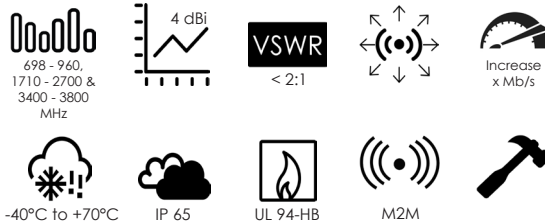


ANTENNAS | OMNI-280-01

OMNI-280-01

698 - 960, 1710 - 2700 & 3400 - 3800 MHZ MEDIUM GAIN LTE SISO ANTENNA



- **Future-proof omni-directional wideband LTE SiSo antenna**
- **Backwards compatible with 3G, 2G technologies**
- **Improves mobile network subscriber's user experience**
- **Increased connectivity stability**
- **Weather-proof enclosure**
- **Pole, wall or magnetic mountable**

Product overview

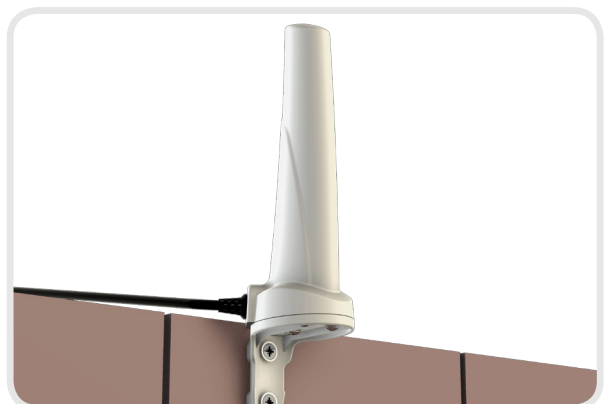
The OMNI-280-01 antenna provides an innovative solution for the signal enhancement of 4G / 3G and 2G networks. It is a unique magnetic, wall- or pole-mountable, single polarised, full LTE band antenna that incorporates an ultra wideband element in a single housing.

This antenna is a cost effective solution for enhancing signal reception and throughput. The OMNI-280-01 antenna increases signal reliability, ensures higher data throughput for users and provides a stable, high quality connection.

This improves user experience and secures client retention. It is ideal for any application using the GSM network (LTE/HSPA/3G/EDGE/GPRS).

Features

- Medium gain omni-directional antenna
- Wideband - covers wide frequency band
- Magnetic, wall or pole mountable
- Lightweight
- Increase system transmission reliability




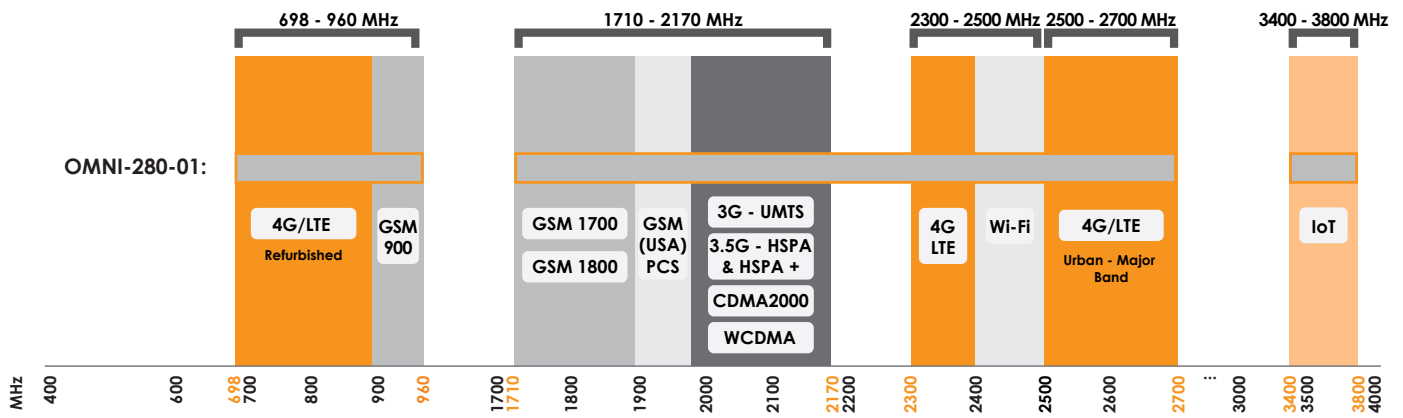
Application areas

- M2M applications where machines and measurement devices need to be connected for real time monitoring and information transfer.(Telematics)
- Utilities for power and water metering
- Security industry where cameras and other security equipment needs to be monitored.
- Retail point of sale equipment.
- Areas where poor data signal reception (Indoor and outdoor)

Frequency bands

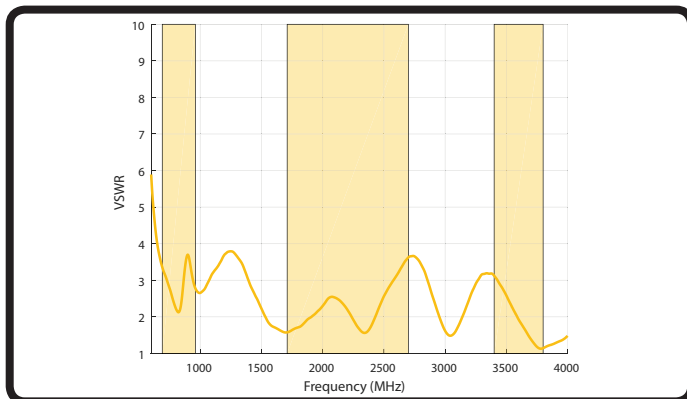
The OMNI-280-01 is a wide-band antenna that works from 698 - 960 MHz, 1710 - 2700 MHz & 3400 - 3800 MHz

 Indicates the bands on which this antenna works



Antenna performance plots

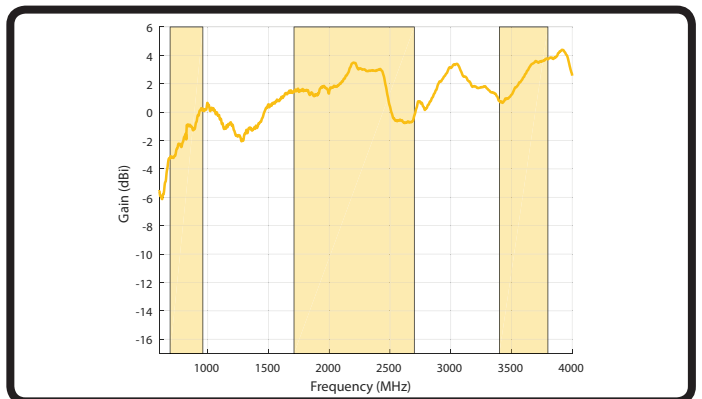
VSWR:



Voltage Standing Wave Ratio (VSWR)

VSWR is a measure of how efficiently radio-frequency power is transmitted from a power source, through a transmission line, into a load. In an ideal system, 100% of the energy is transmitted which corresponds to a VSWR of 1:1. The OMNI-280-01 delivers superior performance across all bands with a VSWR of 2:1 or better across 90% of the bands.

Gain: (excluding cable loss)



Gain* in dBi

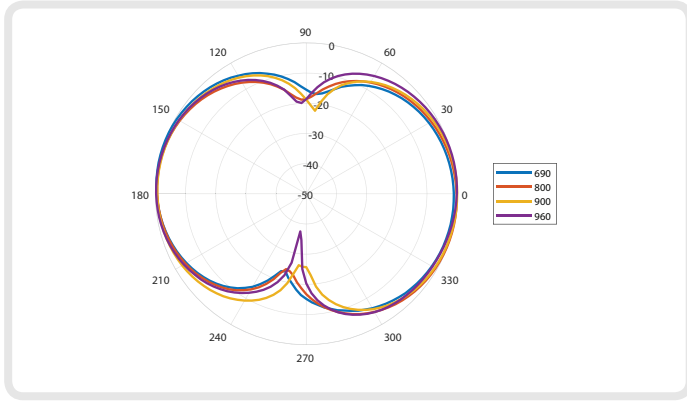
4 dBi is the peak gain across all bands from 698 - 3800 MHz

Gain @ 690 - 960 MHz:	1 dBi
Gain @ 1710 - 2170 MHz:	3 dBi
Gain @ 2300 - 2400 MHz:	2.5 dBi
Gain @ 2500 - 2700 MHz:	2.5 dBi
Gain @ 3400 - 3800 MHz:	4 dBi

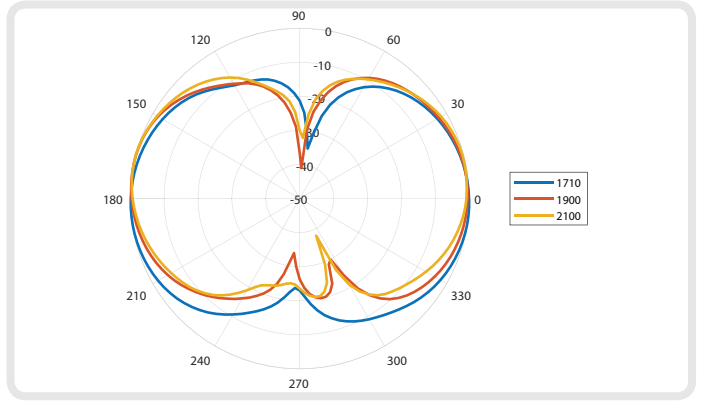
*Antenna gain measured with polarisation aligned standard antenna

Radiation Patterns

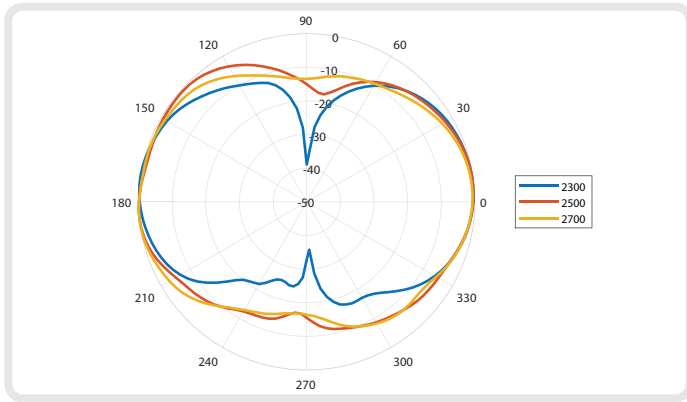
E-Plane: 690 - 960 MHz



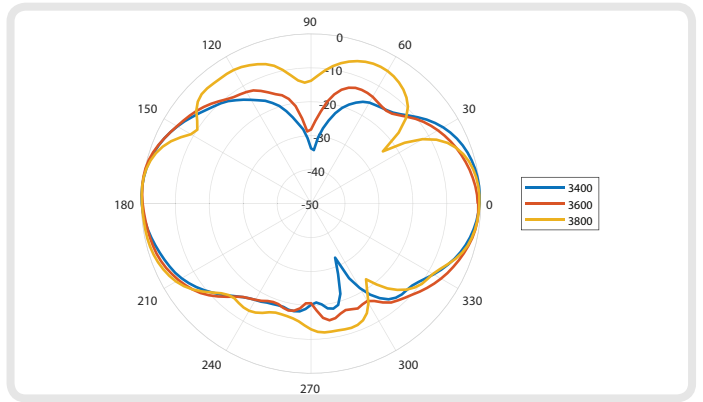
E-Plane: 1710 - 2700 MHz



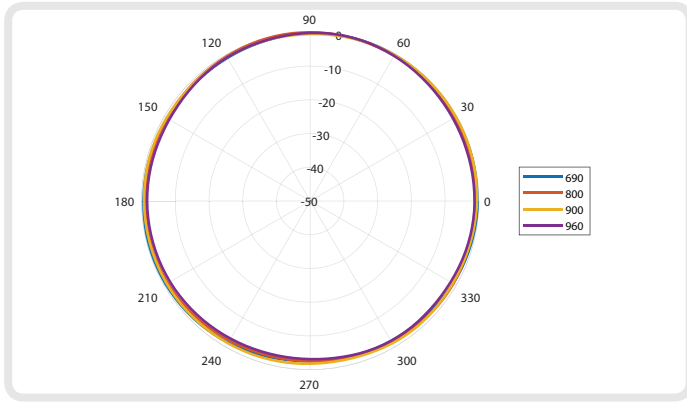
E-Plane: 2300 - 2700 MHz



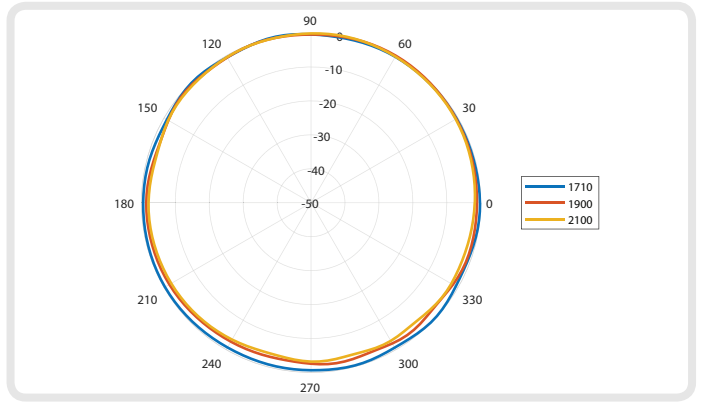
E-Plane: 3400 - 3800 MHz



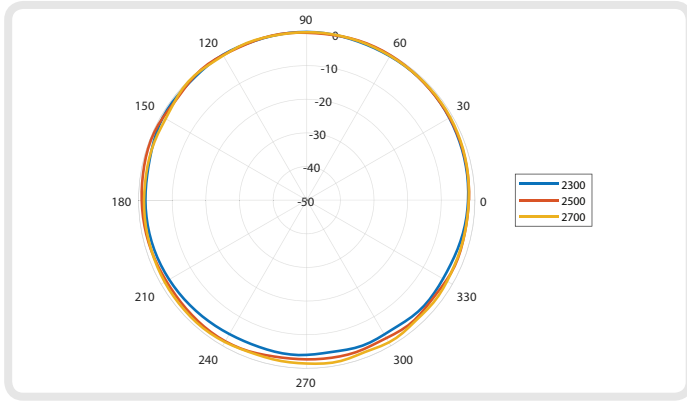
H-Plane: 690 - 960 MHz



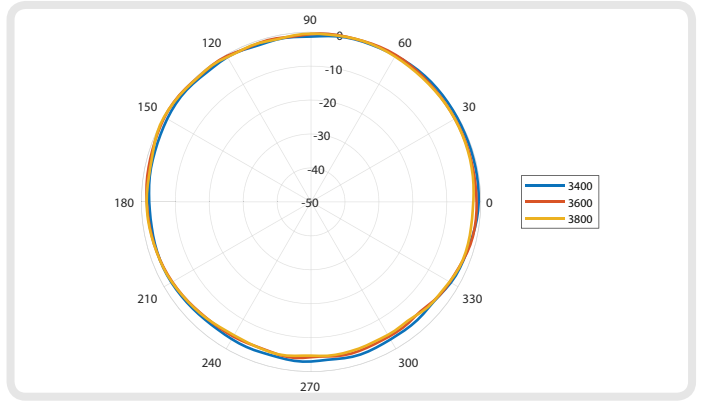
H-Plane: 1710 - 2700 MHz



H-Plane: 2300 - 2700 MHz



H-Plane: 3400 - 3800 MHz



Electrical specifications

Frequency bands:	698 - 960 MHz 1710 - 2700 MHz 3400 - 3800 MHz
Gain (max):	4 dBi
VSWR:	<2:1
Feed power handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	Linear vertical
Cable loss:	0.47Db/m @900 MHz 0.75Db/m @ 2000 MHz 0.79Db/m @2500 MHz 0.83Db/m @ 3500 MHz
DC short:	Yes
Cable length:	1m ±5%
Cable type:	RG58
Connector:	SMA(m)

Mechanical specifications

Product dimensions (L x W):	± 154 mm x 51 mm
Packaged dimensions:	TBC
Weight:	TBC
Packaged weight:	TBC
Radome material:	ABS (Halogen Free)
Radome colour:	Cool Gray 1C

Environmental specifications

Wind survival:	<120 km/h
Temperature range (Operating):	-40°C to +70°C
Environmental conditions:	Outdoor/Indoor
Operating relative humidity:	Up to 98%
Storage humidity:	5% to 95% - non condensing
Storage temperature:	-40°C to +70°C
Flammability rating:	UL 94-HB

Ordering information

Commercial name:	OMNI-280-01
Order product code:	A-OMNI-0280-01
EAN number:	0707273470027

Additional accessories available

Various connectors available

For more detailed information and availability in your region, visit our web site: www.poynting.tech

Contact Poynting

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South Africa

Phone: +27 (0) 12 657 0050

E-mail: sales@poynting.co.za

Product box contents

Antenna:	A-OMNI-0280-01
Mounting bracket:	Pole and wall mount
Mounting Type:	Magnetic and velcro adhesive

The connector is factory mounted to the antenna

Certification approvals and standards

Water ingress protection ratio/standard:	IP 65
Impact resistance:	IK 08
Salt spray:	MIL-STD 810F/ASTM B117
Product safety:	Complies with CE, EN, CSA and IEC standards



OMNI-280-01

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Product Specifications may change without prior notice
Revised: March 2018

Regulatory Compliance: RoHS 2011/65/EU Compliant | ISO 9001:2008
Document version: TS-A-OMNI-0280-01-V1 Rev2
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