

## ANTENNAS | OMNI-292 SERIES

# OMNI-DIRECTIONAL, WIDEBAND LTE ANTENNA

617 – 2700 MHz, 8 dBi



 617 – 960 MHz 1427 – 1517 MHz 1710 – 2700 MHz	 8 dBi	 Increase X Mb/s	 Omni- Directional	 4G LTE	 Machine to Machine
 2.4 – 2.5 GHz	 617 – 698 MHz	 Internet of Things	 IP 65	 -40°C to +80°C	 Fire Resistant

- High performance omni-directional antenna
- Compatible with 4G, 3G and 2G technologies, supports 2.4 GHz Wi-Fi
- Ideal for machine to machine (M2M) applications
- Consistent high gain over a very wide frequency band
- Excellent broadband quality antenna
- Vandal and water-resistant enclosure



APPLICATION AREAS

## Product Overview

The OMNI-292 is a high gain omni-directional antenna that covers all cellular frequencies bands needed for LTE(4G), but also covers the bands for HSDPA, 3G, EDGE, GPRS, voice and 2.4 GHz LTE and Wi-Fi bands. Its configuration makes it suitable for fixed installations of any cellular frequency band. This is one of the few omni-directional antennas in the world that offers consistent high gain over a very wide frequency band with excellent radiation pattern performance. This makes it a very popular choice with installers because of its base station agile. It is also ideal for machine to machine (M2M) applications that are communicating through GSM network (GPRS/ EDGE/ 3G/ HSPA/ LTE).

## Features

- High gain omni-directional antenna
- Lightweight
- Robust and weather resistant
- Operational in the 2.4 – 2.5 GHz Wi-Fi band
- N-Type female connectors so that any cable type or cable length can be connected

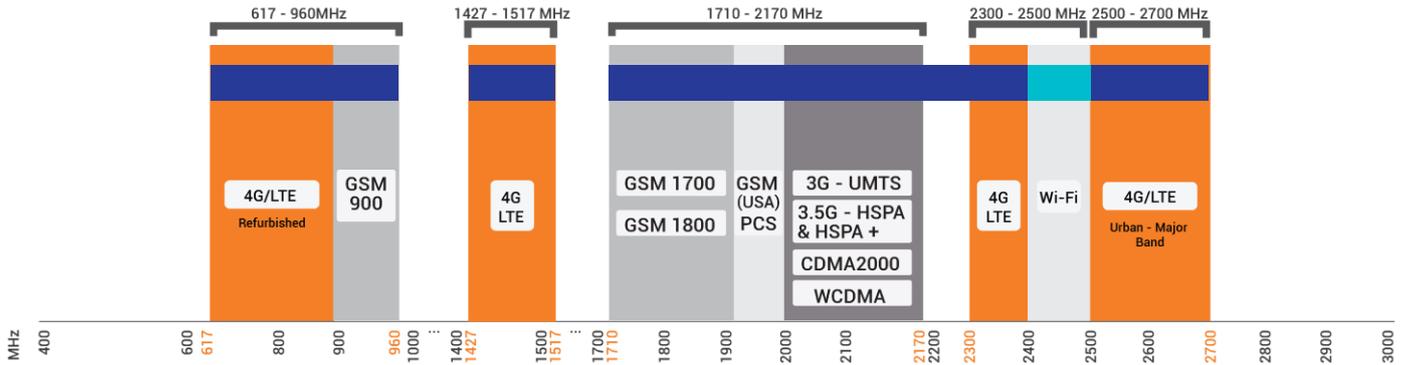
## Application Areas

- Machine to machine (M2M)
- Poor data signal reception (indoor or outdoor)
- Slow data transmission connection
- Unstable connection
- Increases system transmission reliability
- High-end industrial grade router applications
- Mobile offices
- Transportation applications: Caravans, RV's



**Frequency Bands**

The OMNI-292 is an omni-directional antenna that works from | 617 – 960 MHz | 1427 – 1517 MHz | and | 1710 – 2700 MHz |



Indicates the LTE bands on which OMNI-292 works      Indicates the WI-FI bands on which OMNI-292 works

**Antenna Overview**

	
<b>Ports</b>	1
<b>SISO / MIMO</b>	SISO
<b>Frequency Bands</b>	617 - 2700 MHz
<b>Polarisation</b>	Linear (Vertical)
<b>Peak Gain</b>	8 dBi
<b>Coax Cable Type</b>	N/A
<b>Coax Cable Length</b>	N/A
<b>Connector Type</b>	N-Type (F)

*\*The connector is factory mounted to the antenna*

### Electrical Specifications

Frequency Bands:	617 – 960 MHz 1427 – 1517 MHz 1710 – 2700 MHz
Gain (Max):	5 dBi @ 698 – 960 MHz 5.8 dBi @ 1427 – 1517 MHz 8 dBi @ 1710 – 2700 MHz
VSWR:	<2.5:1 across 90% of the bands
Feed Power Handling:	10 W
Input Impedance:	50 Ohm (nominal)
DC Short:	Yes

### Product Box Contents

Antenna:	A-OMNI-0292-V2
Mounting Bracket:	Pole up to 50mm diameter wall and Pole mount stainless steel bracket

### Ordering Information

Commercial name:	OMNI-292-V2
Order product code:	A-OMNI-0292-V2
EAN number:	6009710923726

### Mechanical Specifications

Product Dimensions:	646 mm x Ø71 mm (excl. bracket)
Packaged Dimensions:	700 mm x 95 mm x 90 mm
Weight:	0.46 kg
Packaged Weight:	1.17 kg
Radome Material:	ABS (Halogen Free)
Radome Colour:	Pantone – Cool Gray (1C) RAL - 7047
Mounting Type:	Pole and Wall Mount

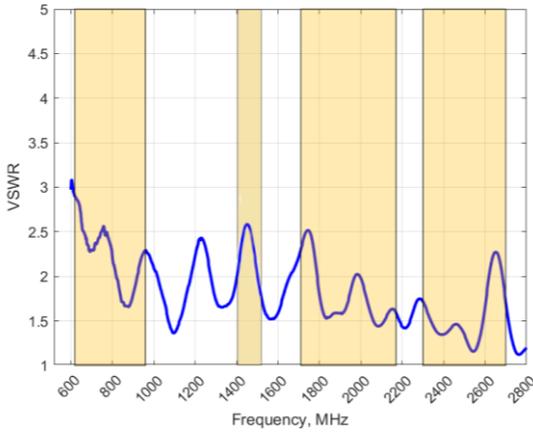
### Environmental Specifications, Certification & Approvals

Wind Survival:	≤190 km/h
Temperature Range (Operating):	-40°C to +80°C
Environmental Conditions:	Outdoor/Indoor
Water Ingress Protection Ratio/Standard:	IP 65
Salt Spray:	MIL-STD 810G/ASTM B117
Operating Relative Humidity:	Up to 98%
Storage Humidity:	5% to 95% - non-condensing
Storage Temperature:	-40°C to +80°C
Enclosure Flammability Rating:	UL 94-HB
Impact Resistance:	IK 08
Product Safety & Environmental:	Complies with CE and RoHS standards

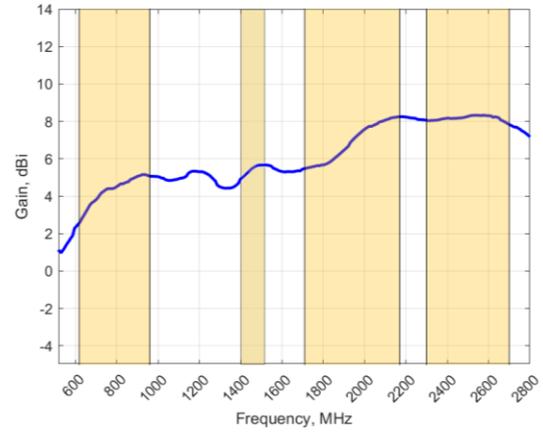


Antenna Performance Plots

**VSWR**



**GAIN (EXCLUDING CABLE LOSS)**



**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-292 delivers superior performance across all bands with a VSWR of 2.5:1 or better across 90% of the bands.

\*VSWR measured without a cable.

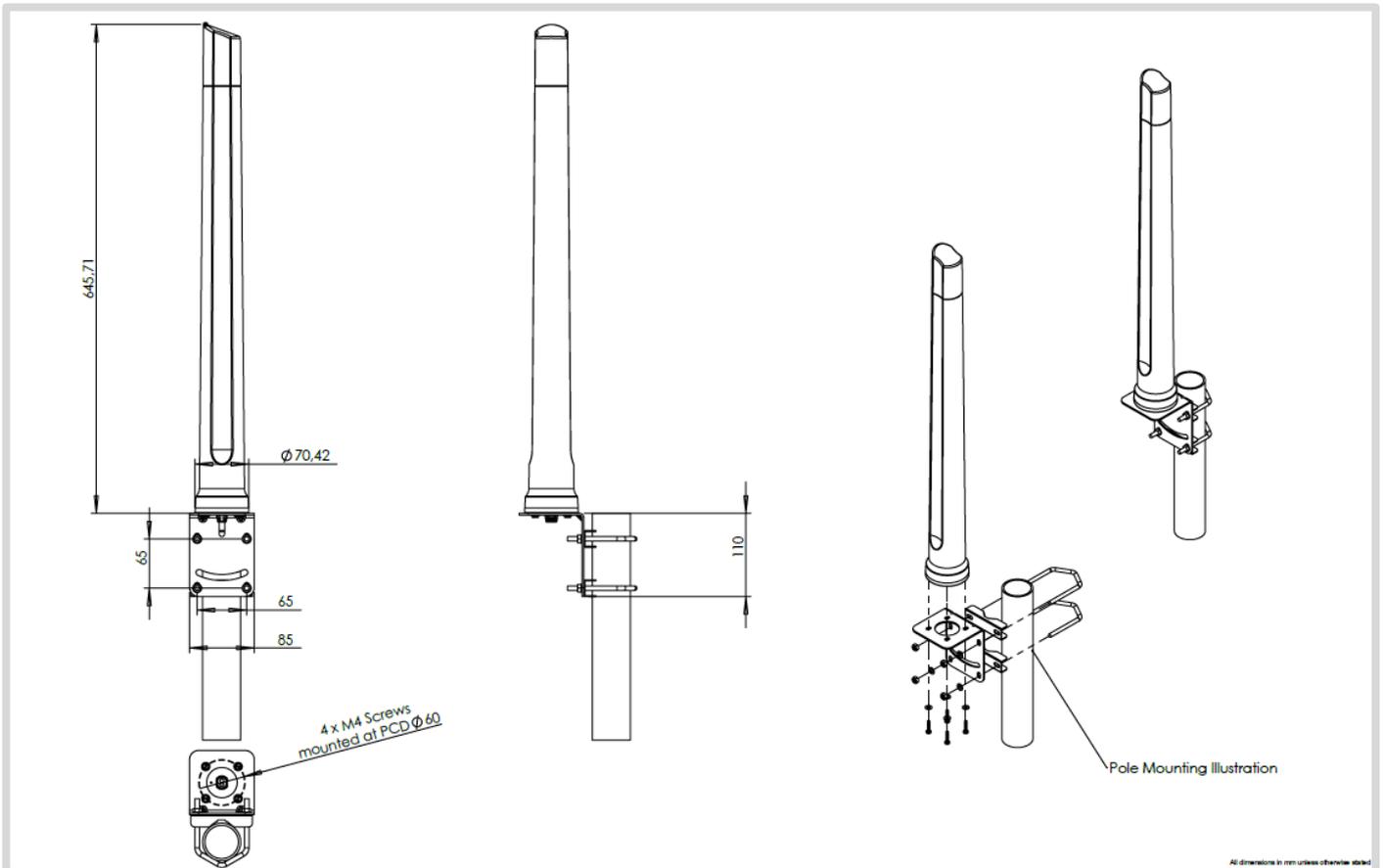
**Gain\* in dBi**

8 dBi is the peak gain across all bands from 617 – 2700 MHz

Gain @ 617 - 960 MHz:	5 dBi
Gain @ 1427-1517 MHz	5.8 dBi
Gain @ 1710 – 2700 MHz:	8 dBi

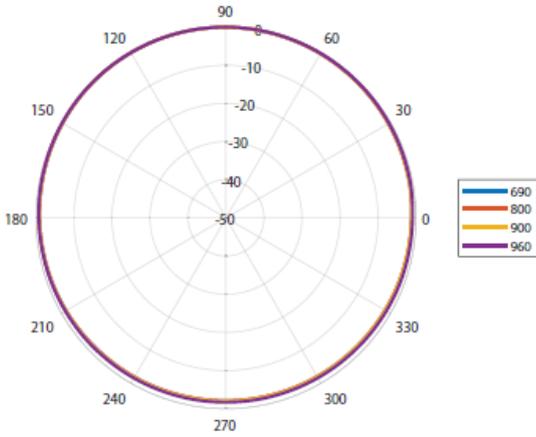
\*Antenna gain measured with polarisation aligned standard antenna

Technical Drawings

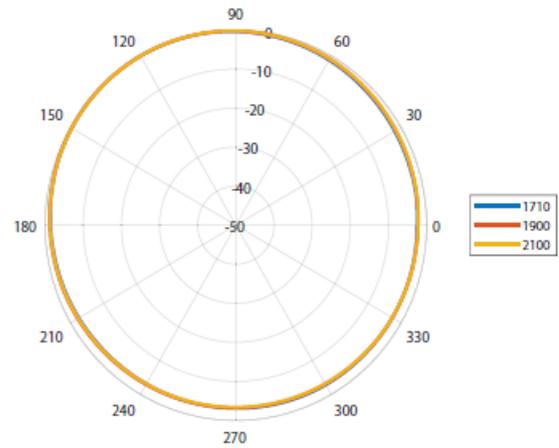


Radiation Patterns

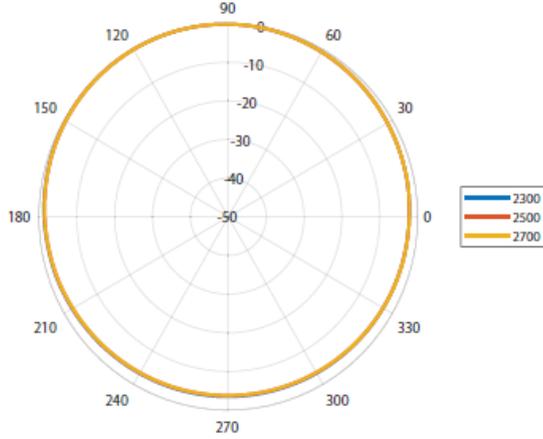
Azimuth: 690 – 960 MHz



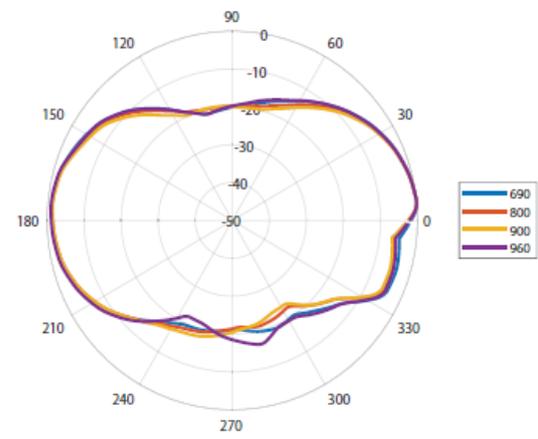
Azimuth: 1710 – 2100 MHz



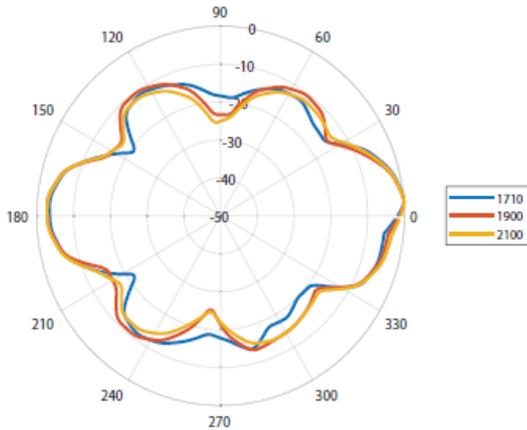
Azimuth: 2300 – 2700 MHz



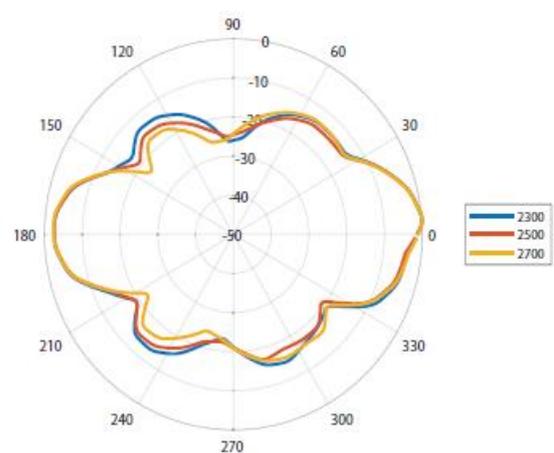
Elevation: 690 – 960 MHz



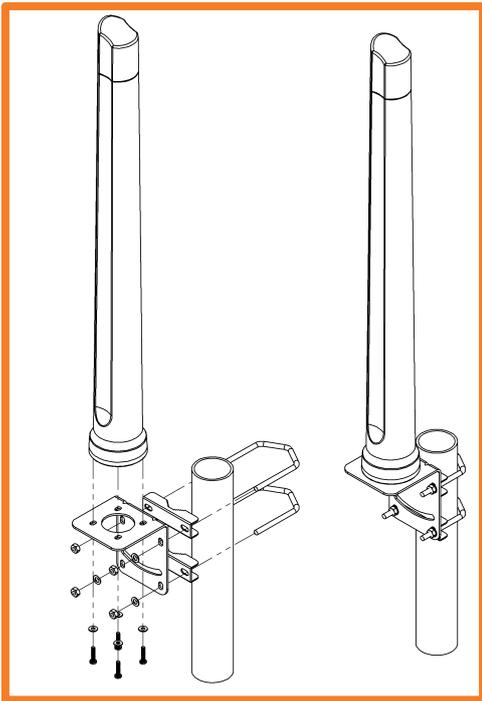
Elevation: 1710 – 2100 MHz



Elevation: 2300 – 2700 MHz

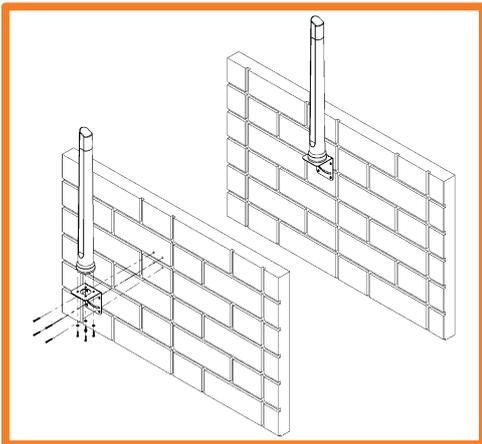


**Mounting Options**



**Pole Mount**

L-Bracket 316 Stainless Steel – included  
(for Ø 30-50mm pole)



**Wall Mount**

L-Bracket 316 Stainless Steel – included

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## Additional Accessories

Extension Cables: Up to 15m HDF 195  
Various adapters available  
Installation poles and brackets available

See accessories technical specifications on [www.poynting.tech](http://www.poynting.tech)

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