# **OMNI-702**



**ANTENNAS | OMNI-702 SERIES** 

## OMNI-DIRECTIONAL WI-FI ANTENNA

2400 - 2500 MHz, 8 dBi





2400 - 2500 MHz;

M2M Machine to





x Mb/s



Omni-

Directional

IP 69K



IK 10



Thinas















Suitable for 2.4 GHz Wi-Fi deployment

-40°C to +80°C Fire Resistant

- Compliant with IEEE 802.11b/g wireless standard
- Ideal for IoT and M2M applications
- Highly rugged and vandal resistant design
- High pressure water and dust ingress protected enclosure (IP69K)

#### **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 8 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**

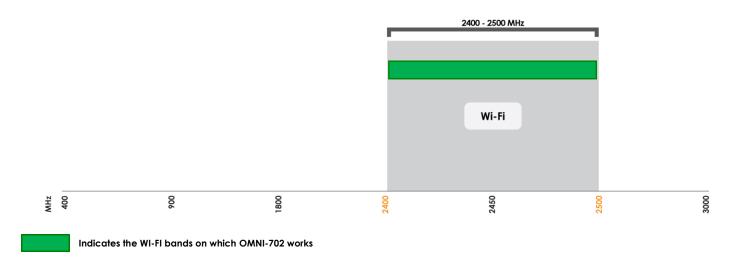
- Smart Utilities: Smart Power Metering, Gas & Water
- Smart Buildings: Climate control, access control, security,
- Smart Environmental & Water Systems
- Warehouses & Logistics systems
- Industrial factory automation and M2M systems
- Farming & Agricultural M2M IoT





## Frequency Bands

The OMNI-702 is an omni-directional antenna that works from 2400 – 2500 MHz



## **Antenna Overview**

	Wi Fi
Ports	1
SISO / MIMO	SISO
Frequency Bands	2400 – 2500 MHz
Polarisation	Linear (Vertical)
Peak Gain	8 dBi
Coax Cable Type	N/A
Coax Cable Length	N/A
Connector Type	N-Type (F)



Pantone 429C

## **Electrical Specifications**

Frequency bands: 2400 - 2500 MHz

8 dBi Gain (max):

VSWR: <1.5:1

Feed power handling: 10 W

50 Ohm (nominal) Input impedance:

Polarisation: Linear Vertical

DC short: Yes

**Product Box Contents** 

Antenna: A-OMNI-0702

Included L-Bracket and adhesive Mounting bracket:

**Ordering Information** 

Commercial name: OMNI-0702

Order product code: A-OMNI-0702-V1-01

EAN number: 6009710921999 **Mechanical Specifications** 

**Product dimensions** 306 mm x Ø70 mm

Packaged dimensions: TRC

Weiaht: TBC

Packaged weight: TBC

UV Stable ASA Radome material:

Radome colour: Grev

**Mounting Type:** Pole, wall and surface 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 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:** 

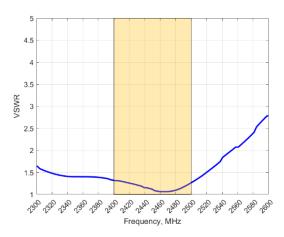
Complies with CE and RoHS standards





### **Antenna Performance Plots**

#### VSWR

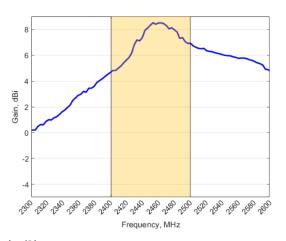


## Voltage Standing Wave Ratio (VSWR)\*

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 or better across the band.

#### GAIN (EXCLUDING CABLE LOSS)



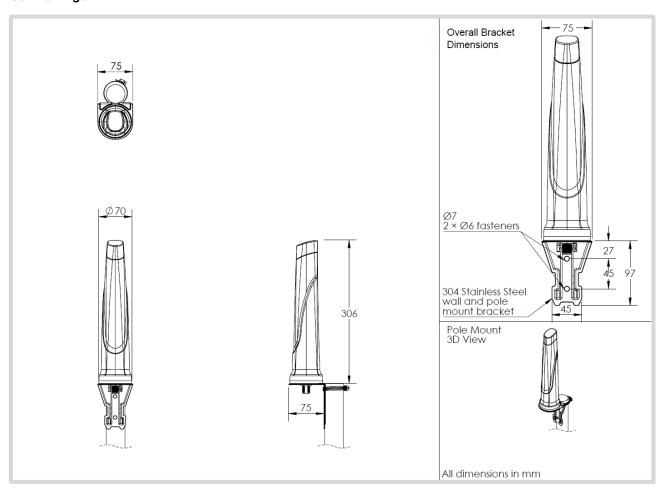
#### Gain+ in dBi

8 dBi is the peak gain across all bands from 2400 - 2500 MHz

Gain @ 2400 - 2500 MHz:

8 dBi

## **Technical Drawings**

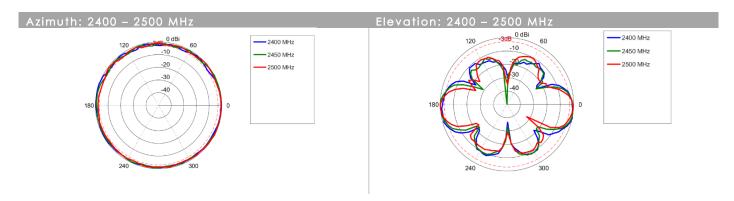


<sup>\*</sup> VSWR measured with no cable

<sup>\*</sup>Antenna gain measured with polarisation aligned standard antenna

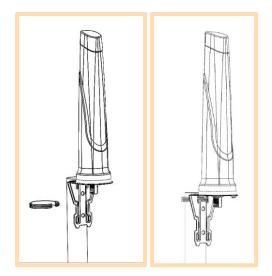


## **Radiation Patterns**



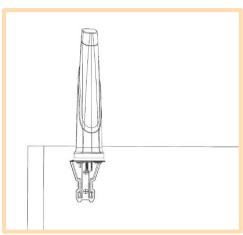


## **Mounting Options**



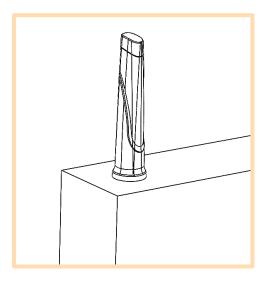
#### **Pole Mount**

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



## **Optional Accessories**

See accessories technical specifications on www.poynting.tech

## **Contact Poynting**

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