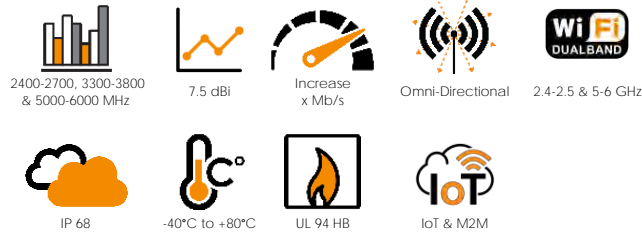


OMNI-496

ANTENNAS | OMNI-496 SERIES

DUAL BAND WI-FI MARINE ANTENNA

2400-2500, 3300-3800 & 5000-6000 MHz HIGH GAIN OMNI-DIRECTIONAL ANTENNA



- Dual band 2.4 GHz and 5 GHz Wi-Fi antenna
- This antenna also supports the Wi-Fi/WiMax/LTE 3.3GHz- 3.8GHz frequencies with a max gain of 7.5dBi
- Compliant with IEEE 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac wireless standard
- Easy mounting with feed through 1-inch marine standard mounts
- Robust and All-weather proof (IP 68)
- UV and Saltwater protected against tempestuous weather conditions
- Various mounting options available
- This antenna is designed for Wi-Fi coverage on deck of the vessel



Urban



Rural/Farm



Marine



Transportation

APPLICATION AREAS

Product Overview

The OMNI-496 Dual-Band Wi-Fi Omni directional antenna, developed by Poynting Antennas, can connect to any Wi-Fi access point whether it is older Wi-Fi technology or new dual band 802.11ac enabled Wi-Fi technology. These antennas can resolve channel saturation and provide the ultimate in Wi-Fi performance and flexibility. The OMNI-496 is an IP68 marine version of its urban, industrial & commercial counterpart; the OMNI-296.


The antenna operates in two frequency bands 2.4 GHz and 5 GHz, offering excellent utilization of the radio spectrum. This Antenna has a maximum 6dBi gain at 2.4GHz band and 7.5dBi gain at the 5GHz band, which offers the best performance with reliable connections. The antenna has a N-Type female connector at its base which can be terminated to a cable of the desired type and length.

Features

- On deck marine applications / Yachts / Boats / Ferries
- IoT and M2M
- Poor data signal reception
- Improve data transmission connection reliability & stability
- Wi-Fi Applications

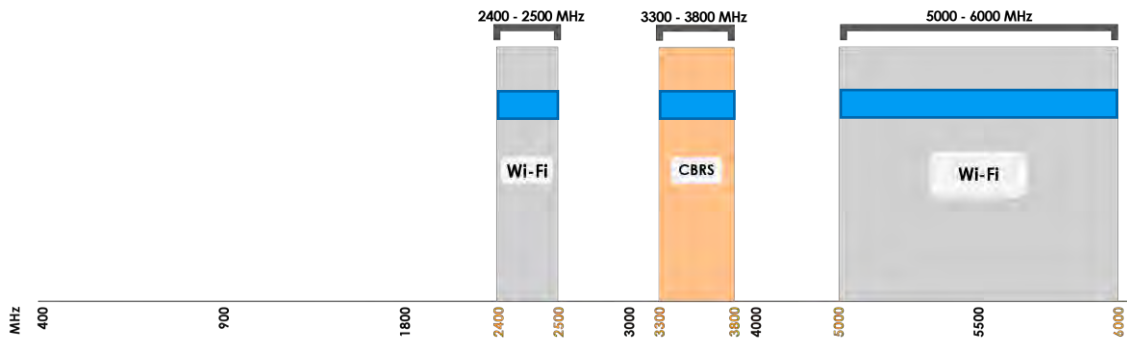


Antenna Overview

	
Frequency Bands	2400 – 2500, 3300 – 3800 & 5000 - 6000 MHz
Peak Gain	7.5 dBi
Coax Cable Type	N/A
Coax Cable Length	N/A
Connector Type	N Type female

Frequency bands

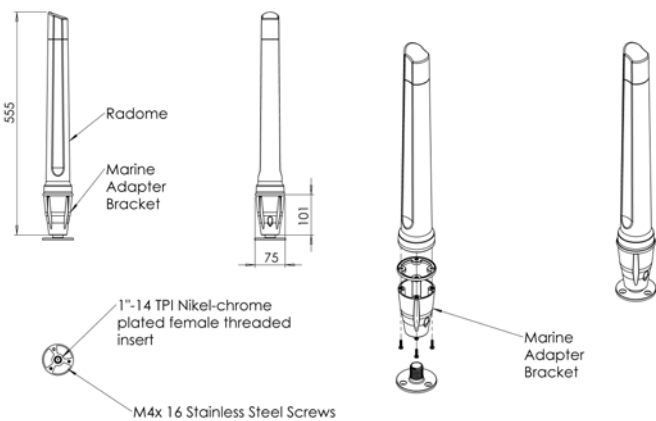
The OMNI-496 is suitable for the following frequency bands | 2400-2500 | 3300-3800 MHz | 5000-6000 MHz |



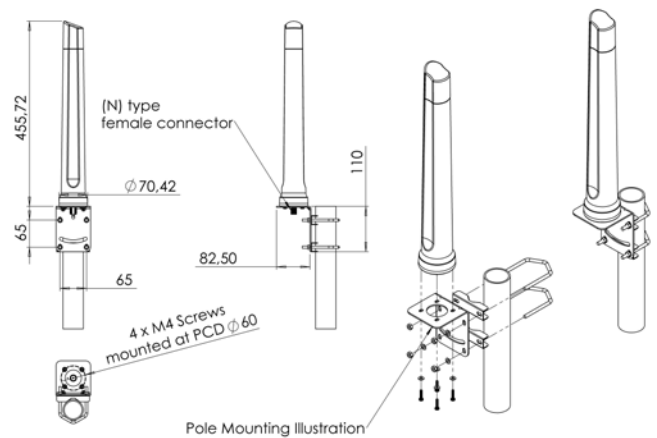
 Indicates the frequency bands which OMNI-496 supports

Technical Drawings

With Standard Marine Mounting:



With Standard L-Bracket Mounting:



Electrical Specifications

Frequency bands:	2400-2500 MHz 3300-3800 MHz 5000-6000 MHz
Gain (max):	7.5 dBi
VSWR:	≤2.5:1
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

**The connector is factory mounted to the antenna*

Product Box Contents

Antenna:	A-OMNI-0496
Mounting bracket:	Marine Adapter (1" -14 TPI) & L-bracket (Ø30-50mm Pole)

Ordering Information

Commercial name:	OMNI-496
Order product code:	A-OMNI-0496-V1
EAN number:	6009880915156

Mechanical Specifications

Product dimensions	± 560 mm x 75 mm (Incl. BRKT-40)
Packaged dimensions:	580 mm x 95 mm x 90 mm
Weight:	0.41 Kg
Packaged weight:	1.21 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

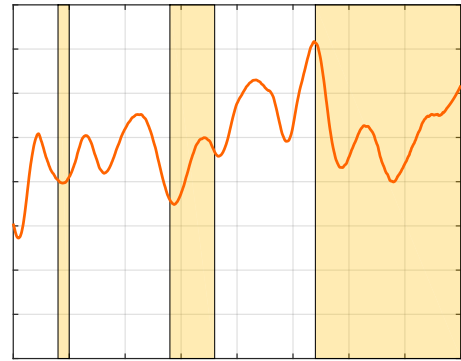
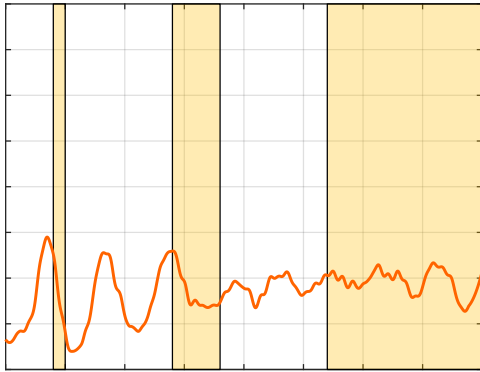
Environmental Specifications, Certification & Approvals

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

VSWR **GAIN: (excluding cable loss)**



Voltage Standing Wave Ratio (VSWR)

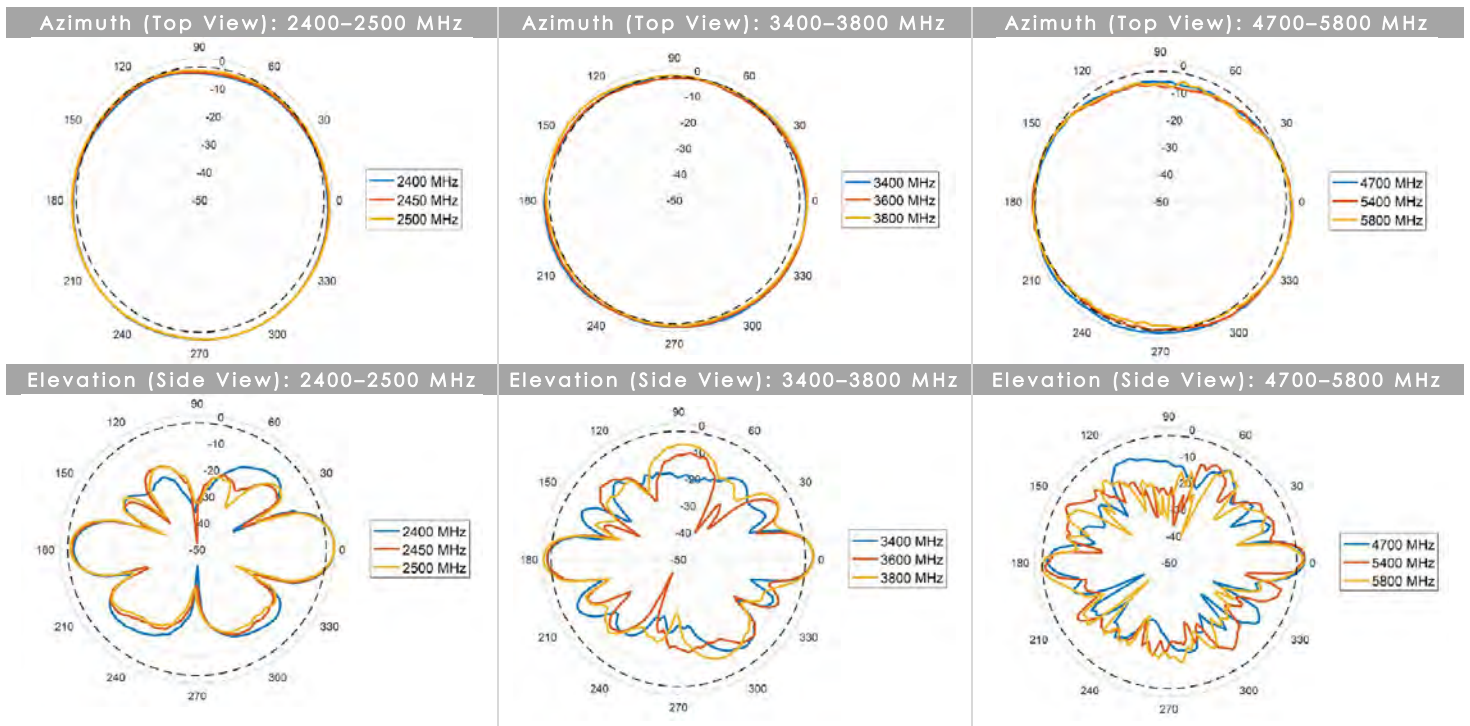
VSWR is a measure of how efficiently radio-frequency power is transmitted from a power source, through a transmission line, into a load. In an ideal system, 100% of the energy is transmitted which corresponds to a VSWR of 1:1.

The OMNI-496 delivers superior performance across all bands with a VSWR of ≤ 2.5

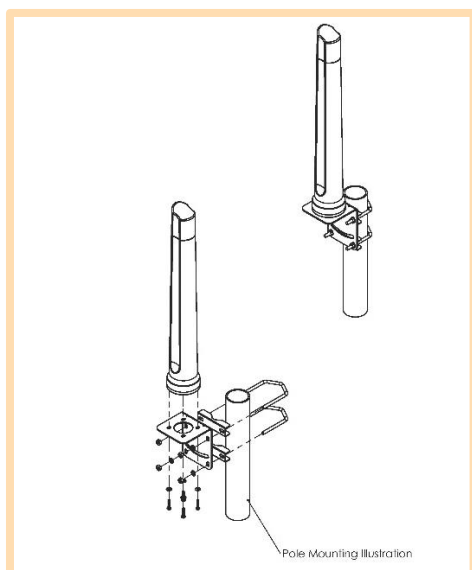
Gain in dBi

7.5 dBi is the peak gain across all bands from 2400 – 6000 MHz

Radiation Patterns

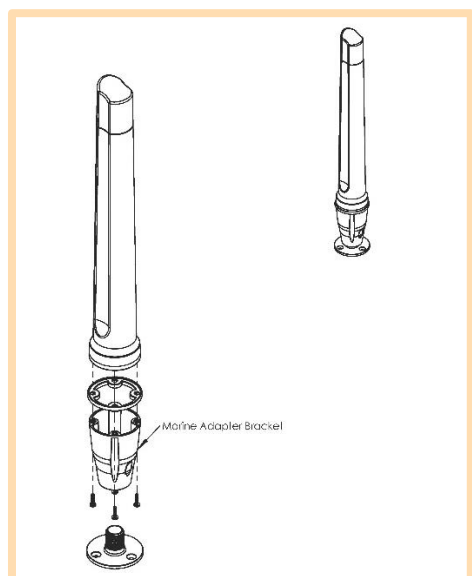


Mounting Options



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)

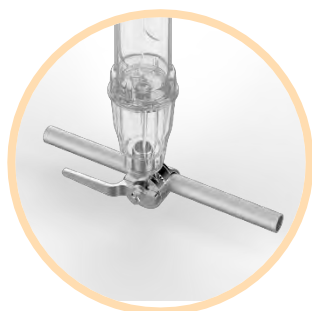
See Accessories below

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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