

Powertec Low Band Grid Antenna, 698 to 960 MHz

Model Number

VGR-6996-14.432

Polarisation

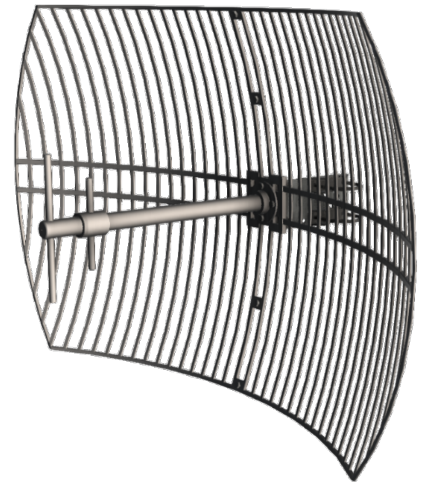
SISO

Design Type

Grid Parabolic

RF Category

Cellular
LPWAN



The Powertec Low Band 4G Grid Antenna is one of the highest performing external antenna solutions available for poor 4G voice and data service. This antenna has been optimised for long range 4G connectivity, tuned specifically for frequencies used in regional and remote areas.

This Grid antenna covers the cellular bands between the 700 and 960 MHz range with a very high 14 dBi peak gain. Gain of this magnitude focuses maximum energy in the direction of the cell tower, while still maintaining a reasonable beamwidth to capture reflected and scattered signal. By narrowing the operating frequency range to just the lower cellular band, maximum radiated efficiency is achieved, and no energy is wasted on short-range frequencies.

Powertec's Low Band Grid Antenna covers regional 4G frequencies, such as Band 28 700 MHz LTE, and the new low band 5G frequencies such as n5 and n8 (NR850, NR900).

Grid antenna designs use a parabolic reflector to project signal in the forward direction, much like a torch beam. These antennas have a high strength-to-weight ratio, and achieve best-in-class peak gain. Unlike Yagi antennas, Grid antennas can employ wideband feed elements to operate over more than one frequency range simultaneously.

- Ruggedised construction for Australian conditions
- Solid aluminium feed, powder coated cast aluminium reflector
- Stainless steel mounting clamp included
- 30 cm tail with a waterproof 4.3-10 Female connector

Antenna Technical Data

PHYSICAL CHARACTERISTICS

Construction Material	Cast Aluminium	RF Connections	1
Radome Colour	Powder Coat	Environmental Rating	No Data
Dimensions	900 x 600 x 510 mm	Operating Temperature	-40 °C to 65 °C
Weight	2.3 kg	Mounting	Pole mount Ø 30-60 mm

ELECTRICAL SPECIFICATIONS

MECHANICAL SPECIFICATIONS

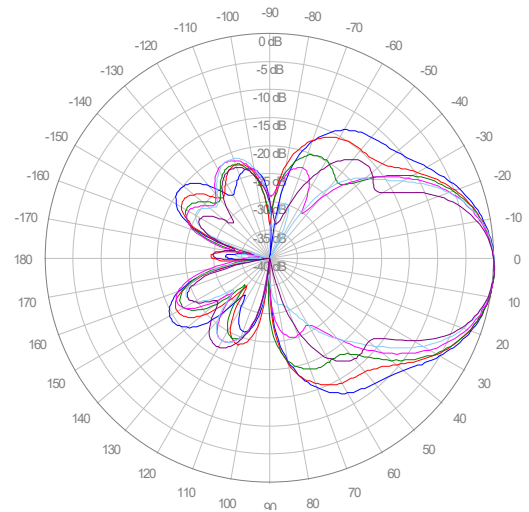
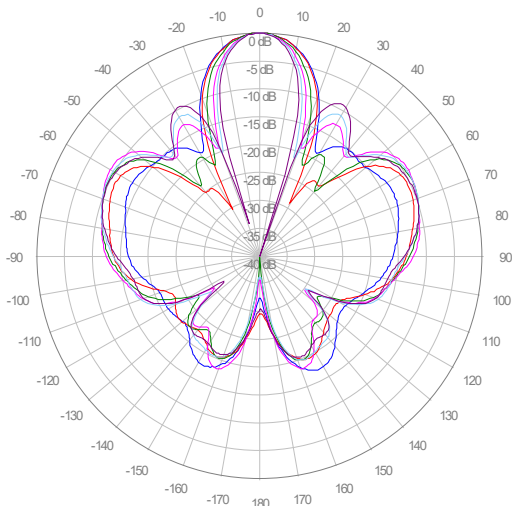
Input Impedance	50 Ω	Input Connector	4.3-10
Polarisation	Vertical (V)	Input Connector Gender	Female
Max. Input Power	100 W	Cable Series	RG-142
PIM, 3rd Order	-	Cable Length	300 mm

FREQUENCY RANGE	PEAK GAIN	VSWR	AZ.	EL.	F/B RATIO	INTER-PORT	XPI
698 to 803 MHz	14.0 dBi	< 1.3:1	24°	40°	> 17 dB	-	> 26 dB
803 to 890 MHz	14.0 dBi	< 1.7:1	21°	37°	> 18 dB	-	> 25 dB
890 to 960 MHz	13.4 dBi	< 3.0:1	17°	30°	> 19 dB	-	> 25 dB

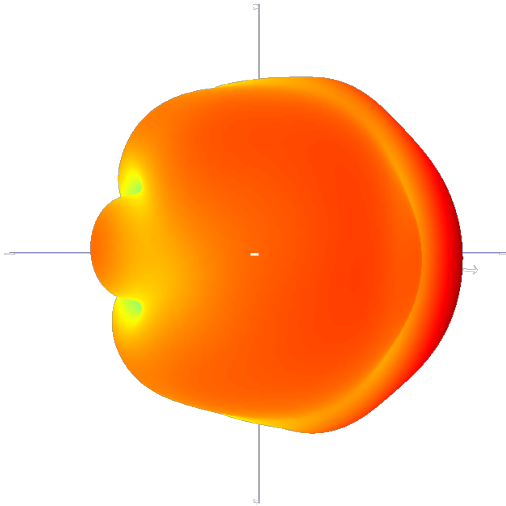
AZIMUTH POLAR PLOT

ELEVATION POLAR PLOT

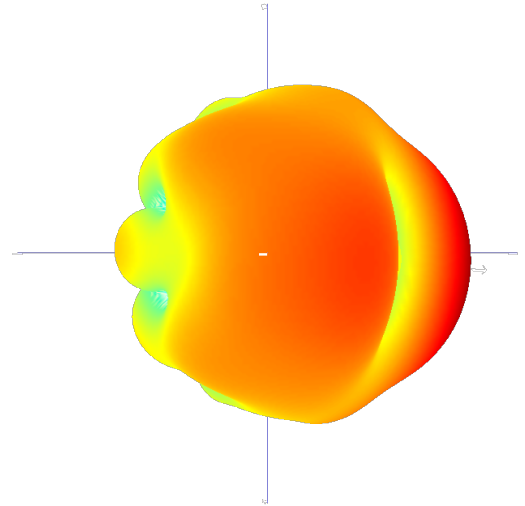
698 to 960
MHz



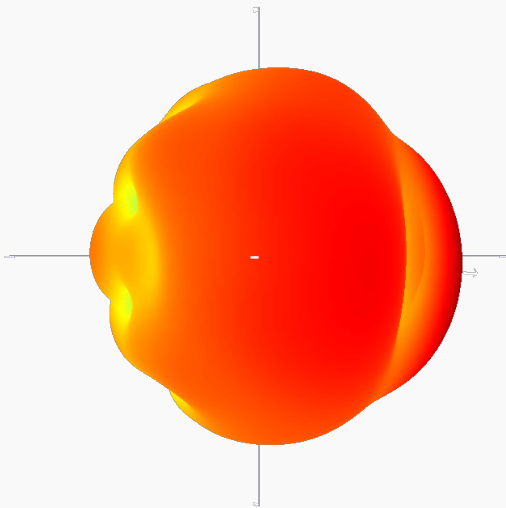
723 MHz



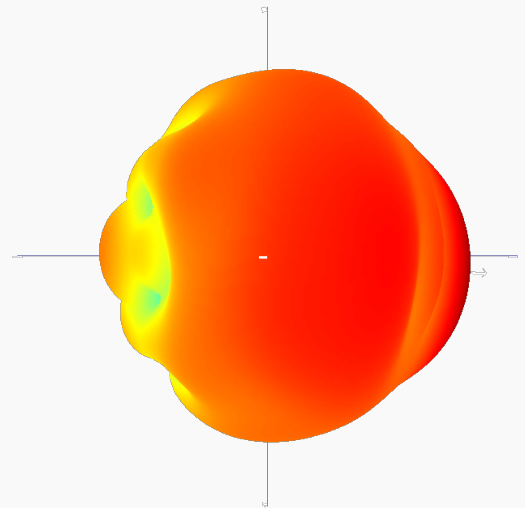
778 MHz



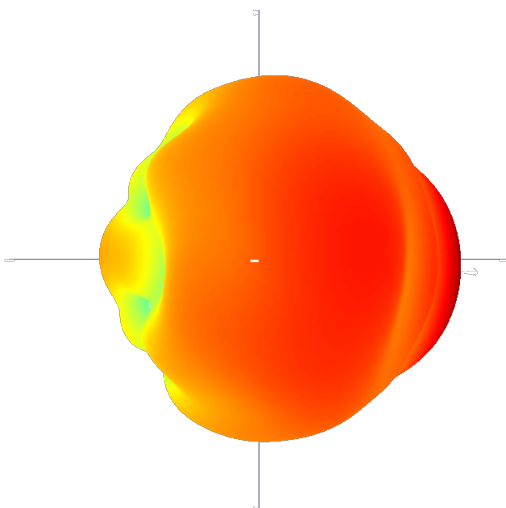
840 MHz



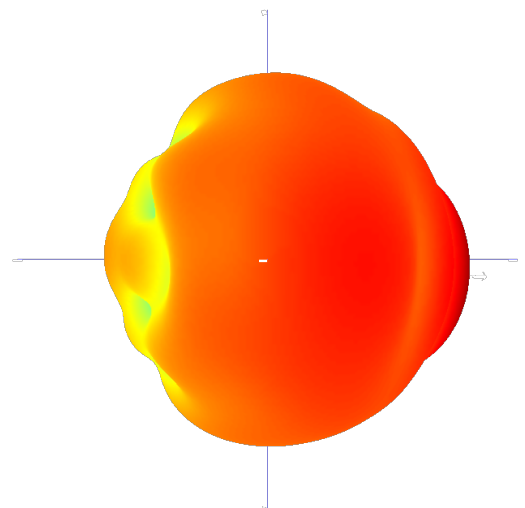
885 MHz



911 MHz



956 MHz



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