

# ANTENNAS | OMNI-0275-V2

# **OMNI-275**

452 - 468, 790 - 960 & 1710 - 2700 MHZ ALL-BAND LTE/CELLULAR OMNI-DIRECTIONAL ANTENNA

















- Includes the new 450 470 MHz frequencies
- Compatible with 4G, 3G and 2G technologies, supports WiFi and WiMax
- · Ideal for machine to machine applications
- · Increased connectivity stability
- · Consistent high gain over a very wide frequency band
- · Suitable for marine applications

#### **Product Overview**

This antenna covers LTE bands 31, 3 and 30. These bands include HSDPA, 3G EDGE, GPRS and voice. Its configuration makes it suitable for fixed installations of any cellular frequency band. This antenna is ideal as it is backward compatible with legacy cellular technologies.

#### **Features**

- Medium gain omni-directional antenna
- Wall or pole mountable
- Water resistant
- Lightweight
- Aesthetically pleasing

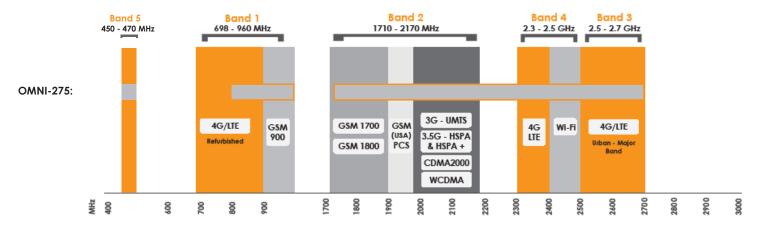
## **Application areas**

- Marine applications / Yachts
- Machine to machine (M2M)
- Poor data signal reception (indoor or outdoor)
- Slow data transmission connection
- Unstable connection
- Increase system transmission reliability
- High-end industrial grade router applications Mobile Offices
- Caravans, RTV's



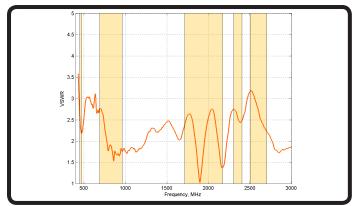
The OMNI - 275 is a 452 - 468, 790 - 960 & 1710 - 2700 MHz LTE Antenna

Indicates the bands on which this antenna works



#### **Antenna Performance Plots**

#### VSWR:

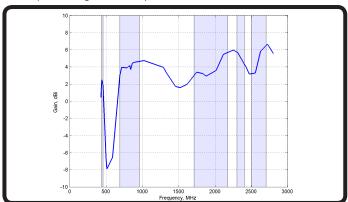


# Voltage Standing Wave Ratio (VSWR)

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 2.5:1.

The OMNI-275 delivers superior performance accross all bands with a VSWR of 2.5:1 or better.

### Gain: (excluding cable loss)



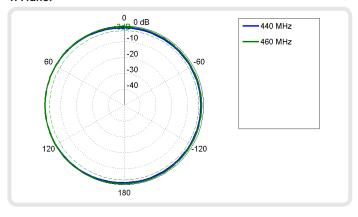
# Gain\* in dBi

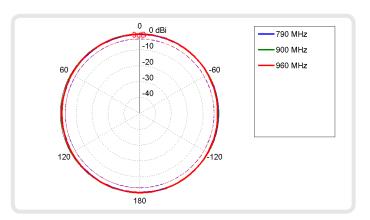
7 dBi is the peak gain across all bands from 452 - 2700 MHz

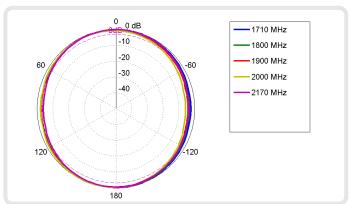
Gain @ different bands: Band 1
Gain @ different bands: Band 2
Gain @ different bands: Band 2
Gain @ different bands: Band 3
7dBi @ 1710-2700MHz

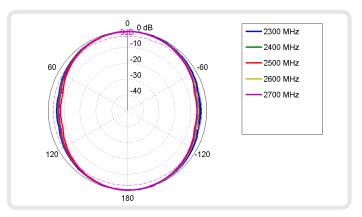
\*Antenna gain measured with polarisation aligned standard antenna

# H Plane:

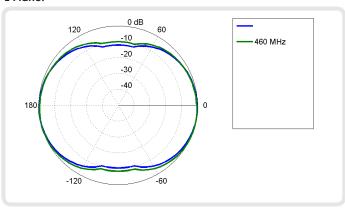


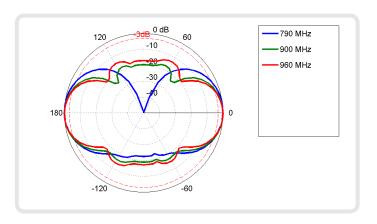


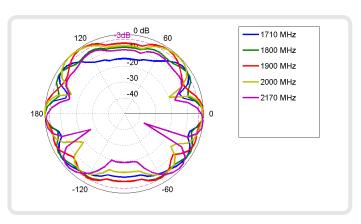


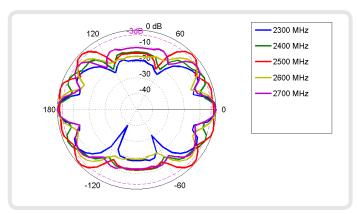


### E Plane:









# **Electrical Specifications**

452 - 468MHz Frequency Bands: 790 - 960MHz

1710 - 2700 MHz

Gain (Max): 7dBi < 2.5:1 over 90% of the band **VSWR** 

10 W Feed Power Handling:

Input impedance: 50 Ohm (nominal) Polarisation: Linear Vertical

DC Short:

Optional cable dependant Cable loss:

# **Mechanical Specifications**

Product Dimensions (L x W x D): 485 x 75 x 75mm 510 x 95 x 90mm Packaged Dimensions: Weight: 750 g Packaged Weight: 910 g ABS (Halogen Free) Radome Material: Radome Colour: Pantone - Cool Gray (1C) RAL - 7047

#### **Environmental Specifications**

<160km/h Wind Survival: Temperature Range (Operating): -20°C to +70°C **Environmental Conditions:** Outdoor/Indoor Operatina Relative Humidity: Up to 98% Storage Humidity: 5% to 95% - non condensing Storage Temperature: -20°C to +70°C

#### **Product Box Contents**

A-OMNI-0275 Antenna: Mounting Bracket: Pole up to 50mm diameter Wall and Pole mount stainless steel bracket

Cable Length: Cable Type: N/A Connector: N-Type Female

The conntector is factory mounted to the antenna







# **Ordering Information**

Commercial name: **OMNI -275** Order Product Code: A-OMNI-0275 EAN number: 6009693810969

# **Additional Accessories Available**

Extension Cables: Up to 15m HDF 195

Various connectors available Installation poles and brackets available

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

# **Certification Approvals and Standards**

Flammability rating: UL 94-V1 EN 13823

Water Ingress Protection Ratio/Standard: IP 65 Impact resistance: IK 08 Salt Spray: MIL-STD 810F /ASTM B117

Product Safety: Complies with UL, CE, EN, CSA and IEC standards









# **Contact Poynting**

#### Poynting Antennas (Pty) Ltd - Head Office

Unit 4, N1 Industrial Park Landmarks Avenue, Samrand, 0157 South Africa

**Phone:** +27 (0) 12 657 0050 E-mail: sales@poynting.co.za

#### **Poynting Europe**

Regus Business Center Neue Messe Riem Kronstadter Straße 4 81677 München Germany

Phone: +49 89 208026538

E-mail: sales-europe@poynting.tech