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Poynting OMNI-293, Omni-Directional, Wideband, 4G-5G antenna, 617 to 3800 MHz

SKU
ANT-PY-00033
MPN
A-OMNI-0293-V1-01
Barcode
6009710922347

Description

Poynting's OMNI-293 is a high performance omnidirectional antenna designed for 4G LTE and 5G NR. With a wideband collinear design the antenna covers the wideband 617 to 3800 MHz cellular frequency range at an idealised 6 to 9 dBi gain across the bands.

The antenna's large collinear radiators provide an exceptional degree of radiation stability, with near-perfect 360° patterns.

In addition to four 4G-5G bands between 698 to 960 MHz, 1427 to 1517 MHz, 1695 to 2700, and 3300 to 3800 MHz, the antenna also covers 2.4 GHz making it ideal as a WiFi and Bluetooth Low Energy base station.

The antenna has an integrated N Female connector at its base so that a feeder cable can be attached without any additional losses.

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Omnidirectional 4G antennas remain popular even in LTE-A Pro 2x2 and 4x4 MIMO applications as nominal MIMO can be achieved with V-V-V-V polarisation configurations, provided spatial diversity rules are observed.

While the antenna can be operated as a 915 MHz LPWA or 2.4 GHz base station, it's important to recognise wideband antennas achieve their wide operating frequency ranges through a detuning process which results in lower TRP efficiency in each individual band. Single-band or dual-band collinear antennas still remain the best choice for non-cellular applications.

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Poynting

Poynting is a top global provider of integrated antenna solutions, responsible for the innovation, design and manufacture of its market-leading products. Established as a consultancy in 1990, Poynting evolved into an official PTY in 1997 and in 2001 established Poynting Antennas. It caters antenna solutions for primarily wireless high speed data applications, including residential 4G LTE as well ...

RF Specification

Start Frequency
618 MHz
Stop Frequency
3800 MHz
Max. Input Power
10 W
Polarisation
Vertical (V)
Input Impedance
50 Ω
RF Connectors

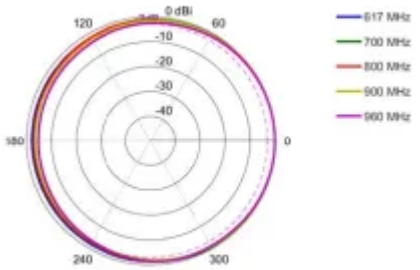
Ports	RF Interface	Body Shape
1	N Female	Straight

Frequency Test Data

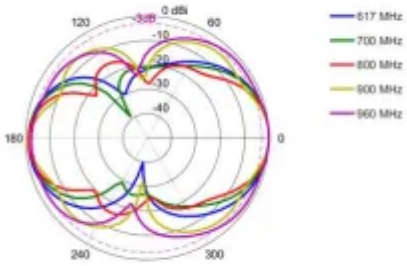
Start Freq.	Stop Freq.	Peak Gain	VSWR	Azimuth
617 MHz	960 MHz	6 dBi	< 2.5:1	360°
1427 MHz	1517 MHz	6 dBi	< 1.5:1	360°
1710 MHz	2200 MHz	6.5 dBi	< 2.2:1	360°
2300 MHz	2700 MHz	9 dBi	< 1.9:1	360°
3300 MHz	3800 MHz	8 dBi	< 2:1	360°

Polar Patterns
Start Frequency
617 MHz
Stop Frequency
960 MHz

Azimuth Polar Plot

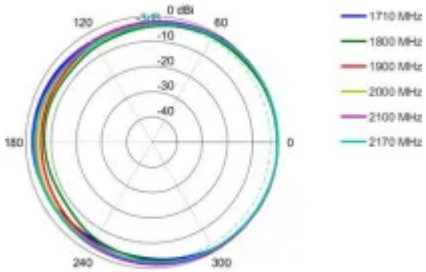


Elevation Polar Plot

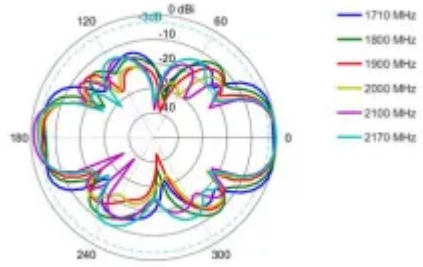


Start Frequency
1710 MHz
Stop Frequency
2170 MHz

Azimuth Polar Plot

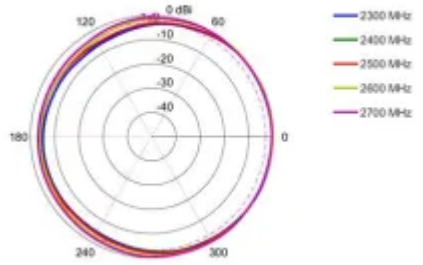


Elevation Polar Plot

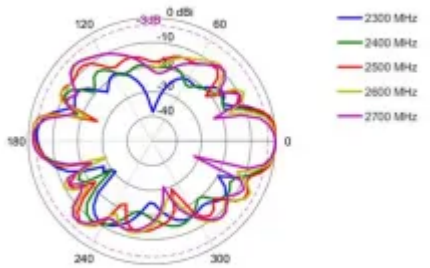


Start Frequency
2300 MHz
Stop Frequency
2700 MHz

Azimuth Polar Plot

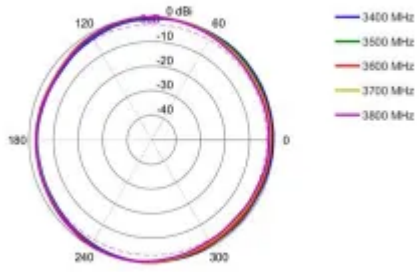


Elevation Polar Plot

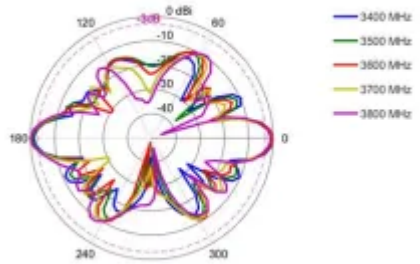


Start Frequency
3400 MHz
Stop Frequency
3800 MHz

Azimuth Polar Plot



Elevation Polar Plot



Physical Specification

Subtype
Collinear
Input Ports
1
MIMO
1x1 SISO
Min. Operating Temperature
-40 °C
Max. Operating Temperature
80 °C
Dimensions
635 x 71 x 71
Ingress Protection
IP65

Materials

ABS Plastic

Mounting

Pole Clamp 25 to 52 mm ⌀, Wall / Vertical Surface

Weight

0.46 kg

Drawing