OMNI-702



ANTENNAS | OMNI-702 SERIES

OMNI-DIRECTIONAL, WI-FI ANTENNA

2400 - 2500 MHz, 6 dBi















Tunnelling

- 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)

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.

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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

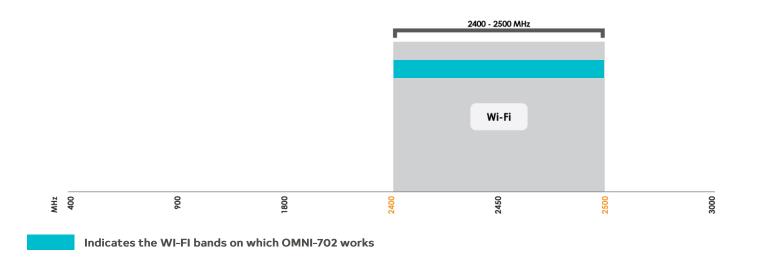
- Smart Utilities: Smart Power Metering, Gas & Water Metering
- Smart Buildings: Climate control, access control, security, irrigation
- Smart Environmental & Water Systems
- Warehouses & Logistics systems
- Industrial factory automation and M2M systems
- Farming & Agricultural M2M IoT





Frequency Bands

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



Antenna Overview

	WFi
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

OMNI-702



Electrical Specifications

Frequency Bands: 2400 - 2500 MHz

Gain (Max): 6 dBi

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-702

Included L-Bracket and adhesive **Mounting Bracket:** disc

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

UV Stable ASA **Radome Material:**

Radome Colour: Grev

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 & Complies with CE and RoHS standards **Environmental:**

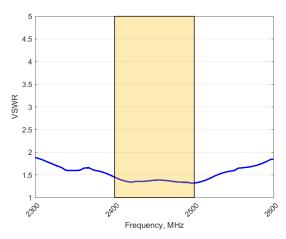






Antenna Performance Plots

VSWR



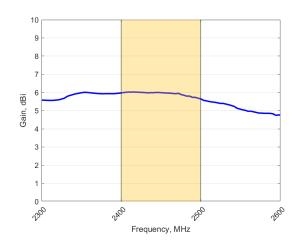
Voltage Standing Wave Ratio (VSWR)*

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.

*VSWR measured without a cable

GAIN (EXCLUDING CABLE LOSS)

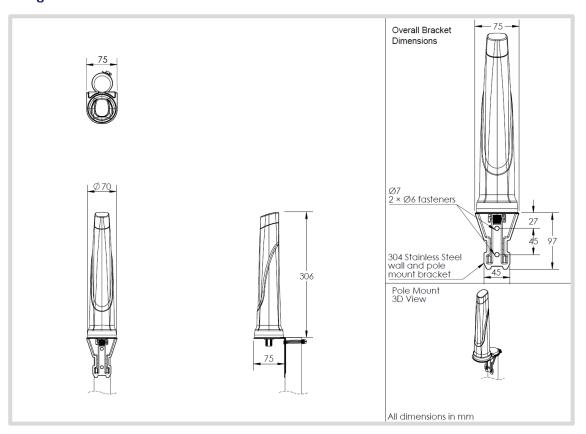


Gain⁺ in dBi

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

*Antenna gain measured with polarisation aligned standard antenna

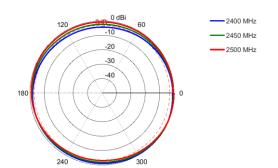
Technical Drawings



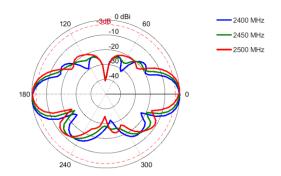


Radiation Patterns

Azimuth: 2400 - 2500 MHz

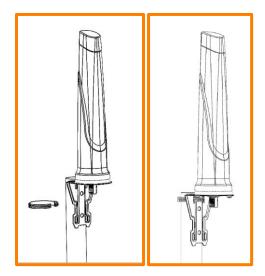


Elevation: 2400 - 2500 MHz



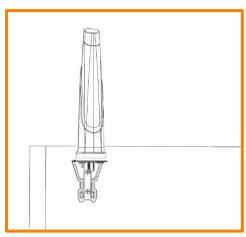


Mounting Options



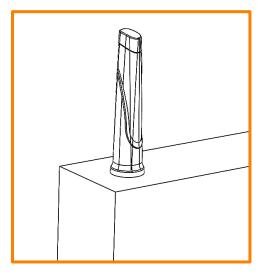
Pole Mount

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



Additional Accessories

See accessories technical specifications on www.poynting.tech

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