

## ANTENNAS | OMNI-705 SERIES

# OMNI-DIRECTIONAL, WI-FI ANTENNA

5000 – 6000 MHz, 7.5 dBi



 5000 – 6000 MHz	 7.5 dBi	 Increase X Mb/s	 Omni-Directional	 5.0 – 6.0 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 5 GHz Wi-Fi deployment
- Compliant with IEEE 802.11a and 802.11ac wireless standard
- Ideal for IoT and M2M applications
- Rugged and low-profile design
- High pressure water and dust ingress protected enclosure (IP69K)



APPLICATION AREAS

## Product Overview

The OMNI-705 antenna is an omni-directional Wi-Fi antenna, developed by Poynting Antennas. The antenna operates from 5.0 – 6.0 GHz, covering the 5 GHz Wi-Fi band, and has a maximum gain of 7.5dBi. 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-705 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

- Omni-directional antenna
- High gain Wi-Fi antenna from 5000 to 6000 MHz
- Easy installation, pole- or wall mountable
- Stylish and robust design
- High pressure water and dust proof enclosure (IP 69K)

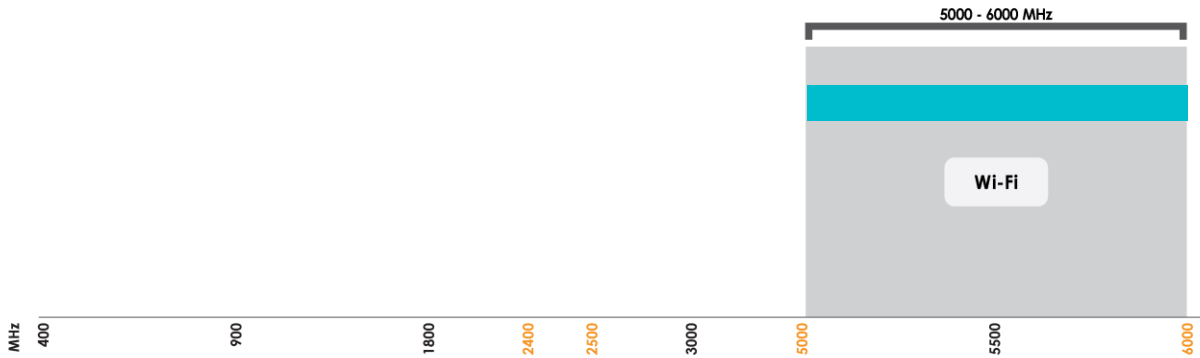
## Application Areas

- 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-705 is a Wi-Fi/ISM antenna that works from | 5000 – 6000 MHz |



Indicates the WI-FI bands on which OMNI-705 works

**Antenna Overview**

	
Ports	1
SISO / MIMO	SISO
Frequency Bands	5000 – 6000 MHz
Polarisation	Linear Vertical
Peak Gain	7.5 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:	5000 – 6000 MHz
Gain (Max):	7.5 dBi
VSWR:	<2:1
Feed Power Handling:	10 W
Input Impedance:	50 Ohm (nominal)
Polarisation:	Linear Vertical
DC Short:	Yes

**Product Box Contents**

Antenna:	A-OMNI-705
Mounting Bracket (Included):	Adhesive Disc & L-Bracket (Ø20-70mm Pole)

**Ordering Information**

Commercial Name:	OMNI-705
Order Product Code:	A-OMNI-0705-V1-01
EAN Number:	6009710922248

**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

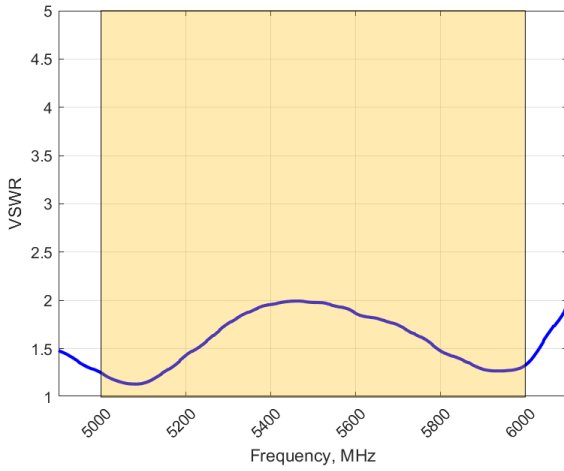
**Environmental Specifications, Certification & Approvals**

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

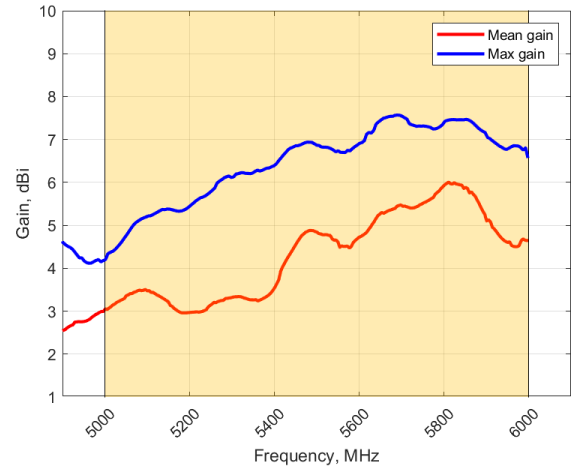


**Antenna Performance Plots**

**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-705 delivers superior performance across all bands with a VSWR of <2:1.

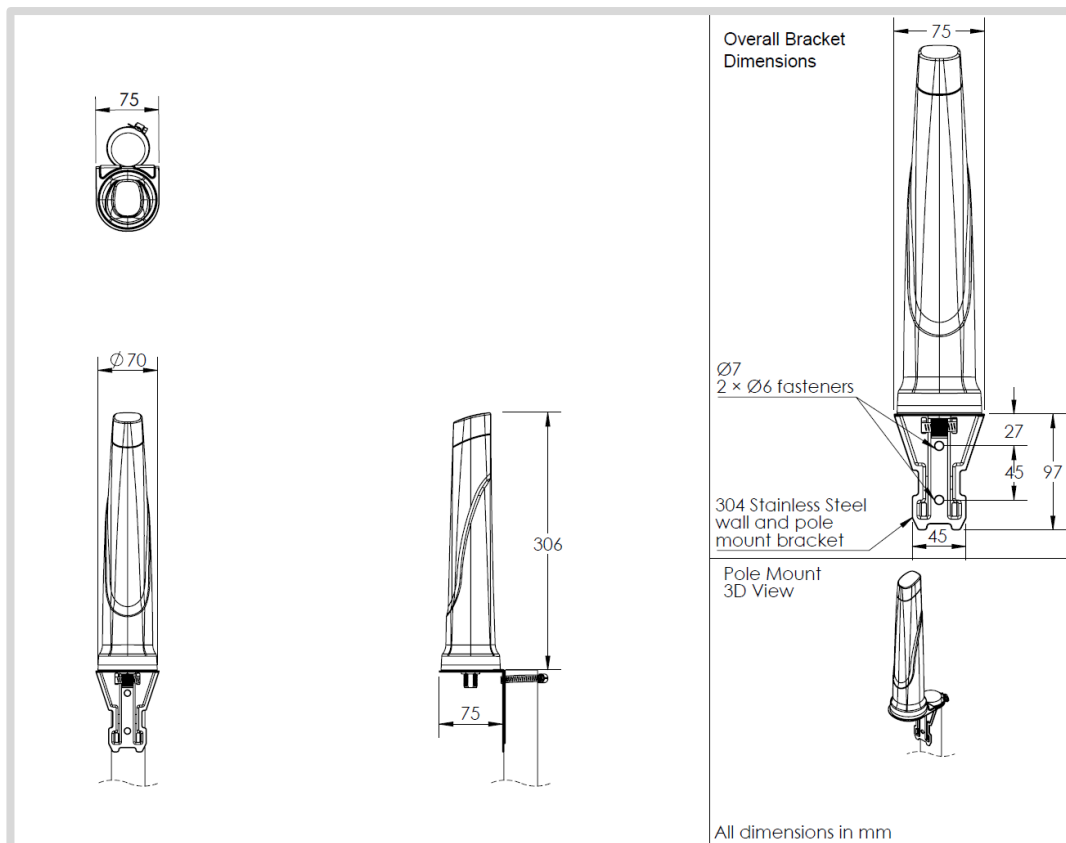
\*VSWR measured without a cable

**Gain\* in dBi**

7.5 dBi is the peak gain across all bands from 5000 – 6000 MHz

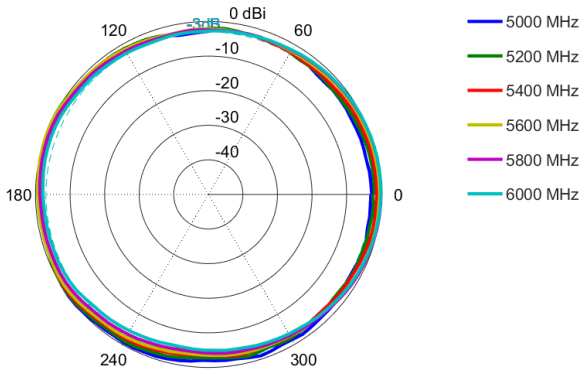
\*Antenna gain measured with polarisation aligned standard antenna

**Technical Drawings**

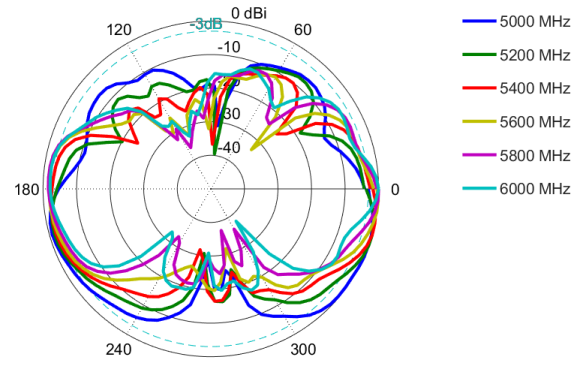


Radiation Patterns

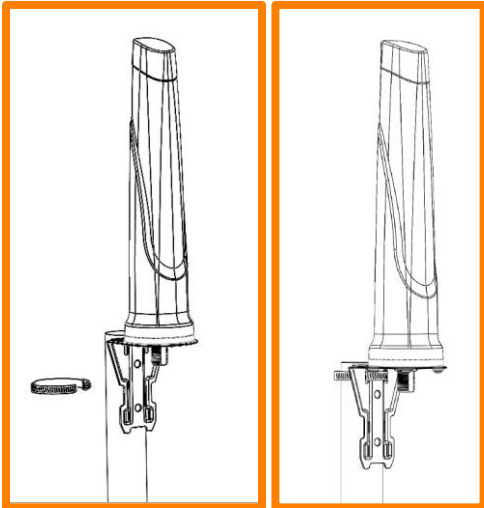
Azimuth: 5000 – 6000 MHz



Elevation: 5000 – 6000 MHz

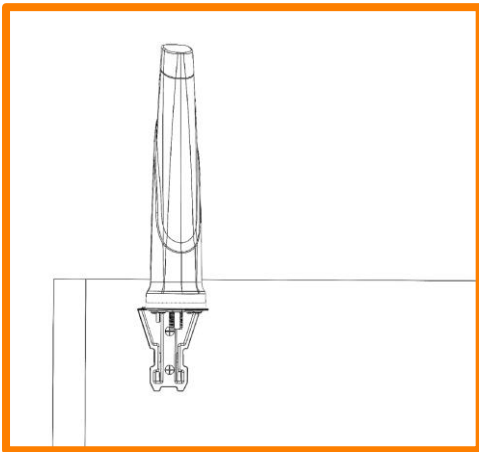


**Mounting Options**



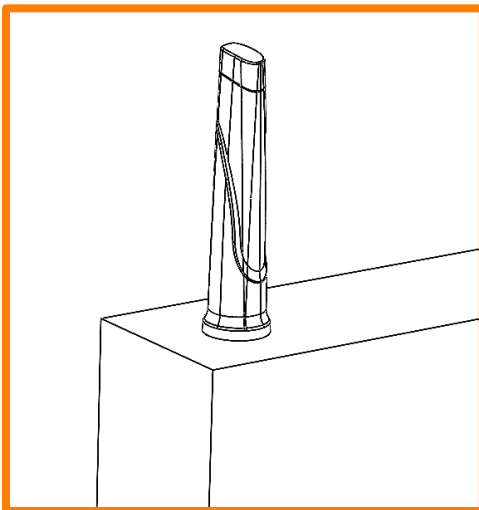
**Pole Mount**

Pole mounted using included L-Bracket and cable clamp



**Wall/Cabinet 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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