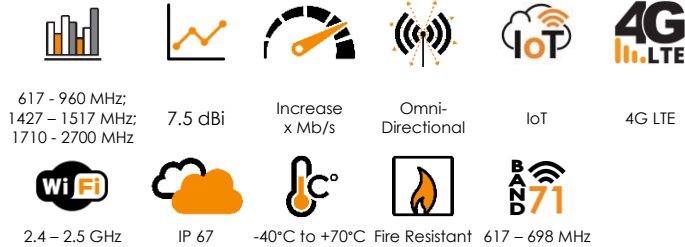


## ANTENNAS | OMNI-400 SERIES

# OMNI-DIRECTIONAL, MARINE & COASTAL LTE ANTENNA

617 - 2700 MHz, 7.5 dBi (US Specific)



- **High performance omni-directional marine antenna**
- **Easy mounting with feed through 1-inch marine standard adapter bracket included**
- **Robust and all-weather proof for harsh conditions at sea (IP 67)**
- **Various 316 stainless steel mounting brackets available optionally**
- **UV and saltwater protected against tempestuous weather conditions**



Urban



Rural/Farm



Marine



Transportation

APPLICATION AREAS

## Product Overview

The OMNI-400 is a high-performance marine antenna. This antenna uses a standard 1-inch (14 TPI) marine mount for simplified installation to most marine attachments. The ultra-wide frequency band covers all contemporary LTE operating frequencies with excellent balanced gain across all frequencies. Higher frequencies are not compromised, and the antenna design allows Poynting to have superior pattern control over the entire frequency range making the OMNI-400 a true high performance omni-directional antenna. The OMNI-400 guarantees signal reception almost everywhere, allowing it to be usable in all parts of the world. Poynting Antennas achieves this through new antenna configuration using multiple dipoles and a uniquely (patented) feed network.

## Features

- High gain omni-directional antenna
- Purpose built antenna for marine and coastal applications
- Lightweight
- UV and saltwater resistant
- Robust and weather resistant
- Operational in the 2.4 - 2.5 GHz Wi-Fi band

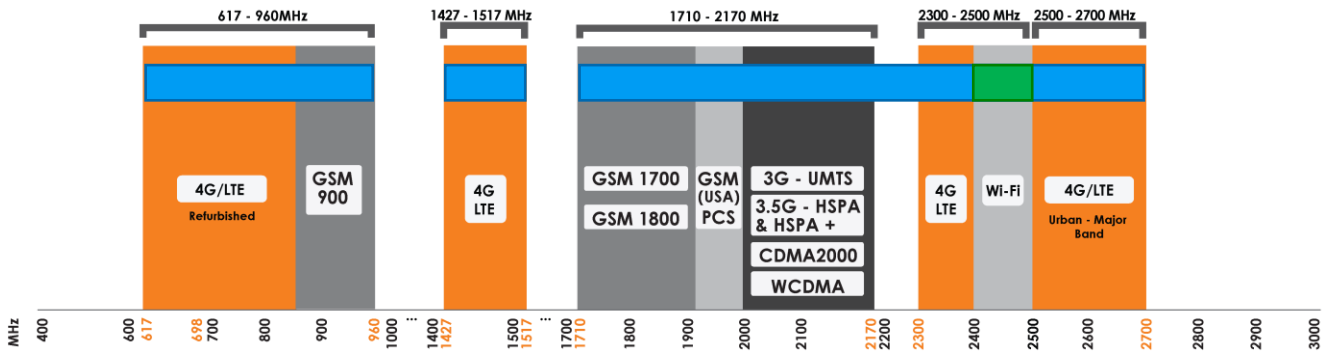
## Application Areas

- Marine / Yachts / Boats / Ferries
- Enhanced LTE reception
- IoT and M2M
- Poor data signal reception
- Improve data transmission connection reliability & stability
- Wi-Fi applications



### Frequency Bands

The OMNI-400 is an omni-directional antenna that works from 617 - 960 MHz | 1427 – 1517 MHz | 1710 - 2700 MHz



Indicates the LTE bands on which OMNI-400 works

Indicates the WI-FI bands on which OMNI-400 works

### Antenna Overview

Ports	1
SISO / MIMO	SISO
Frequency Bands	617 – 2700 MHz
Polarisation	Linear Vertical
Peak Gain	7.5 dBi
Coax Cable Type	N/A
Coax Cable Length	N/A
Connector Type	N-Type (F)

*The connector is factory mounted to the antenna*

## Electrical Specifications

<b>Frequency bands:</b>	617 - 960 MHz 1427 - 1517 MHz 1710 - 2700 MHz
<b>Gain (peak):</b>	4 dBi @ 617 - 960 MHz 6 dBi @ 1427 - 1517 MHz 7.5 dBi @ 1710 - 2700 MHz
<b>VSWR:</b>	<2.5:1 across 95% of the band
<b>Feed power handling:</b>	10 W
<b>Input impedance:</b>	50 Ohm (nominal)
<b>Coax cable loss:</b>	Optional cable dependent
<b>DC short:</b>	Yes

## Product Box Contents

<b>Antenna:</b>	A-OMNI-0400
<b>Mounting bracket:</b>	Mounts to standard 1" -14 T male threads and universal L-bracket

## Ordering Information

<b>Commercial name:</b>	OMNI-400
<b>Order product code:</b>	A-OMNI-0400
<b>EAN number:</b>	0707273469434

## Mechanical Specifications

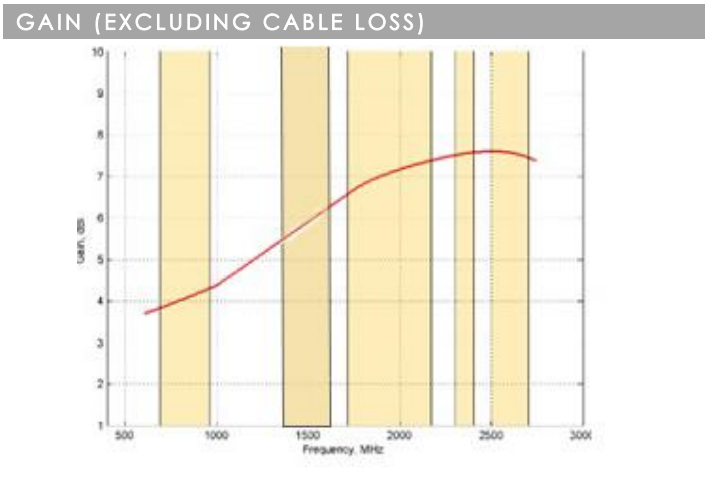
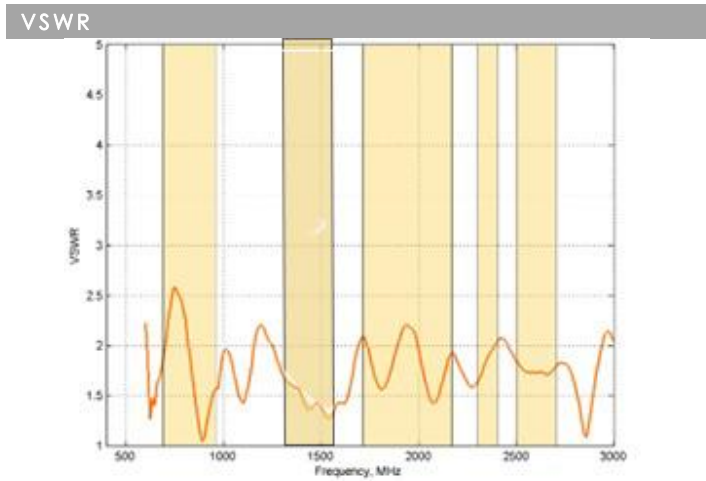
<b>Product dimensions</b>	555 mm x 75 mm
<b>Packaged dimensions:</b>	580 mm x 95 mm x 95 mm
<b>Weight:</b>	0.576kg
<b>Packaged weight:</b>	1.245kg
<b>Radome material:</b>	ABS (Halogen Free)
<b>Radome colour:</b>	Pantone – Cool Gray (1C) RAL - 7047
<b>Mounting Type:</b>	Standard 1" -14 TPI marine mount & Wall/pole mount

## Environmental Specifications, Certification & Approvals

<b>Wind Survival:</b>	<186 km/h
<b>Temperature Range (Operating):</b>	-40°C to +70°C
<b>Environmental Conditions:</b>	Outdoor/Indoor
<b>Water ingress protection ratio/standard:</b>	IP 67
<b>Salt Spray:</b>	MIL-STD 810F/ASTM B117
<b>Operating Relative Humidity:</b>	Up to 98%
<b>Storage Humidity:</b>	5% to 95% - non-condensing
<b>Storage Temperature:</b>	-40°C to +70°C
<b>Enclosure Flammability Rating:</b>	UL 94-HB
<b>Impact resistance:</b>	IK 08
<b>Product Safety &amp; Environmental:</b>	Complies with CE and RoHS standards



**Antenna Performance Plots**



**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-400 delivers superior performance across all bands with a VSWR of 2.5:1 or better across 95% of the bands.

\*VSWR measured without a cable

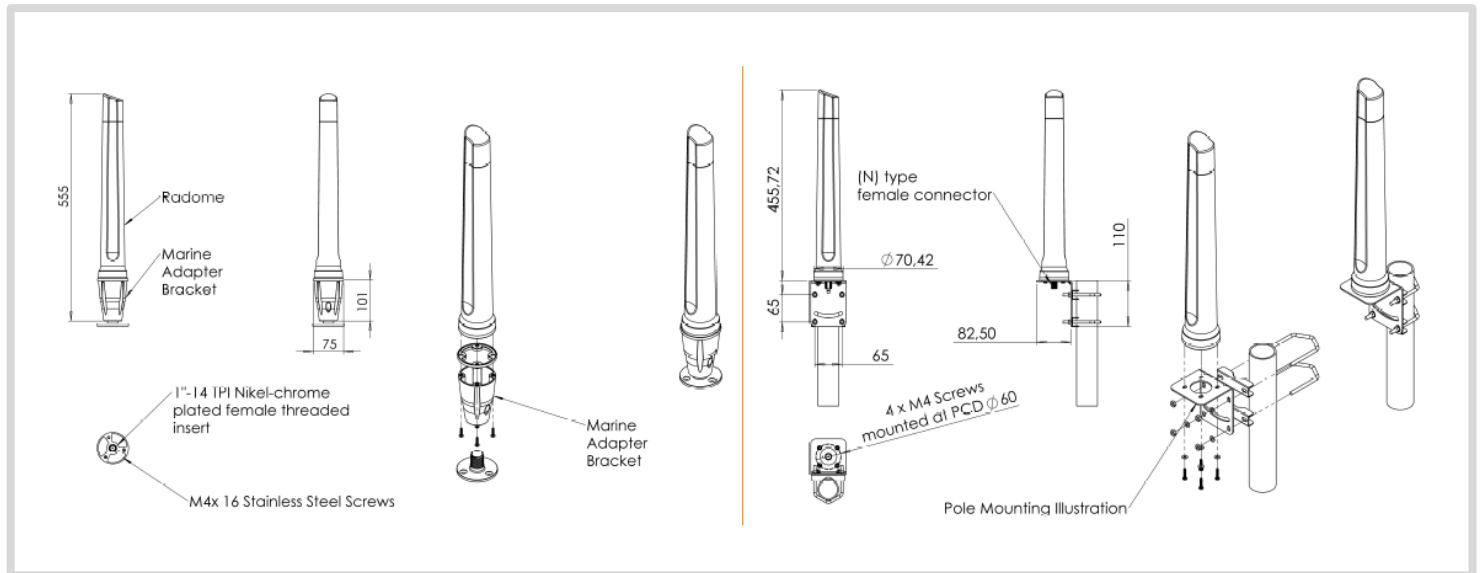
**Gain\* in dBi**

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

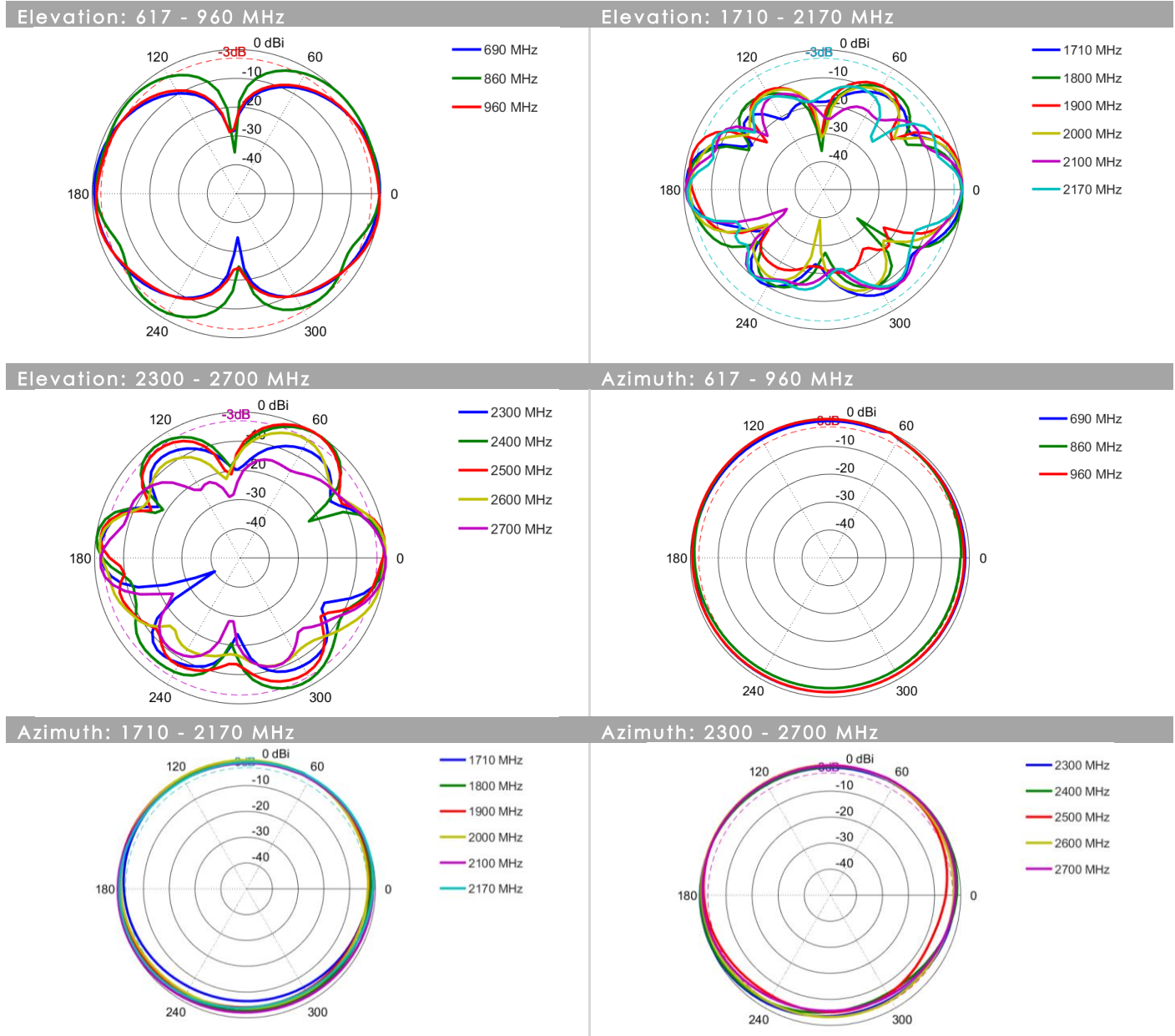
Gain @ 617 - 960 MHz:	4 dBi
Gain @ 1427 – 1517 MHz:	6 dBi
Gain @ 1710 - 2700 MHz:	7.5 dBi

\*Antenna gain measured with polarisation aligned standard antenna

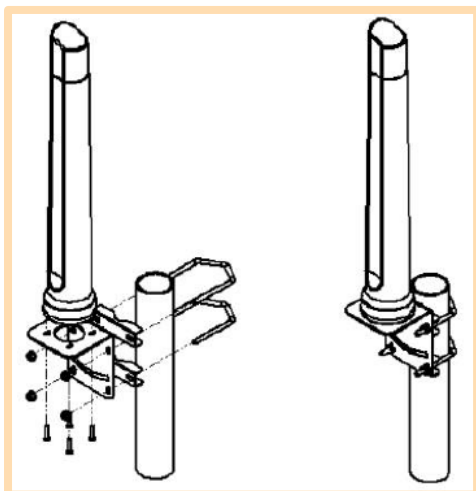
**Technical Drawings**



**Radiation Patterns**

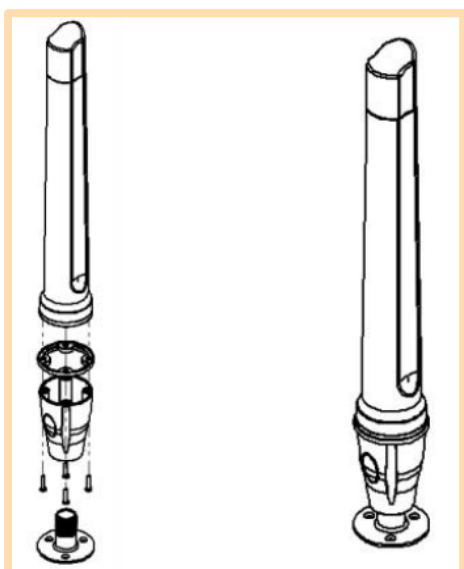


## Mounting Options



### Pole Mount

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



### Marine Bracket Mount

1" -14 TPI female adapter – included

Mounts to standard marine brackets:

- BRKT-37: Flat Mount - Optional
- BRKT-38: Ratchet Mount - Optional
- BRKT-39: Rail Mount - Optional

See Optional Accessories below

Also available: BRKT-41 with 1.25" – 11TPI female adapter (Optional)

See Accessories below

## Additional Accessories



### BRKT-37

Marine flat mount antenna bracket 1"-14TPI 316 Stainless Steel



### BRKT-38

Marine ratchet rail mount antenna bracket 1"-14TPI 316 Stainless Steel



### BRKT-39

Heavy duty marine mount antenna bracket 1"-14TPI 316 Stainless Steel

#### Extension Cables

Up to 15m HDF 195

#### Others

Various connectors and installation poles and brackets available

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

## 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

### Poynting USA

1804 Owen Court, Suite 104,  
Mansfield,  
TX 76063  
USA

**Phone:** +1 817 533-8130

**E-mail:** sales-us@poynting.tech