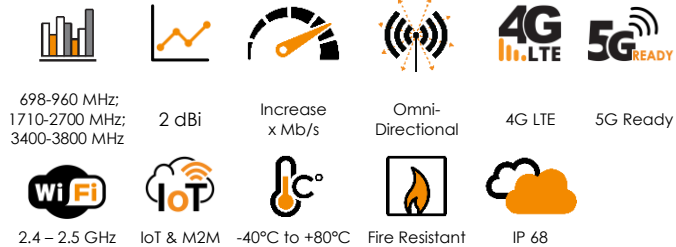


ANTENNAS | OMNI-404 SERIES

OMNI-DIRECTIONAL MARINE AND COASTAL LTE/5G ANTENNA

698 - 3800 MHz; 2 dBi



- **Marine quality, low profile, omni directional antenna**
- **Suitable for 5G deployments up to 3800 MHz**
- **Robust and all-weather proof for harsh conditions at sea**
- **Easy mounting with feed through a standard 1-inch marine adapter bracket which is included**
- **Various marine grade stainless steel mounting brackets available optionally**
- **UV and saltwater protected against tempestuous weather conditions**
- **Protected against water and dust ingress, IP68**



Product Overview

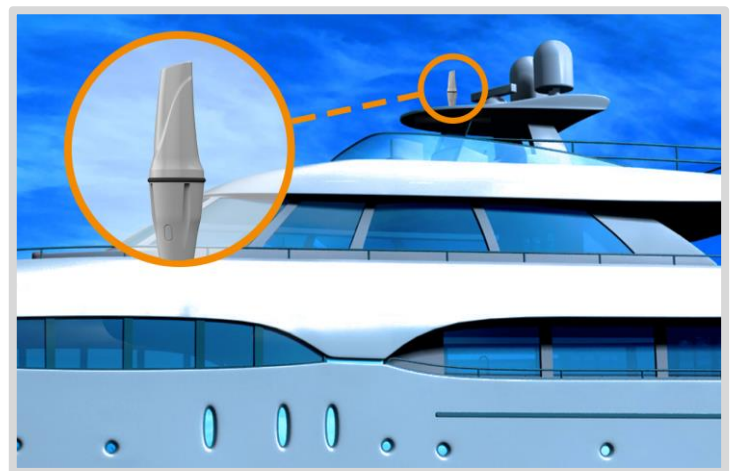
The OMNI-404 is a wide band LTE/5G antenna with a smaller profile radome which is specifically designed for adverse marine & coastal environments. This antenna covers all contemporary LTE operating frequencies, from 698 to 3800 MHz, with excellently balanced gain across all frequencies, enhancing LTE performance features, such as multi carrier aggregation (CA). This antenna is also suitable on all 5G networks up to 3800 MHz. The antenna is designed for superior pattern control over the entire frequency range, making the OMNI-404 an exceptional omni-directional antenna for its size and application. Poynting Antennas achieves this through a new antenna design using multiple dipoles and a unique (patented) feed network. A standard 1-inch (14 TPI) marine mount connector is used for simplified installation to most standard marine attachments.

Features

- Medium gain omni-directional antenna
- The antenna is purpose-built for marine and coastal applications
- Fits directly to standard 1-inch (14 TPI) marine mount
- UV and salt-water resistant
- Robust and weather resistant with IP68 rating

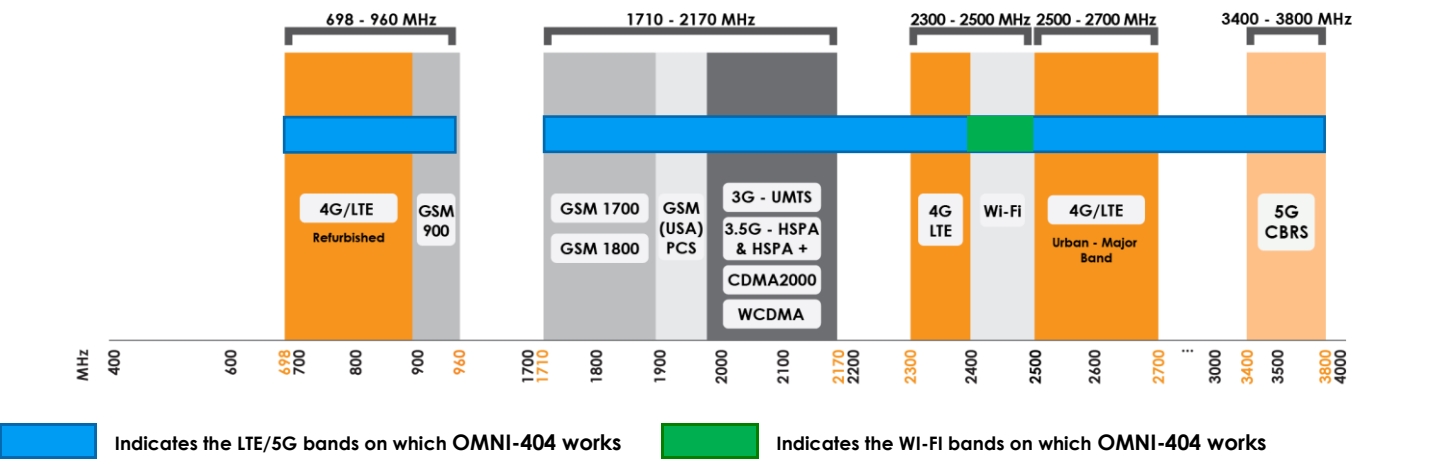
Application Areas

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



Frequency bands

The OMNI-404 is a marine antenna that works from | 698-960 MHz | 1710-2700 MHz | 3400-3800 MHz



Antenna Overview

	
Ports	1
SISO / MIMO	SISO
Frequency Bands	698 – 3800 MHz
Peak Gain	2 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:	698-960 MHz
	1710-2700 MHz
	3400-3800 MHz
Gain (max):	-4 dBi @ 698-960 MHz
	2 dBi @ 1710-2700 MHz
	1.5 dBi @ 3400-3800 MHz
VSWR:	≤ 2.5:1
Feed power handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	Linear Vertical
DC short:	Path to Ground

Product Box Contents

Antenna:	A-OMNI-0404
Mounting bracket:	1" (14 TPI) Marine Adapter (BRKT-40)

Ordering Information

Commercial name:	OMNI-404
Order product code:	A-OMNI-0404-V1-01
EAN number:	6009710920923

Mechanical Specifications

Product dimensions:	252 mm x Ø75 mm (Incl. BRKT-40)
Packaged dimensions:	288 mm x 97 mm x 97 mm
Weight:	0.35 Kg
Packaged weight:	0.50 Kg
Radome material:	UV Stable Marine ASA
Radome colour:	Brilliant White Pantone P 179-1 C
Mounting Type:	Standard 1" -14 TPI marine mount

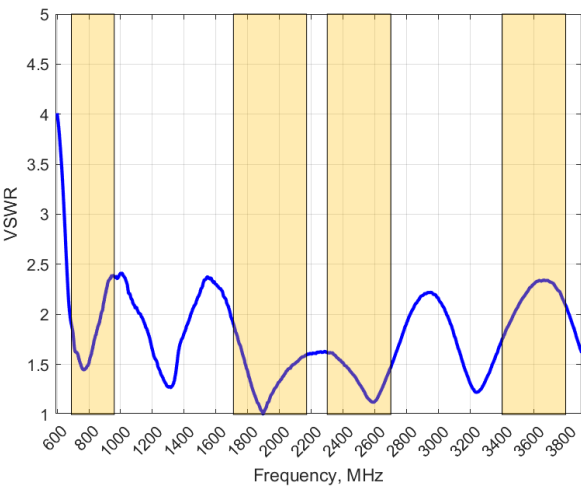
Environmental Specifications, Certification & Approvals

Wind Survival:	<190 km/h
Temperature Range (Operating):	-40°C to +80°C
Environmental Conditions:	Outdoor/Indoor
Water ingress protection ratio/standard:	IP 68
Salt Spray:	MIL-STD 810F/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 10
Product Safety & Environmental:	Complies with CE and RoHS Standards

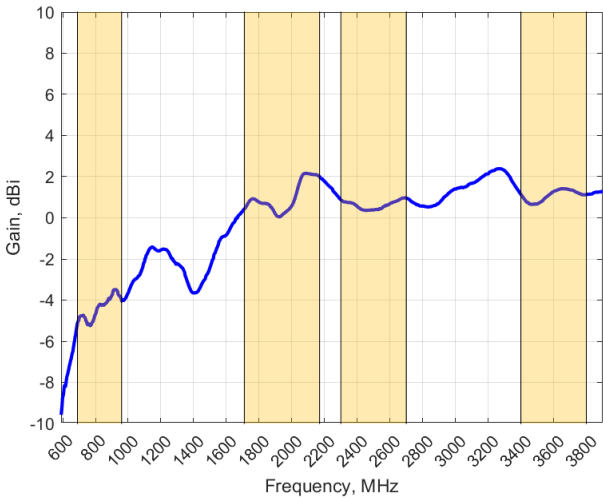


Antenna Performance Plots

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-404 delivers superior performance across all bands with a VSWR of <2.5:1

*Antenna VSWR measured with 2m low loss cable

Gain* in dBi

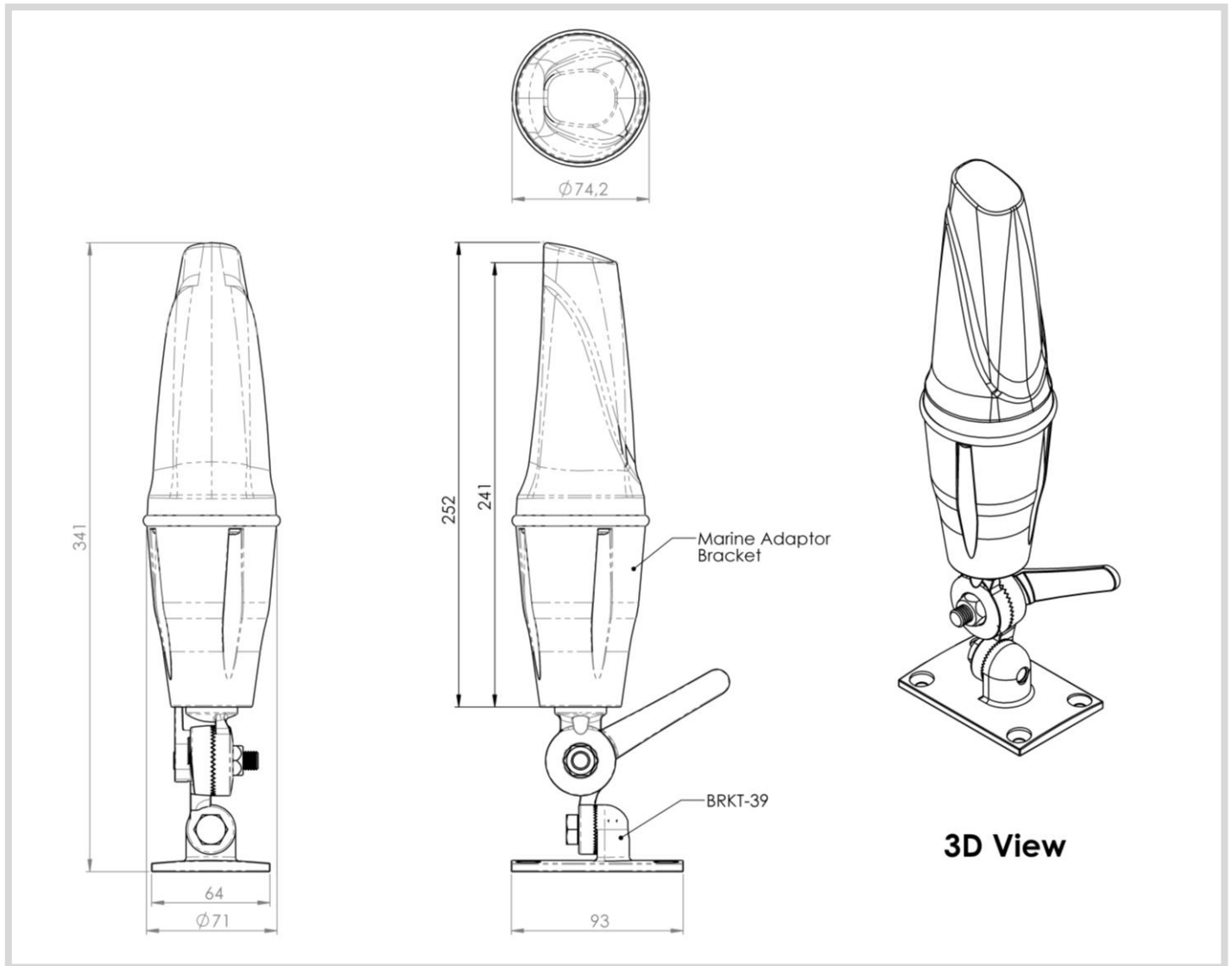
2 dBi is the peak gain across all bands from 690 – 3800 MHz

Gain @ 698-960MHz	-4 dBi
Gain @ 1710-2700MHz	2 dBi
Gain @ 3400-3800MHz	1.5 dBi

*Antenna gain measured with polarisation aligned standard antenna

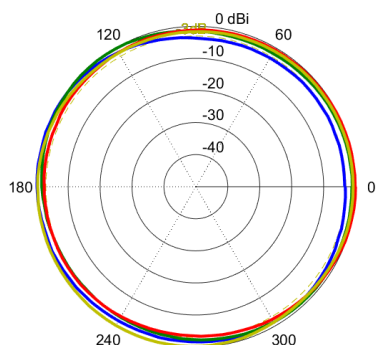
Technical Drawings

With Standard Marine Mounting and BRKT-39 (not included)



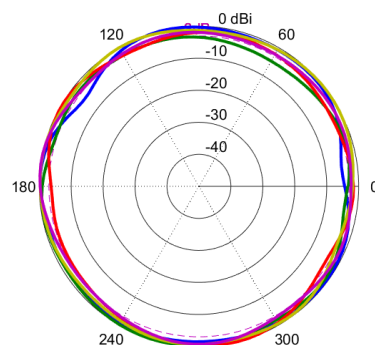
Radiation Patterns

Azimuth (Top View): 690–960 MHz



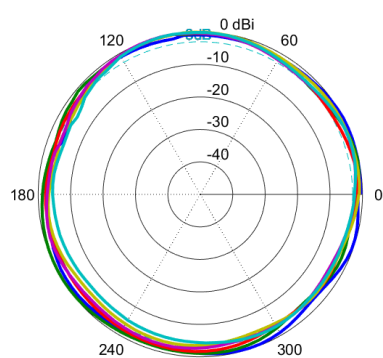
690 MHz
760 MHz
860 MHz
960 MHz

Azimuth (Top View): 1710–2170 MHz



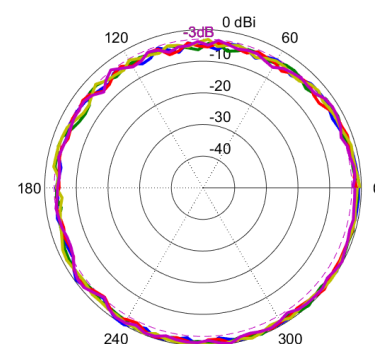
1710 MHz
1850 MHz
1950 MHz
2050 MHz
2170 MHz

Azimuth (Top View): 2170–2700 MHz



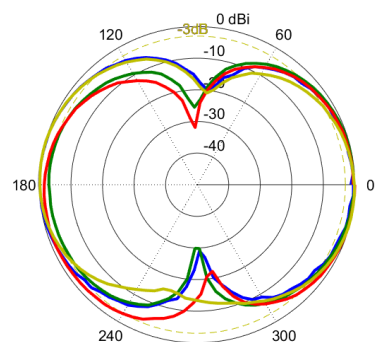
2170 MHz
2300 MHz
2400 MHz
2500 MHz
2600 MHz
2700 MHz

Azimuth (Top View): 3400–3800 MHz



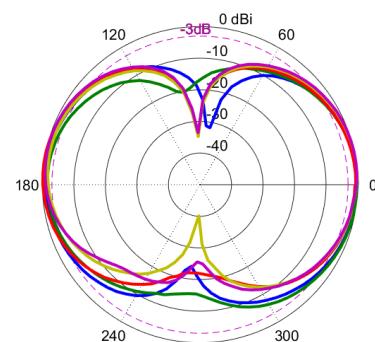
3400 MHz
3500 MHz
3600 MHz
3700 MHz
3800 MHz

Elevation1 (Side View): 690–960 MHz



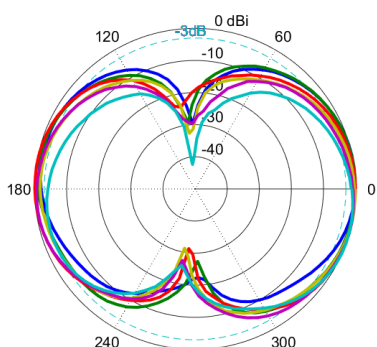
690 MHz
780 MHz
870 MHz
960 MHz

Elevation1 (Side View): 1710–2170 MHz



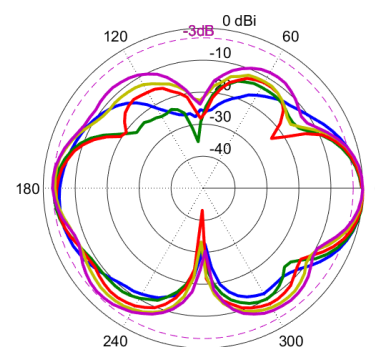
1710 MHz
1850 MHz
1950 MHz
2050 MHz
2170 MHz

Elevation1 (Side View): 2170–2700 MHz



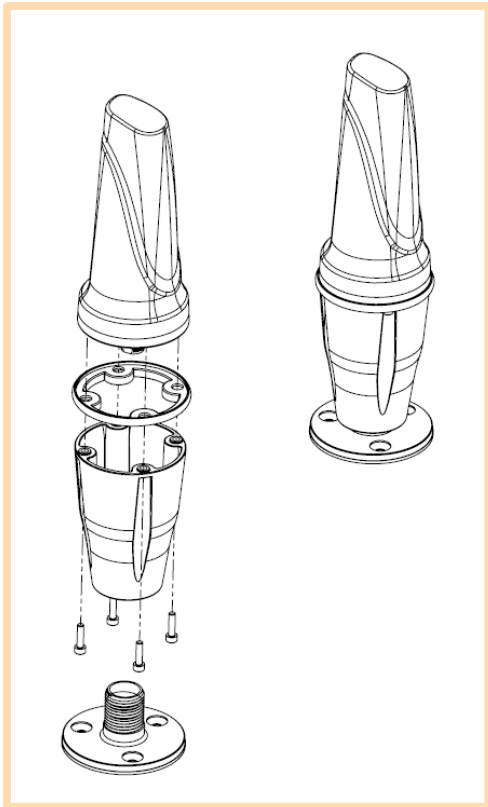
2170 MHz
2300 MHz
2400 MHz
2500 MHz
2600 MHz
2700 MHz

Elevation1 (Side View): 3400–3800 MHz



3400 MHz
3500 MHz
3600 MHz
3700 MHz
3800 MHz

Mounting Options



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" – 11 TPI female adapter (Optional)

Optional 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

See accessories technical specifications on 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