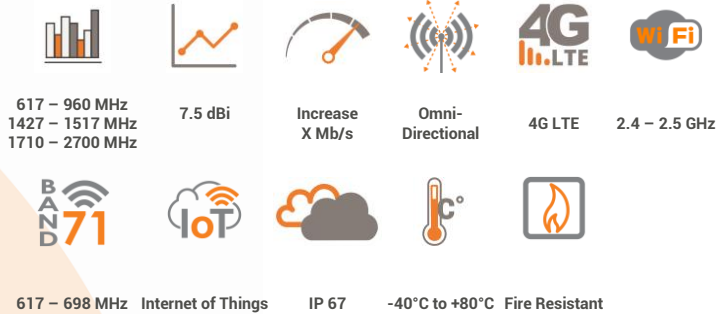
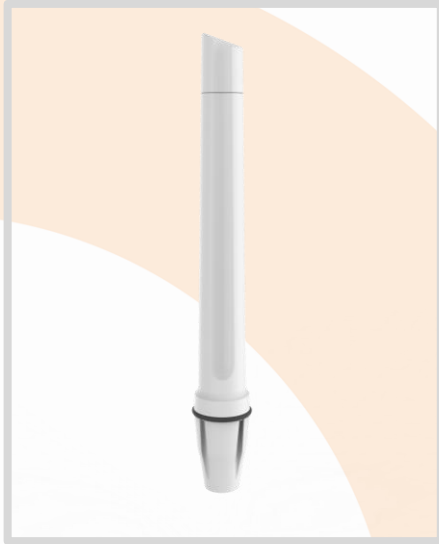


ANTENNAS | OMNI-400 SERIES

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



APPLICATION AREAS

Product Overview

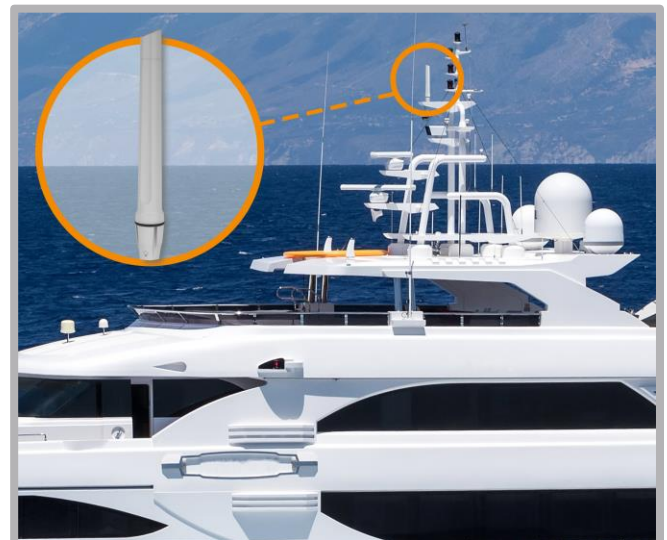
The OMNI-400 is a high-performance marine antenna. This antenna uses a standard 1-inch (14 TPI) marine mount for simplified installation to most marine attachments. The ultra-wide frequency band covers all contemporary LTE operating frequencies with excellent balanced gain across all frequencies. Higher 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

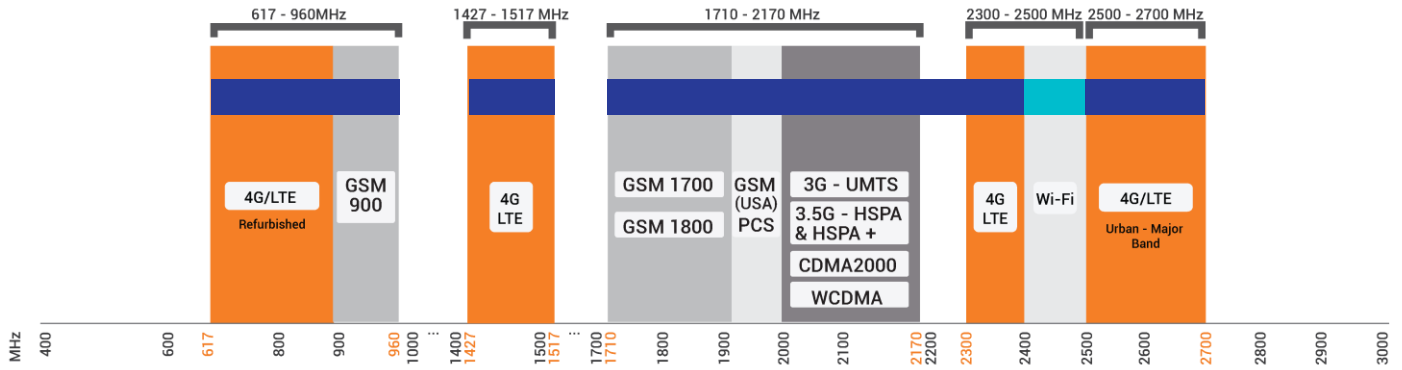
- Marine / Yachts / Boats / Ferries
- Enhanced LTE reception
- IoT and M2M
- Poor data signal reception
- Improve data transmission connection reliability & stability
- Wi-Fi applications



OMNI-400


Frequency Bands

The OMNI-400 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-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

Frequency Bands:	617 – 960 MHz 1427 – 1517 MHz 1710 – 2700 MHz
Gain (Max):	4 dBi @ 617 – 960 MHz 6 dBi @ 1427 – 1517 MHz 7.5 dBi @ 1710 – 2700 MHz
VSWR:	<2.5:1 across 95% of the band
Feed Power Handling:	10 W
Input Impedance:	50 Ohm (nominal)
DC Short:	Yes

Product Box Contents

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

Ordering Information

Commercial Name:	OMNI-400
Order Product Code:	A-OMNI-0400
EAN Number:	6009710927335

Mechanical Specifications

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

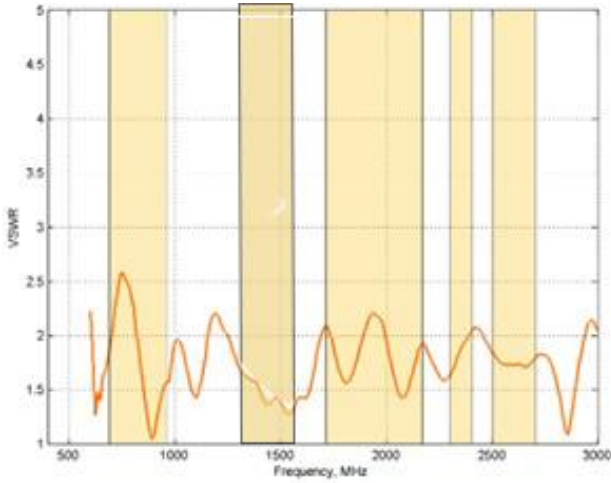
Environmental Specifications, Certification & Approvals

Antenna Wind Survival:	<186 km/h
Temperature Range (Operating):	-40°C to +80°C
Environmental Conditions:	Outdoor/Indoor
Ingress Protection:	IP67
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



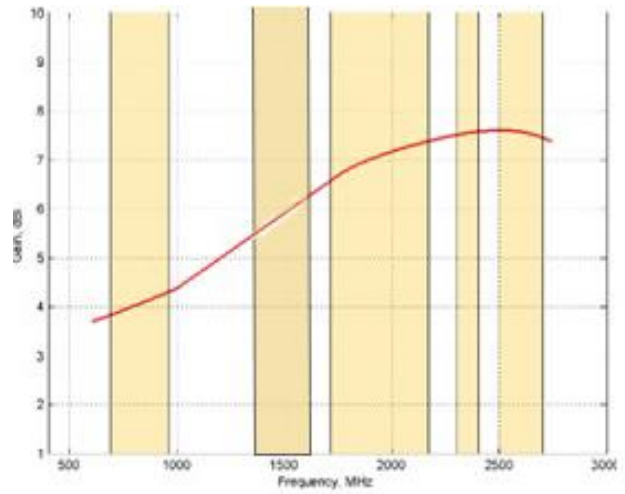
Voltage Standing Wave Ratio (VSWR)*

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 (EXCLUDING CABLE LOSS)



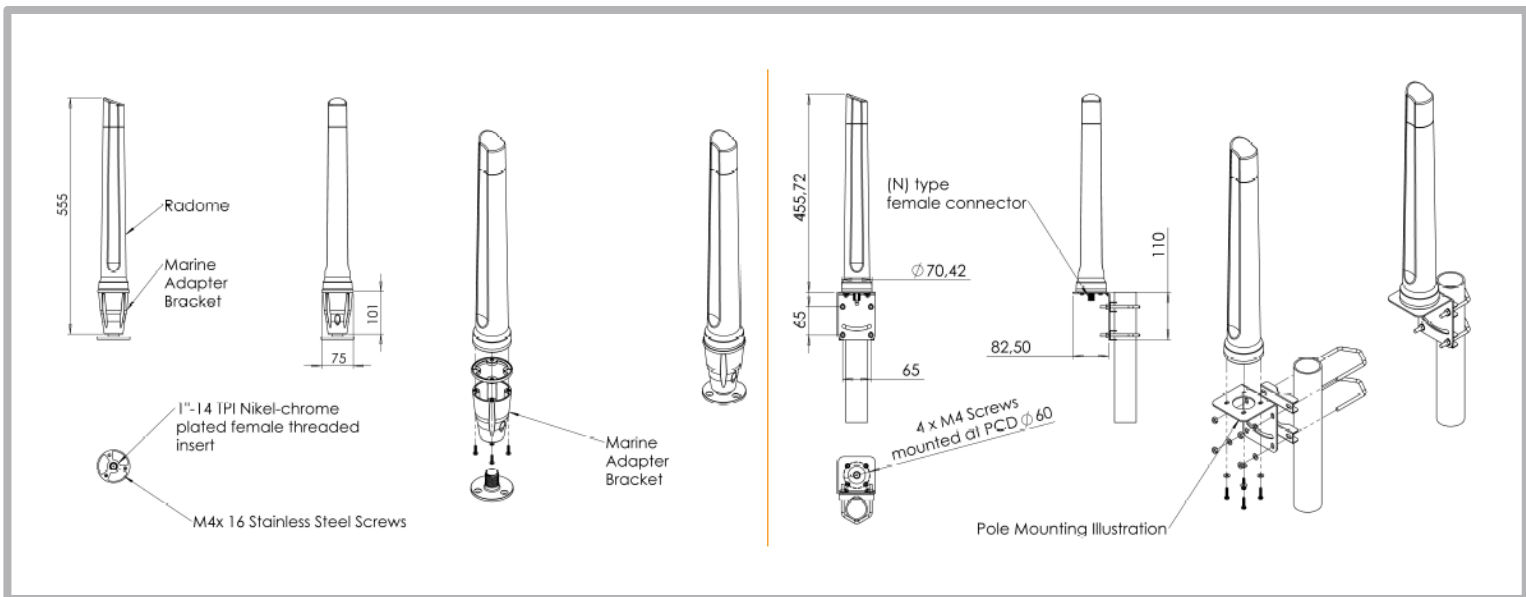
Gain* in dBi

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

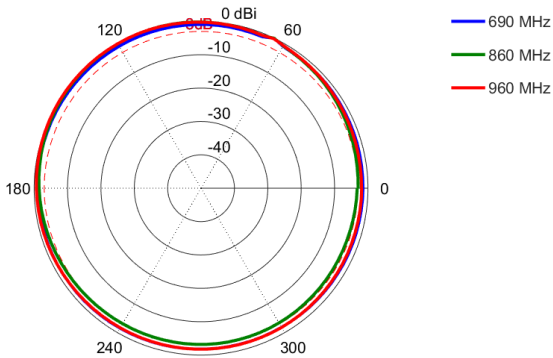
*Antenna gain measured with polarisation aligned standard antenna

Technical Drawing

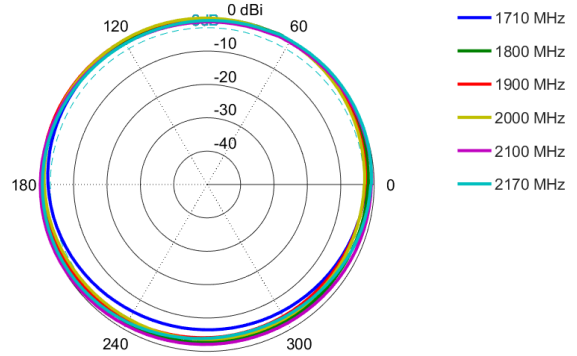


Radiation Patterns

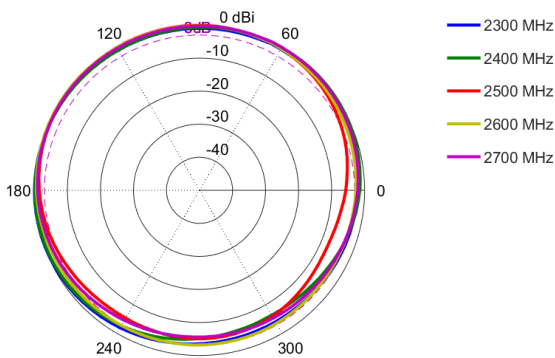
Azimuth: 690 - 960 MHz



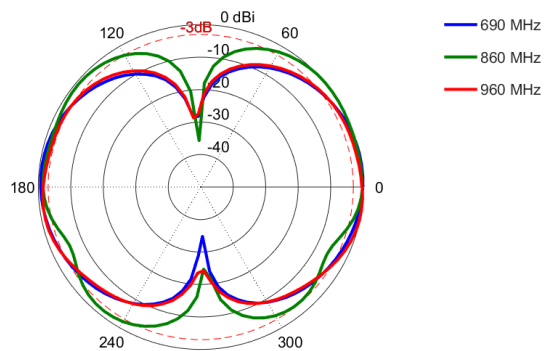
Azimuth: 1710 - 2170 MHz



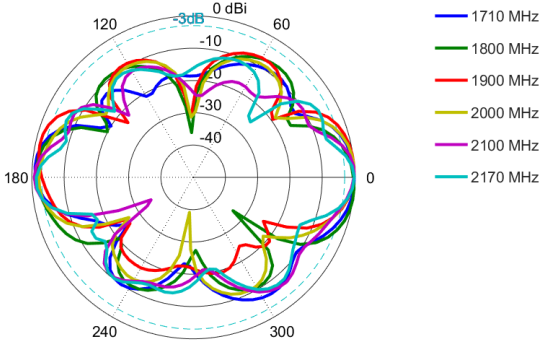
Azimuth: 2300 - 2700 MHz



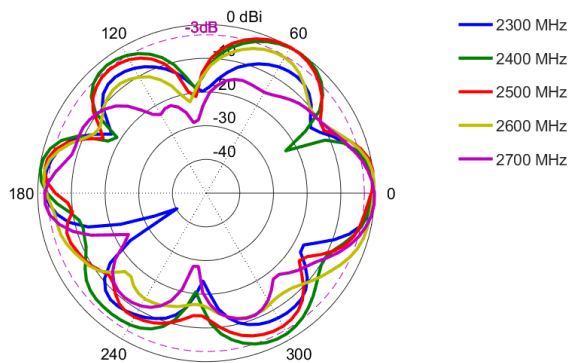
Elevation: 690 - 960 MHz



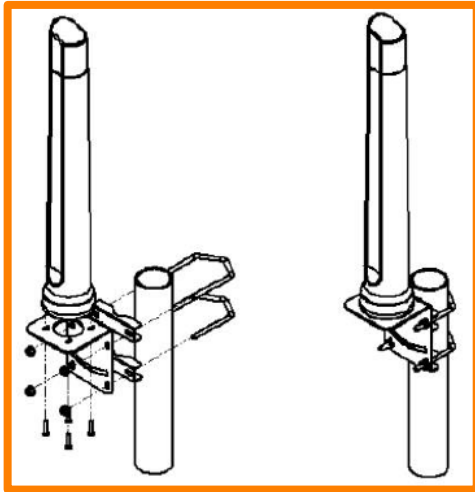
Elevation: 1710 - 2170 MHz



Elevation: 2300 - 2700 MHz

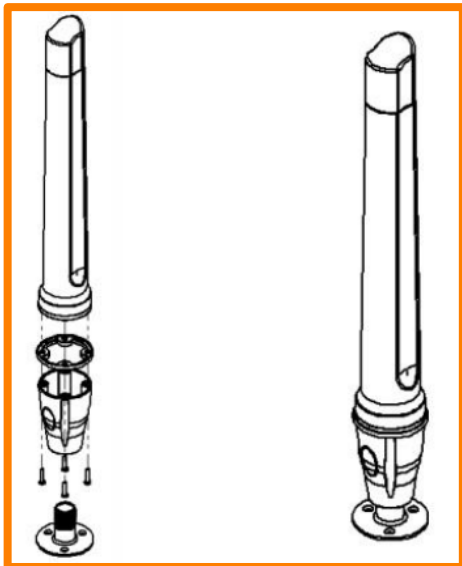


Mounting Options



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"-14 TPI 316 Stainless Steel



BRKT-38

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



BRKT-39

Heavy duty marine mount antenna bracket 1"-14 TPI 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

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