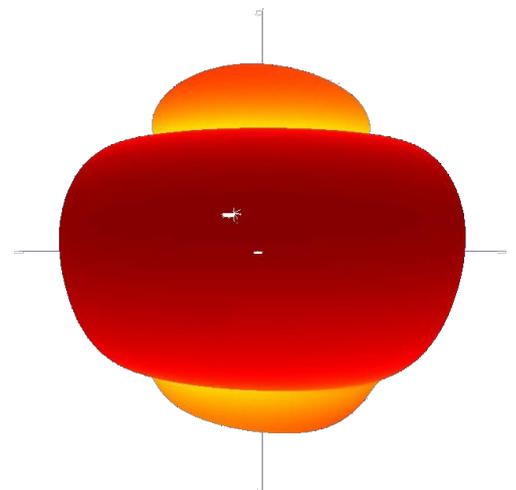
885 MHz



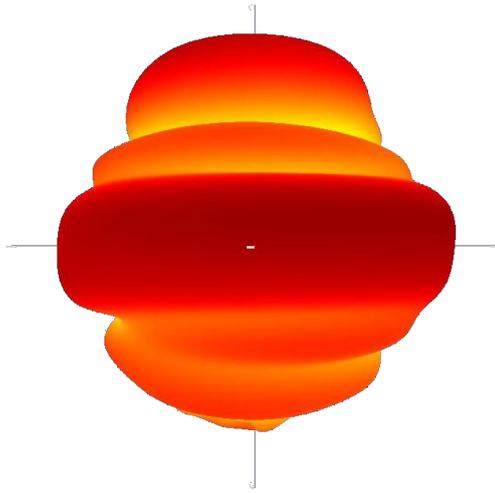
911 MHz



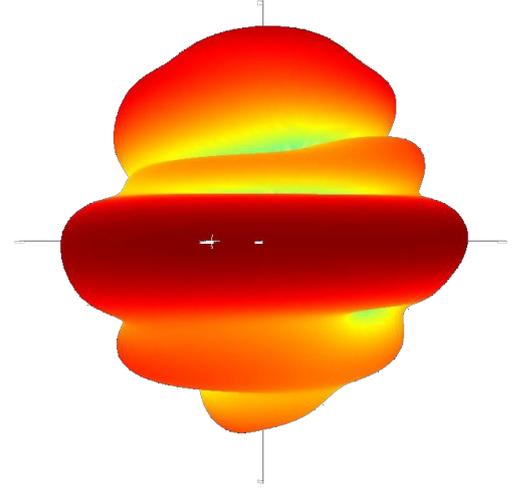
956 MHz



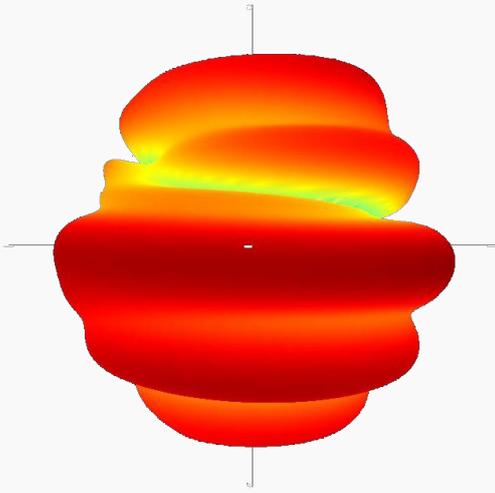
1710  
MHz



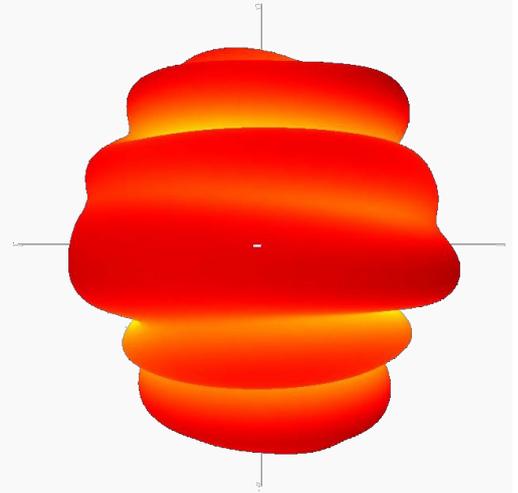
1880  
MHz



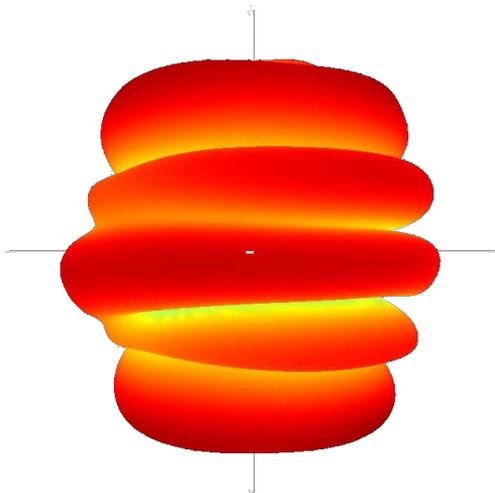
2170  
MHz



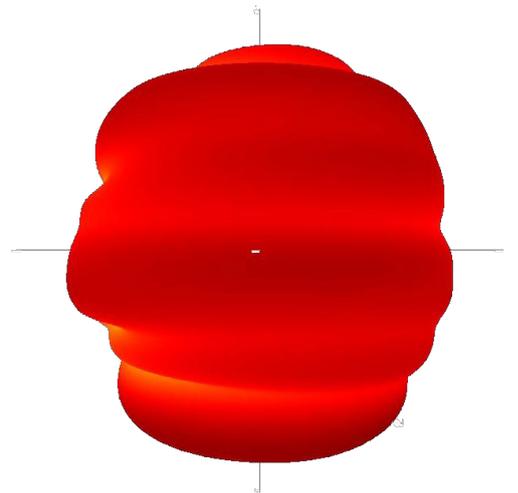
2400  
MHz



2600  
MHz



2700  
MHz



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