OMNI-704

POYNTING
BEYOND A CONNECTED LIFE

ANTENNAS | OMNI-704 SERIES

OMNI-DIRECTIONAL, WI-FI ANTENNA

5000 – 6000 MHz, 4 dBi

5000 – 6000 MHz
4 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

- **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

Rural/Farm
Industrial
Mining
Tunnelling

Product Overview

The OMNI-704 antenna forms part of our new "Rhyno" antenna range. The OMNI-704 operates from 5.0 – 6.0 GHz, covering the upper half of the 5 GHz Wi-Fi band, and has a maximum gain of 4 dBi. The antenna has a constant gain throughout the entire band of operation, as this offers improved performance with reliable connections. The antenna was designed with superior pattern control over the entire frequency range, making the OMNI-704 an exceptional omni-directional antenna for its size. The antenna housing is made of UV stable ASA, which offers protection in highly corrosive environments, including chemical and toxic environments such as industrial plants. 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
- Medium 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

Revised: March 2023

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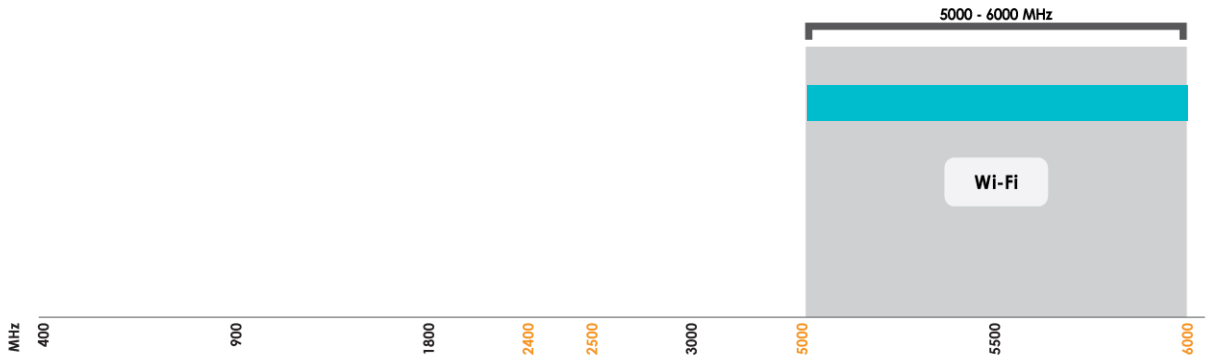
Frequency Bands

The OMNI-704 is a Wi-Fi/ISM antenna that works from | 5000 – 6000 MHz |



Indicates the WI-FI bands on which OMNI-704 works

Antenna Overview

	Wi Fi
Ports	1
SISO / MIMO	SISO
Frequency Bands	5000 – 6000 MHz
Polarisation	Linear Vertical
Peak Gain	4 dBi
Coax Cable Type	N/A
Coax Cable Length	N/A
Connector Type	N-Type (F)

**The connector is factory mounted to the antenna*

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Electrical Specifications

Frequency Bands:	5000 – 6000 MHz
Gain (Max):	4 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-704
Mounting Bracket:	Included L-Bracket and adhesive disc

Ordering Information

Commercial Name:	OMNI-704
Order Product Code:	A-OMNI-0704-V1-01
EAN Number:	6009710921975

Mechanical Specifications

Product Dimensions	155 mm x Ø70 mm
Packaged Dimensions	236 mm x 80 mm x 96 mm
Weight	0.225 kg
Packaged Weight	0.405 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

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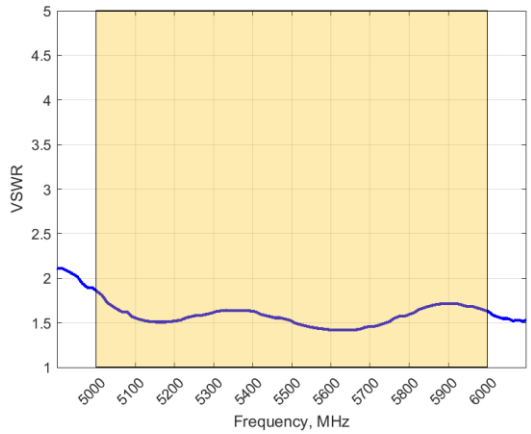
Antenna Performance Plots

VSWR



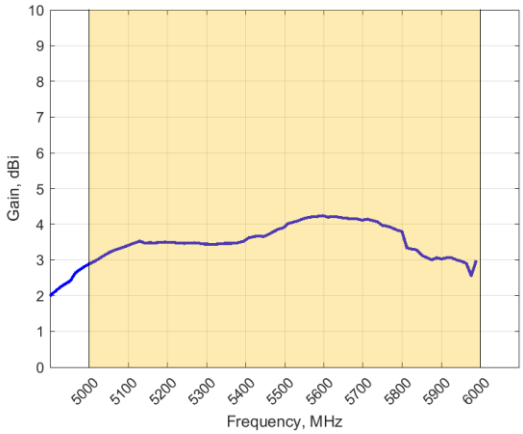
Voltage Standing Wave Ratio (VSWR)*

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-704 delivers superior performance across all bands with a VSWR of <2:1.

**VSWR measured without a cable*

GAIN (EXCLUDING CABLE LOSS)

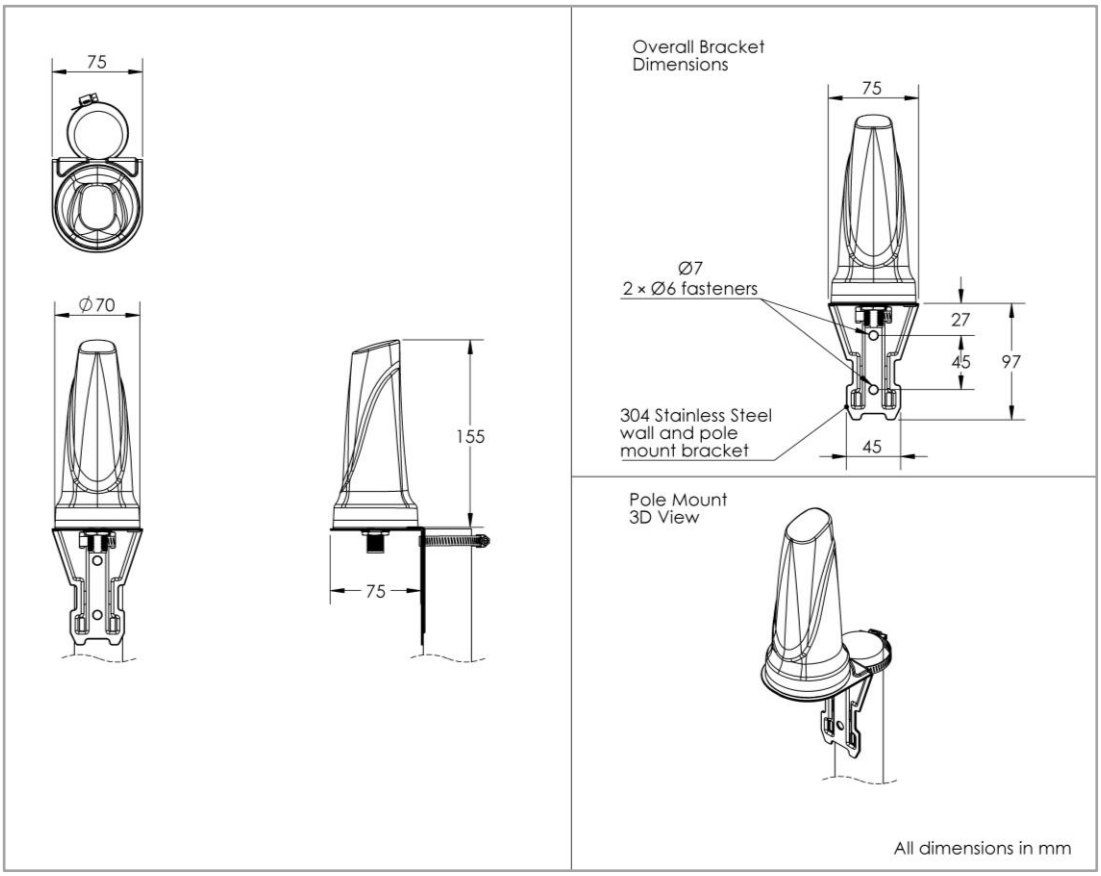


Gain+ in dBi

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

+Antenna gain measured with polarisation aligned standard antenna

Technical Drawings



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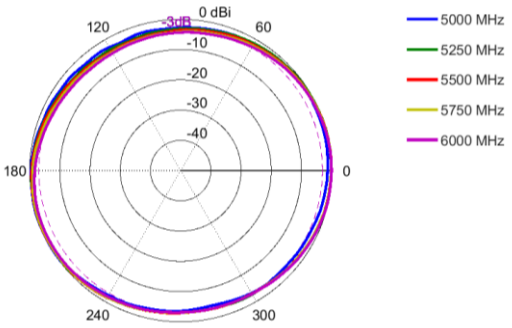
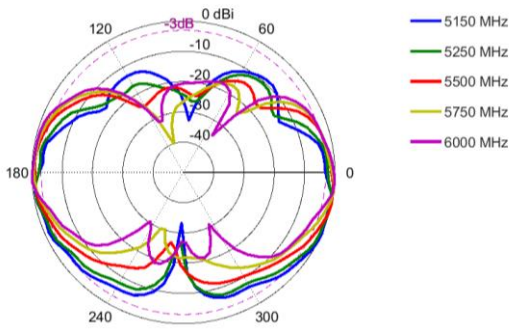
Radiation Patterns

Azimuth: 5000 – 6000 MHz



Elevation: 5000 – 6000 MHz



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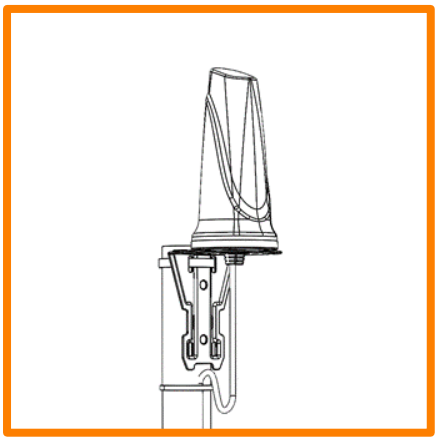
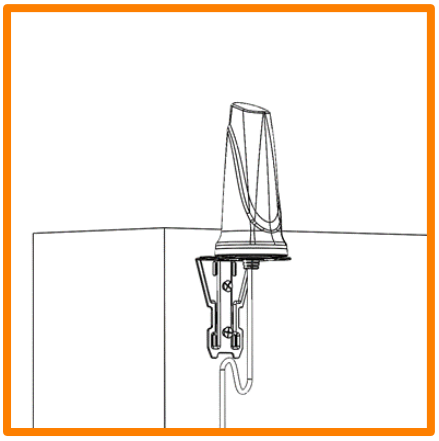
Mounting Options



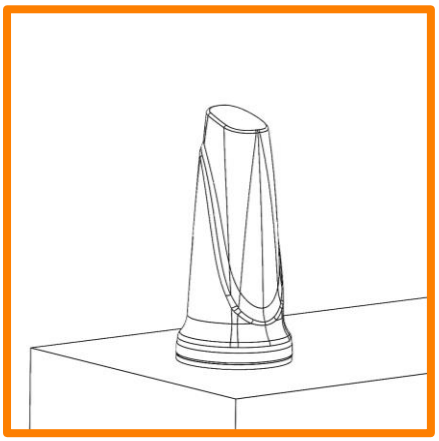
Pole Mount

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

CONTACT POYNTING

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