

## Omni-directional OMNI Antenna | Marine & Coastal applications

### KEY FEATURES

- Omni Directional LTE or 5G Antennas
- Wideband frequency from:
  - 690 MHz to 2700 MHz (OMNI-403) for LTE
  - 690 MHz to 3800 MHz (OMNI-404) for LTE & 5G
- Medium gain antenna:
  - OMNI-403: Peak gain of 5 dBi
  - OMNI-404: Peak gain of 2.5 dBi
- Selection of LTE / 5G Ready and future proof antennas
- Works on all Cellular LTE networks across the world, including new 3.5GHz LTE/5G band
- UV Stable Enclosure
- Waterproof & dustproof antenna (IP68)
- Suitable for marine and coastal applications
- Saltwater protected
- Robust and strong design to survive adverse weather conditions at sea
- Able to withstand winds of up to 250 km/h
- DC grounded to prevent static discharge from damaging router equipment

### KEY APPLICATION AREAS

- Marine applications, such as: super yachts, commercial vessels, (river-) cruise ships, Ferries, private yachts, towing-vessels and speed boats
- Buoy IoT applications
- Other applications with harsh environments such as harbour buildings, buoys, pontoons and smaller boats
- Coastal and other salt corrosive environments along the coastline, lake sides and other high humid areas
- Smart Environmental, Water Systems and Utilities M2M & IoT
- Can be used for commercial, industrial, residential and urban applications, where high IP rating antennas are required
- Farming & Agricultural M2M & IoT

#### OMNI Antenna Series

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Product Specifications may change without prior notice  
Revised: March 2020



Regulatory Compliance: RoHS 2011/65/EU Compliant | ISO 9001:2015

Document version: Product Brief OMNI-403 and OMNI-404 v1.0

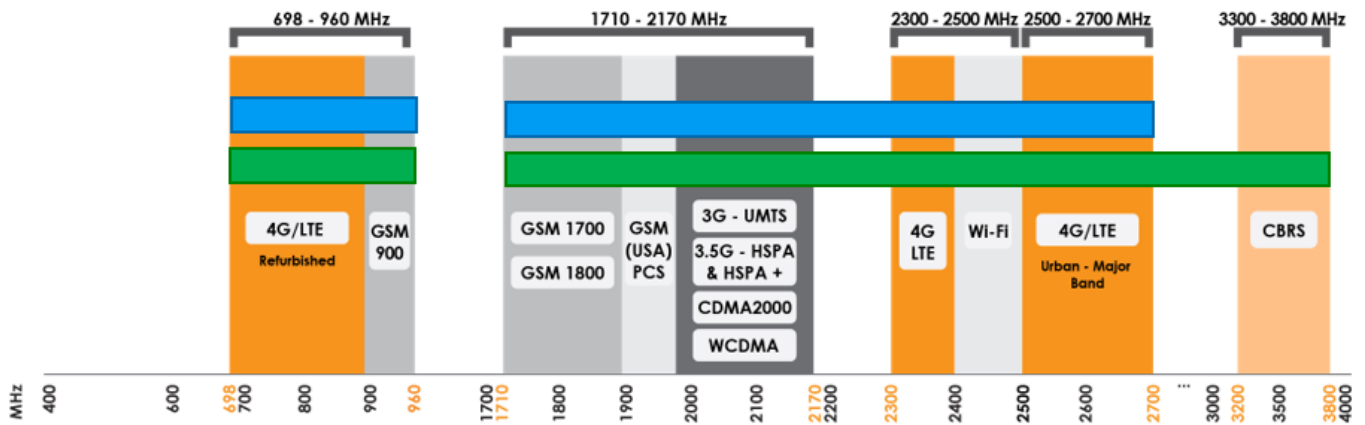
www.poynting.tech



## Product Overview

Poynting's new OMNI-403 and OMNI-404 antennas are smaller versions of our very popular OMNI-291 marine antenna. These new antennas have a smaller profile radome which is specifically designed for adverse marine & coastal environments. The two new omni-directional antennas are intended to supplement and expand the range to offer more options to our customers, especially where aesthetics require a smaller antenna onboard.

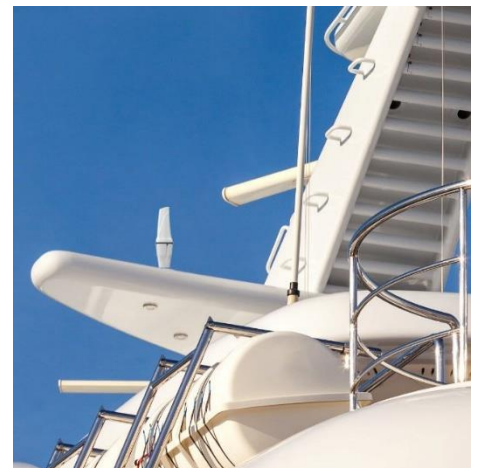
The antennas are designed for superior pattern control across the entire frequency range, making the OMNI-403 and OMNI-404 exceptional omni-directional antennas for their size and application. The antennas cover the contemporary LTE/5G Ready bands from 698MHz to 2700MHz as well as the LTE/CBRS band from 3200 MHz to 3800 MHz (OMNI-404). Therefore, providing reception capability for the most popular international LTE & 5G bands. The frequency bands for these antennas are illustrated in the following graph.



Indicates the frequency bands supported by OMNI-403      Indicates the frequency bands supported by OMNI-404

Conventional antenna designs, such as an array of dipoles and other similar designs, do not achieve the necessary characteristics for a wide impedance and gain bandwidth antenna, while demanding near ideal radiation patterns over the whole bandwidth. Poynting Antennas has achieved this performance using an innovative design whereby the impedance, gain and radiation patterns are harmonised over the entire frequency range, providing superior performance across all the bands. This is an important factor for LTE and future 5G technologies, where they rely on capacity and throughput enhancing features such as Carrier Aggregation (CA) to provide the best possible reception and throughput over multiple frequency bands simultaneously. Poynting Antennas are well known to outlast the next technologies and these antennas are no different.

Both antennas are specifically designed for marine applications and features IP68 protection against water, making the antennas ideal for the most severe storms at sea. The antennas are also fully saltwater protected so that it can be used in highly corrosive environments, including chemical and toxic environments. This is thanks to the SAN Marine ASA radome material. Although the antennas are designed for marine applications they can also be used for commercial, industrial, residential and urban implementation.



Both marine antennas offer a standard 1"-14TPI marine adaptor (BRKT-40 in the box) and can optionally provide a standard 1¼"-11TPI marine adapter (BRKT-41) where these larger mounting points are already installed on the yacht or boat.

A series of optional 316 grade stainless steel marine mounts are available, namely the BRKT-37, BRKT-38 & BRKT-39. The difference between the various brackets are:

- BRKT-37 is a marine flat mount antenna bracket
- BRKT-38 is ratchet rail mount antenna bracket
- BRKT-39 is a heavy-duty marine mount antenna.

Both antennas comply with the relevant CE, EN, CSA, RoHS and IEC Standards as stated in our technical sheets. They are also rated for temperatures from -40°C to +80°C and will survive winds of up to 250 km/h with a rating of IK10 impact resistance.



OMNI-403 (or OMNI-404)  
mounted using the 316  
stainless steel BRKT-39