













## ANTENNAS | OMNI-702 SERIES

# OMNI-DIRECTIONAL, WI-FI ANTENNA

2400 – 2500 MHz, 6 dBi



 2400 – 2500 MHz	 6 dBi	 Increase X Mb/s	 Omni- Directional	 2.4 – 2.5 GHz	 Internet of Things
 Machine to Machine	 -40°C to +80°C	 Fire Resistant	 Chemical Protection	 IK 10	 IP 69K

- High gain, omni-directional Wi-Fi antenna
- Suitable for 2.4 GHz Wi-Fi deployment
- Compliant with IEEE 802.11b/g wireless standard
- Ideal for IoT and M2M application
- Highly rugged and vandal resistant design
- High pressure water and dust ingress protected enclosure (IP 69K)



APPLICATION AREAS

## Product Overview

The OMNI-702 antenna is an omni-directional Wi-Fi antenna, developed by Poynting Antennas. The antenna operates from 2.4 – 2.5 GHz, covering the 2.4 GHz Wi-Fi band, and has a maximum gain of 6 dBi. The constant gain throughout the entire band offers improved performance with reliable connections. The antenna was designed for superior pattern control over the entire frequency range, making the OMNI-702 an exceptional omni-directional antenna for its size. The antenna can connect to any Wi-Fi access point and resolve channel saturation and provide ultimate Wi-Fi performance and flexibility. The rugged enclosure design offers protection in adverse environmental conditions with an IP 69K and IK 10 rating. The antenna has an N-Type female connector at its base, which can be connected to a cable of the desired type and length.

## Features

- High performance omni-directional antenna
- High gain Wi-Fi antenna from 2400 to 2500 MHz
- Easy installation, pole- or wall mountable
- Stylish and robust design
- High pressure water and dust proof enclosure (IP 69K)

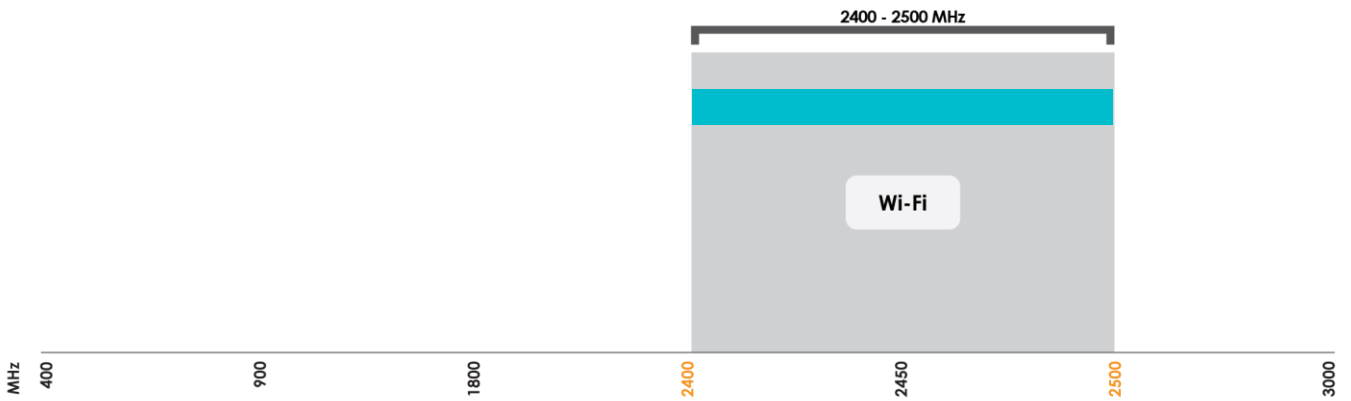
## Application Areas

- Smart Utilities: Smart Power Metering, Gas & Water Metering
- Smart Buildings: Climate control, access control, security, irrigation
- Smart Environmental & Water Systems
- Warehouses & Logistics systems
- Industrial factory automation and M2M systems
- Farming & Agricultural M2M IoT



**Frequency Bands**

The OMNI-702 is a Wi-Fi/ISM antenna that works from | 2400 – 2500 MHz |



Indicates the WI-FI bands on which OMNI-702 works

**Antenna Overview**

Ports	1
SISO / MIMO	SISO
Frequency Bands	2400 – 2500 MHz
Polarisation	Linear Vertical
Peak Gain	6 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:	2400 – 2500 MHz
Gain (Max):	6 dBi
VSWR:	<1.5:1
Feed Power Handling:	10 W
Input Impedance:	50 Ohm (nominal)
Polarisation:	Linear Vertical
DC Short:	Yes

**Product Box Contents**

Antenna:	A-OMNI-702
Mounting Bracket (Included):	Adhesive Disc & L-Bracket (Ø20-70mm Pole)

**Ordering Information**

Commercial Name:	OMNI-702
Order Product Code:	A-OMNI-0702-V1-01
EAN Number:	6009710921999

**Mechanical Specifications**

Product Dimensions	306 mm x Ø70 mm
Packaged Dimensions	386 mm x 80 mm x 96 mm
Weight	0.25 kg
Packaged Weight	0.555 kg
Radome Material:	UV Stable ASA
Radome Colour:	Grey Pantone 429C
Mounting Type:	Wall and Pole Mount Using L-Bracket & Surface Mount Using Adhesive Disc

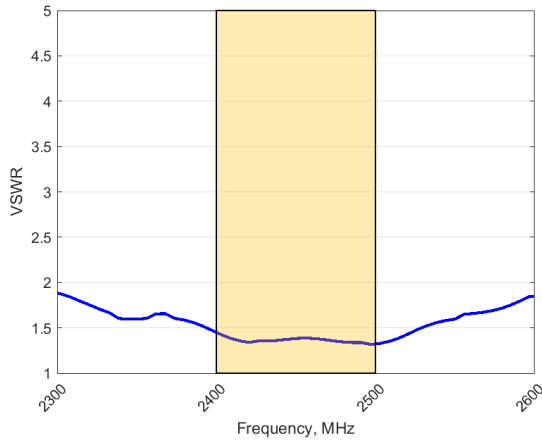
**Environmental Specifications, Certification & Approvals**

Wind Survival:	<190 km/h
Temperature Range (Operating):	-40°C to +80°C
Environmental Conditions:	Outdoor/Indoor
Water Ingress Protection Ratio/Standard:	IP 69K
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 10
Product Safety & Environmental:	Complies with CE and RoHS standards

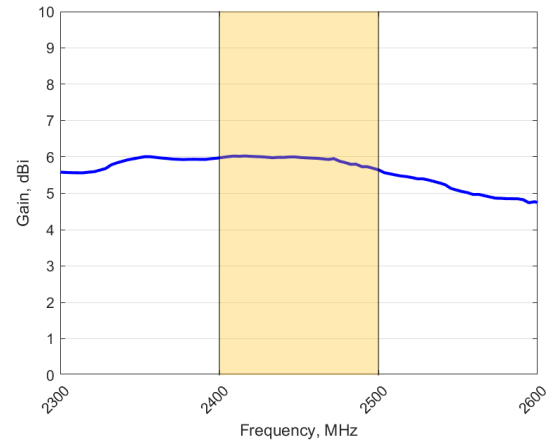


**Antenna Performance Plots**

**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-702 delivers superior performance across all bands with a VSWR of <1.5:1.

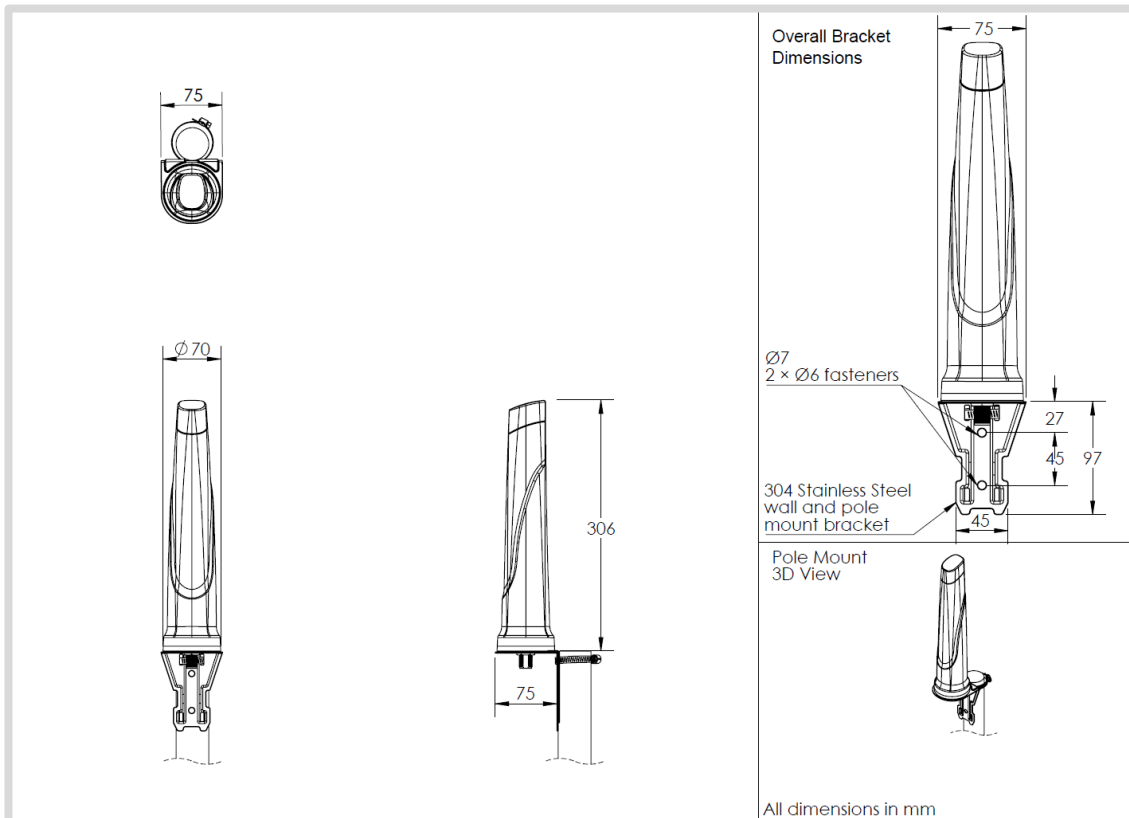
\*VSWR measured without a cable

**Gain\* in dBi**

6 dBi is the peak gain across all bands from 2400 – 2500 MHz

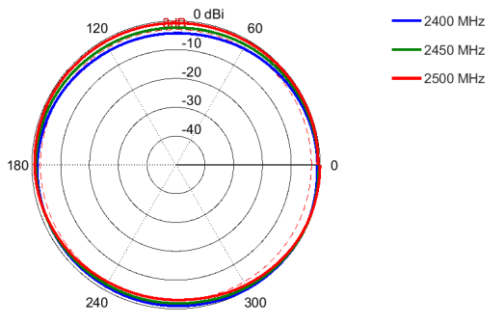
\*Antenna gain measured with polarisation aligned standard antenna

**Technical Drawings**

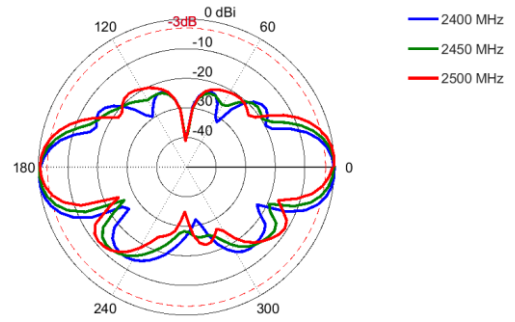


Radiation Patterns

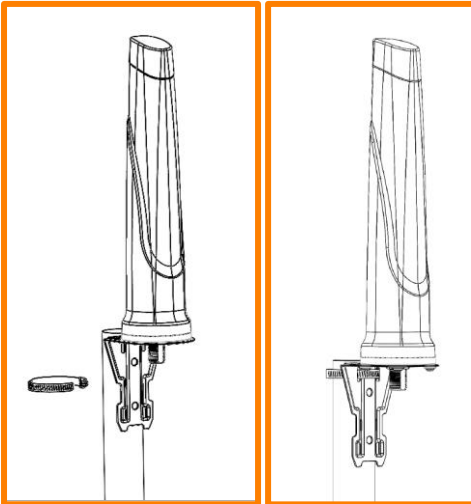
Azimuth: 2400 – 2500 MHz



Elevation: 2400 – 2500 MHz

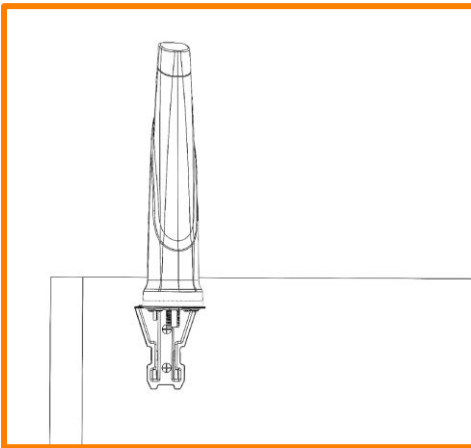


**Mounting Options**



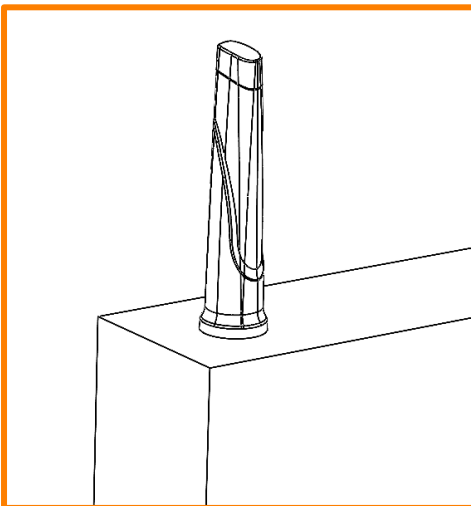
**Pole Mount**

Pole mounted using included L-Bracket and cable clamp



**Wall Mount**

Wall / Cabinet mounted using included L-Bracket




**Surface Mount**

Surface mounted using included adhesive disc

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## Additional Accessories

See accessories technical specifications on [www.poynting.tech](http://www.poynting.tech)



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