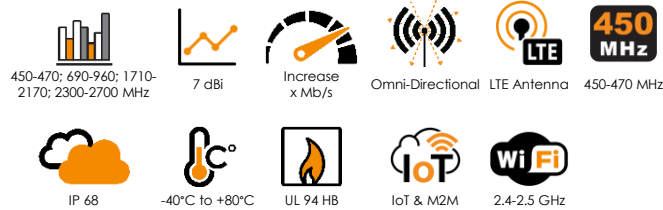


OMNI-291-V2

ANTENNAS | OMNI-291-V2 SERIES

OMNI DIRECTIONAL MARINE ANTENNA

HIGH PERFORMANCE LINEAR MARINE & COASTAL 450-2700 MHZ ANTENNA



- **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**
- **Various 316 Stainless Steel mounting brackets available optionally**
- **UV and Saltwater protected against tempestuous weather conditions.**



APPLICATION AREAS

Product Overview

The OMNI-291-V2 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, including the LTE & CDMA 450 MHz bands which are common requirements for marine applications. Higher frequencies are not compromised, and the antenna design allows Poynting to have superior pattern control over the entire frequency range making the OMNI-291-V2 a true high performance omni-directional antenna. Usable in all parts of the world, the OMNI-291 guarantees signal reception almost everywhere along the coast. Poynting Antennas achieves this through new antenna configuration using multiple dipoles and a unique (patented) feed network. The antenna is future proof as it covers the 450 MHz LTE frequency getting more and more popular in various regions and countries!

Features

- Medium gain omni-directional antenna
- The antenna is purpose-built for marine and coastal applications
- Lightweight
- UV and Salt-water resistant
- Robust and weather resistant
- 2.4 - 2.5 GHz band can be used as Wi-Fi antenna

Application Areas

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

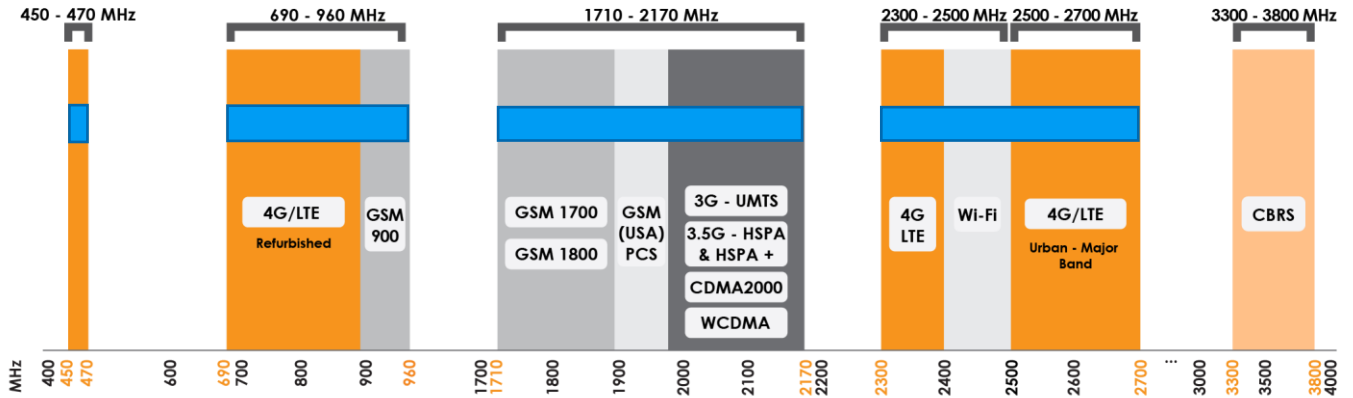


OMNI-291-V2

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Product Specifications may change without prior notice
Revised: August 2018

Frequency bands

The OMNI-291-V2 is suitable for the following frequency bands | 450-470 MHz | 690-960 MHz | 1710-2170 MHz | 2300-2700 MHz |

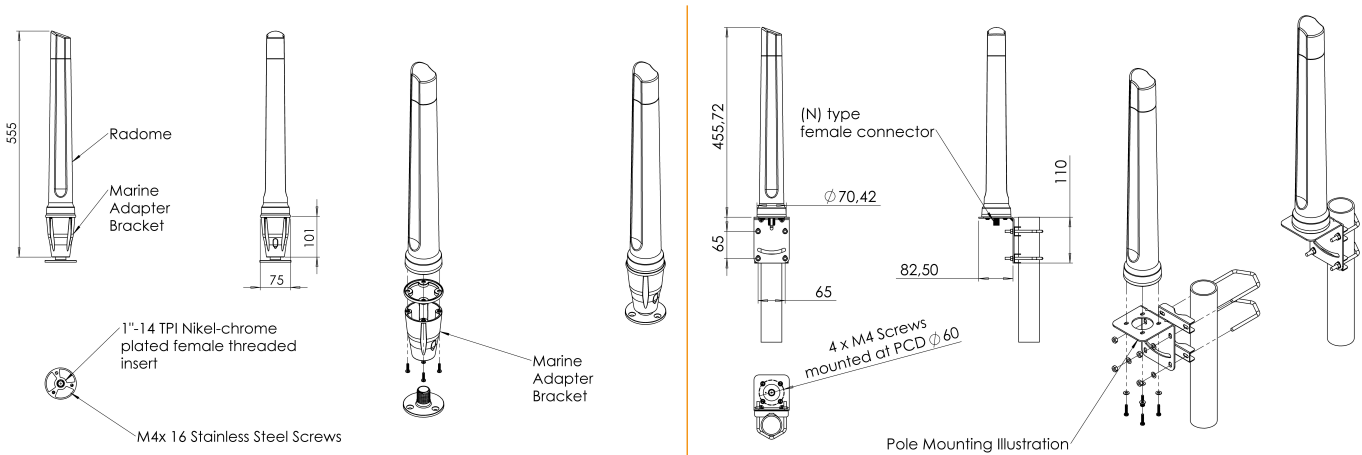


Indicates the frequency bands which OMNI-291-V2 supports

Antenna Overview

Frequency Bands	450 MHz - 2700 MHz
Peak Gain	7 dBi
Coax Cable Type	N/A
Coax Cable Length	N/A
Connector Type	N-Type Female

Technical Drawings



Electrical Specifications

Frequency bands:	450-470 MHz 690-960 MHz 1710-2170 MHz 2300-2700 MHz
Gain (max):	7 dBi
VSWR:	<2.5:1 over 90% of the band
Feed power handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	Linear Vertical
Coax cable loss:	Optional, cable dependant
DC short:	Yes

Coax Cable & Connector Type

Cable length:	N/A
Coax cable type:	N/A
Connector type:	N-Type Female (Silver/Nickel Plated) <i>*The connector is factory mounted to the antenna</i>

Product Box Contents

Antenna:	A-OMNI-0291-V2
Mounting bracket:	Marine Adapter (1" -14 TPI) & L-bracket (Ø30-50mm Pole)

Ordering Information

Commercial name:	OMNI-291-V2
Order product code:	A-OMNI-0291-V2
EAN number:	6009880915132

Mechanical Specifications

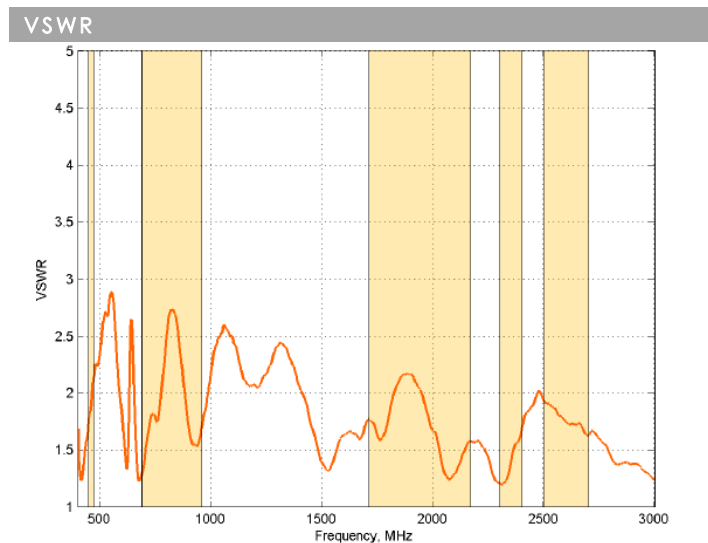
Product dimensions	± 560 mm x 75 mm (Incl. Marine Bracket)
Packaged dimensions:	580 mm x 95 mm x 95 mm
Weight:	0.576 kg
Packaged weight:	1.245 kg
Radome material:	UV Stable SAN Marine ASA
Radome colour:	Brilliant White Pantone P 179-1 C
Mounting Type:	Standard 1" -14 TPI marine mount & Wall/pole mount

Environmental Specifications, Certification & Approvals

Wind Survival:	<160 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
Flammability Rating:	UL 94-HB
Impact resistance:	IK 08
Product Safety & Environmental:	Complies with CE, EN, CSA, RoHS and IEC standards



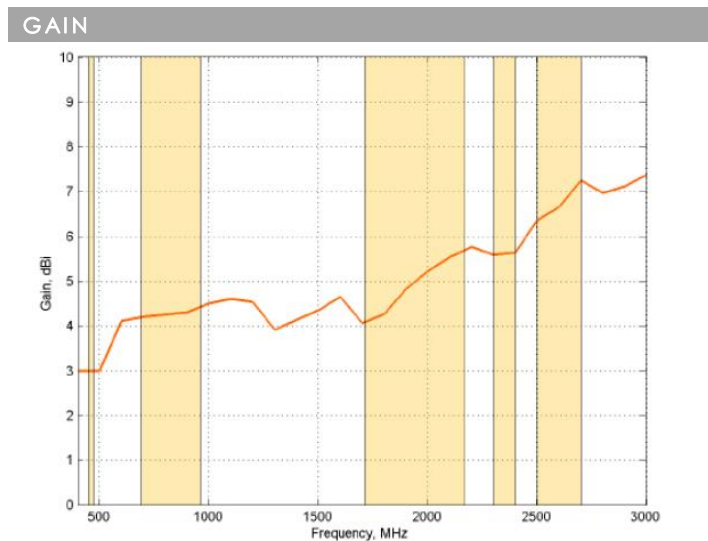
Antenna Performance Plots



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.

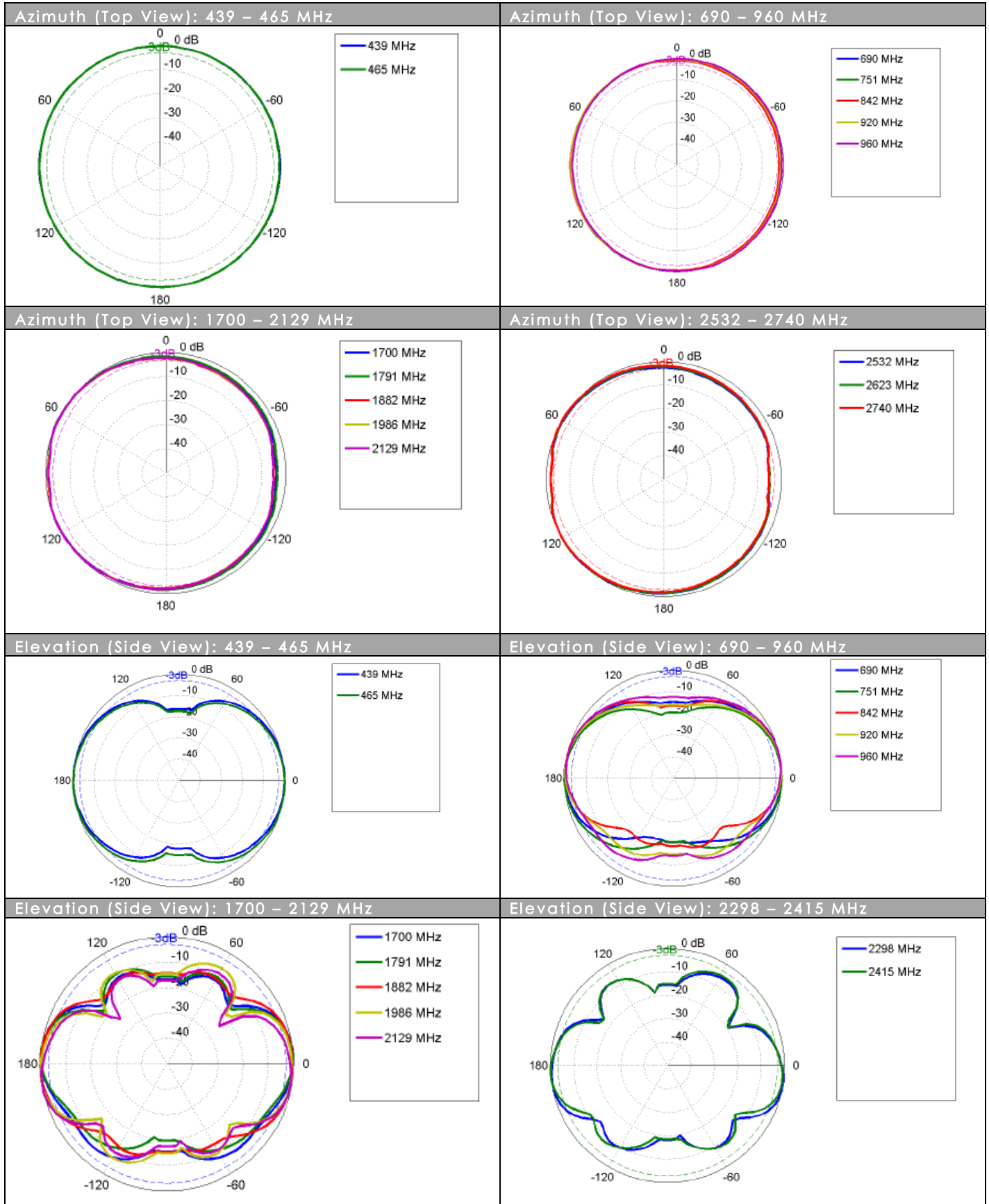
The OMNI-291-V2 delivers superior performance across all bands with a VSWR of 2.5:1 or better across 90% of the bands.



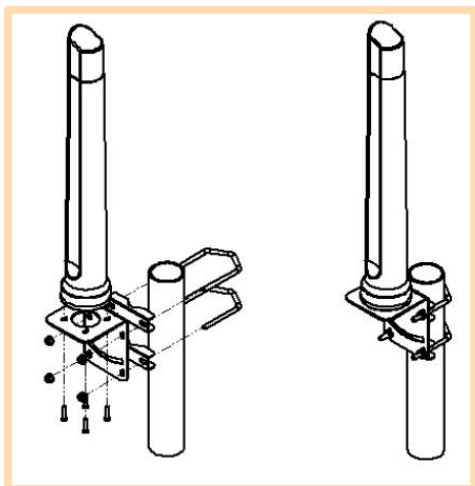
Gain in dBi

7 dBi is the peak gain across all bands from 450 – 2700 MHz

Radiation Patterns

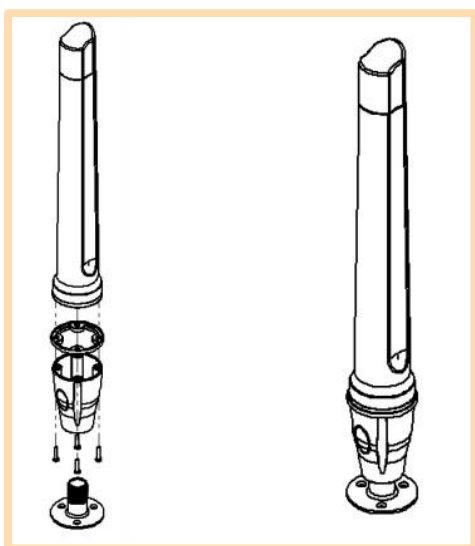


Mounting Options



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)

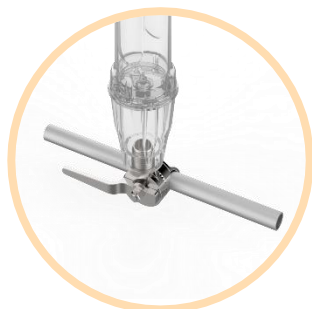
See Optional Accessories below

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

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