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Powertec Wideband 4G Magnetic Antenna, 700 to 2700 MHz, SMA Male

SKU: ANT-EC-00001
MPN: VMAG-6927-4.SA1
Barcode: 9337692004421

Description

It's truly not often that an antenna surprises our team. Manufactured in Taiwan, this antenna provides true wideband operation across the full 3G and 4G range 700 to 2700 MHz. The antenna has been optimised for operation across the lower cellular band to provide best performance on 4G frequencies, including long range 700 MHz 4GX and 5G 850 MHz Telstra NR850.

The antenna provides a 5 dBi gain across the 700 to 900 MHz band, and 4 dBi gain across 1695 to 2700 MHz - a very difficult achievement for this design type.

During independent laboratory testing the antenna consistently demonstrated excellent performance. The antenna has a reasonably sturdy design and its thin visual profile goes unnoticed to the passer-by. The antenna is an ideal choice for IoT applications, such as NB-IoT and LTE-M.

- 5 dBi gain across lower bands 698 to 960 MHz
- 4 dBi gain across mid bands 1695 to 2700 MHz
- Ideal for IoT and industrial M2M applications, such as metering and monitoring
- True wideband 4G, covering the entire band with high radiated efficiency
- Ground plane dependent

RF Specification

Powertec

Powertec is a wireless technology manufacturer and systems integrator based in Australia. Operating since 1995, Powertec has grown to become the leading wireless technology distributor in its region, and a leading Infratech systems developer. Supporting over 1500 partners the company provides procurement, design, project management, and support services across Australia, New Zealand, Pacific ...

Cable 1

Start Frequency:	698 MHz	Polarisation:	Vertical (V)
Stop Frequency:	2700 MHz	Input Impedance:	50 Ω
Max. Input Power:	50 W		

RF Connectors

Ports	RF Interface	Body Shape	Cable Series	Length
1	SMA Male	Straight	RG-58	3000 mm

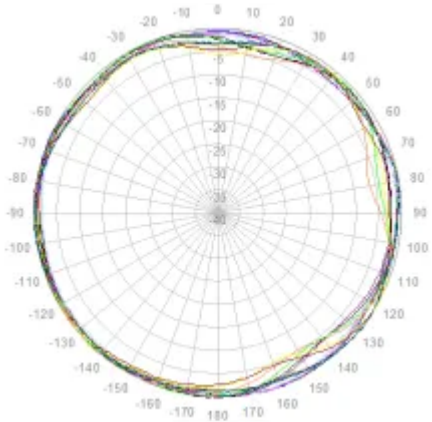
Frequency Test Data

Start Freq.	Stop Freq.	Peak Gain	VSWR	Elevation	Efficiency
698 MHz	824 MHz	3.4 dBi	< 1.9:1	90°	70%
824 MHz	960 MHz	4.99 dBi	< 1.9:1	80°	68%
1695 MHz	2200 MHz	4.3 dBi	< 2:1	80°	55%
2200 MHz	2700 MHz	4.4 dBi	< 2.8:1	80°	40%

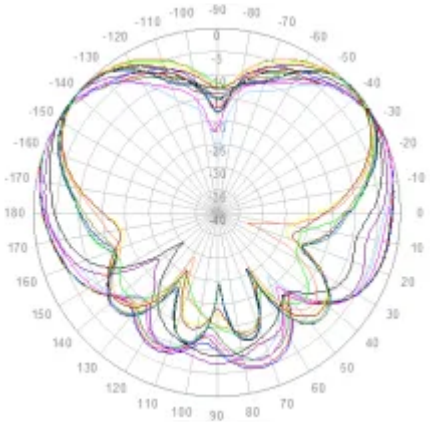
Polar Patterns

Start Frequency: 698 MHz
Stop Frequency: 960 MHz

Azimuth Polar Plot

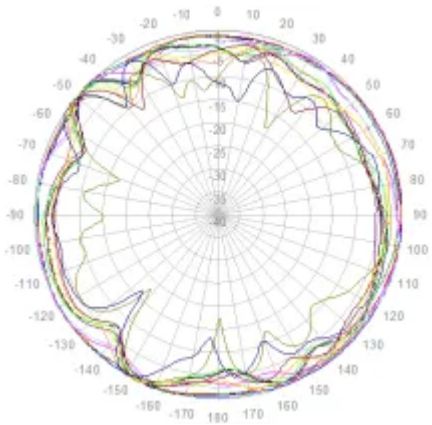


Elevation Polar Plot

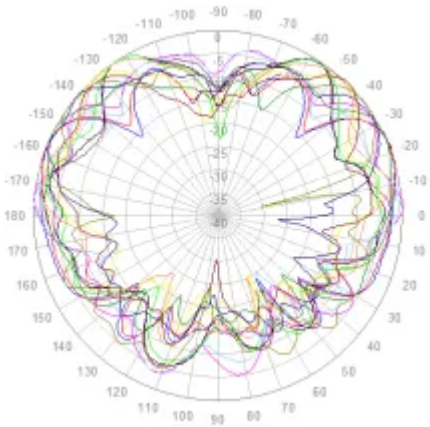


Start Frequency: 1710 MHz
Stop Frequency: 2700 MHz

Azimuth Polar Plot



Elevation Polar Plot



Physical Specification

Subtype:	Whip	Dimensions:	238 x 86 x 86
Input Ports:	1	Materials:	Steel, Thermoplastic Elastomer (TPE)
MIMO:	1x1 SISO	Mounting:	Magnetic
Min. Operating Temperature:	-30 °C	Weight:	0.48 kg
Max. Operating Temperature:	80 °C	Compliance/Certifications:	ISO 9001 Quality Management

Drawing

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