OMNI-702

ANTENNAS | OMNI-702 SERIES

OMNI-DIRECTIONAL WI-FI ANTENNA

2400 – 2500 MHz, 8 dBi

2400 – 2500 MHz | 8 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 | IP 69K | IK 10

- **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 applications**
- **Highly rugged and vandal resistant design**
- **High pressure water and dust ingress protected enclosure (IP69K)**

APPLICATION AREAS: Rural/Farm, Industrial, Mining, Tunnelling

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 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

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Product Specifications may change without prior notice
Revised: January 2022

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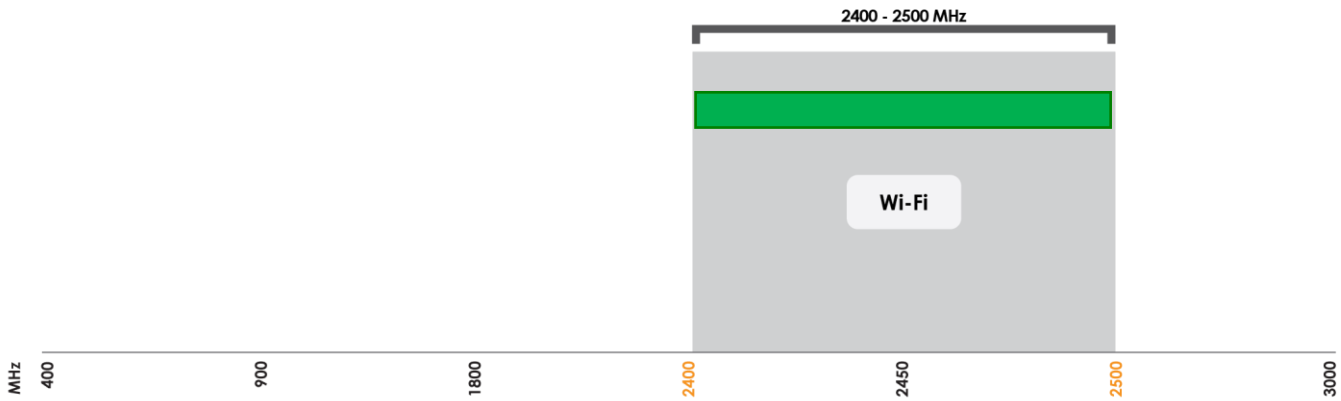
Frequency Bands

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



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

Antenna Overview

	Wi Fi DUAL BAND
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)

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Electrical Specifications

Frequency bands:	2400 – 2500 MHz
Gain (peak):	8 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-0702
Mounting bracket:	Included L-Bracket and adhesive disc

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:	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:	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

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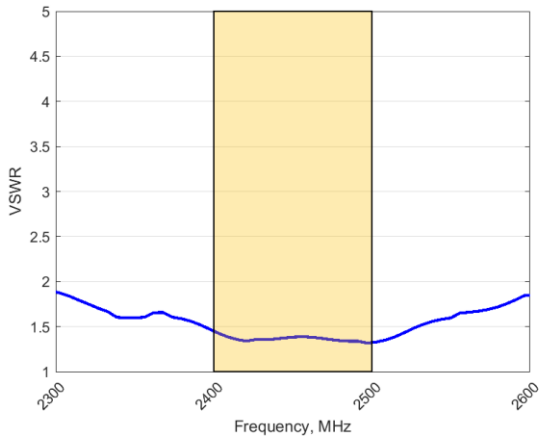
Antenna Performance Plots

VSWR



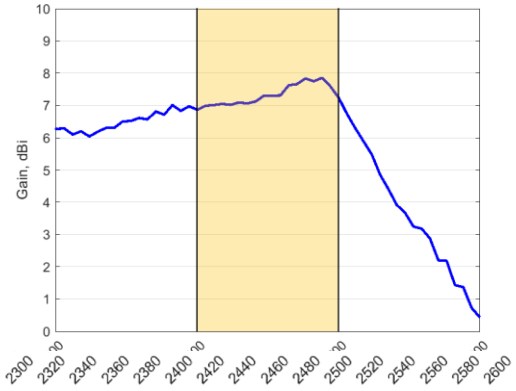
Voltage Standing Wave Ratio (VSWR)*

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.

** VSWR measured with no cable*

GAIN (EXCLUDING CABLE LOSS)



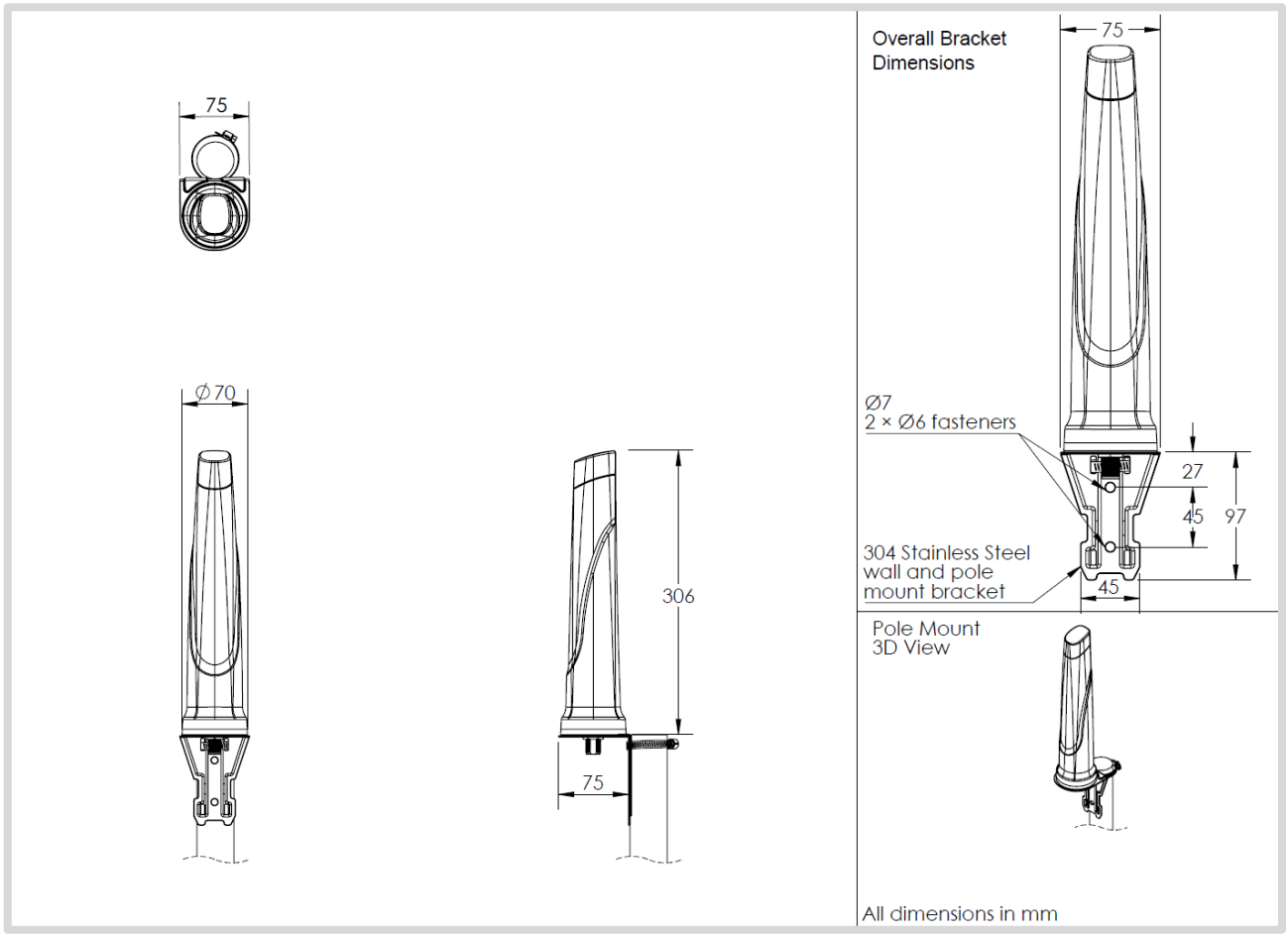
Gain+ in dBi

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

Gain @ 2400 – 2500 MHz: 8 dBi

+Antenna gain measured with polarisation aligned standard antenna

Technical Drawings



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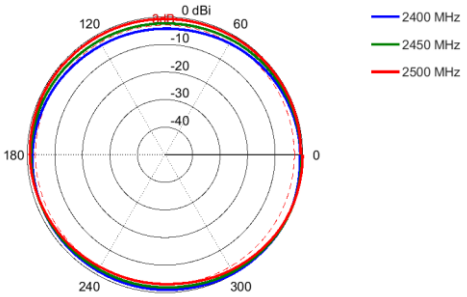
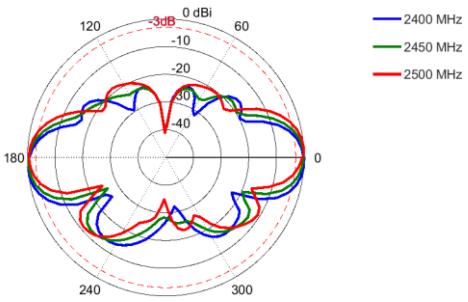
Radiation Patterns

Azimuth: 2400 – 2500 MHz



Elevation: 2400 – 2500 MHz



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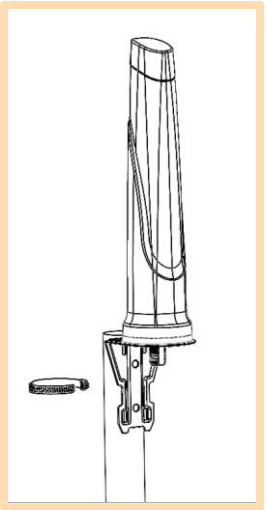
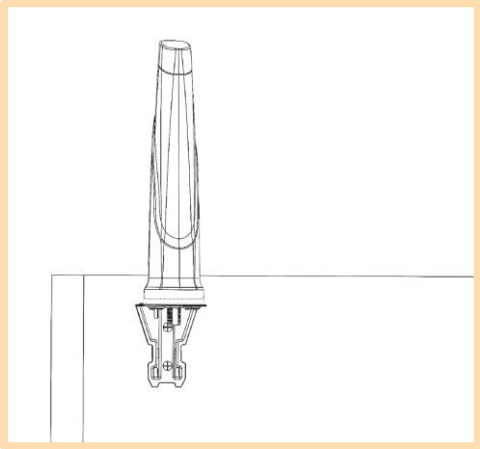
Mounting Options



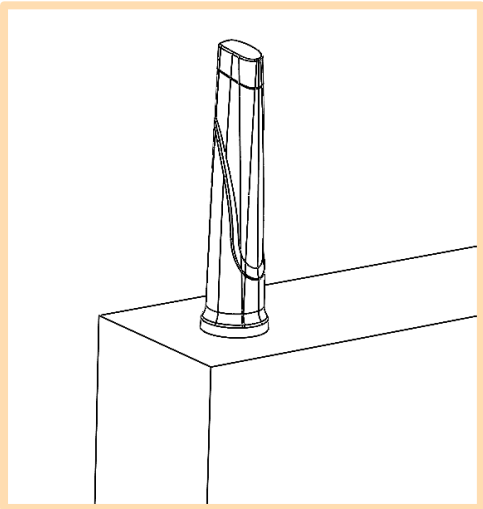
Pole Mount

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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Optional Accessories

See accessories technical specifications on www.poynting.tech

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