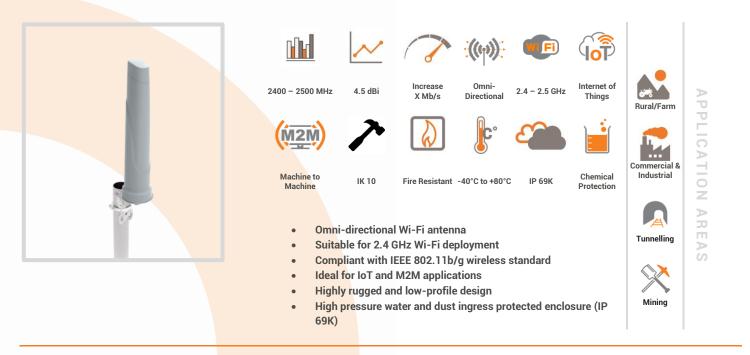
#### ANTENNAS | OMNI-703 SERIES

### **OMNI-DIRECTIONAL, WI-FI ANTENNA**

2400 – 2500 MHz, 4.5 dBi



#### **Product Overview**

The OMNI-703 antenna forms part of our new "Rhyno" antenna range. The OMNI-703 operates from 2.4 – 2.5 GHz, covering the 2.4 GHz Wi-Fi band, and has a maximum gain of 4.5 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-703 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 comes with 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 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

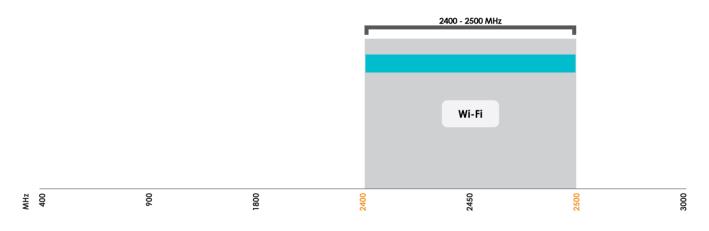


#### **OMNI-703**



#### **Frequency Bands**

The OMNI-703 is a Wi-Fi / ISM antenna that works from 2400 - 2500 MHz



Indicates the WI-FI bands on which OMNI-703 works

#### **Antenna Overview**

<b>INI FI</b>
1
SISO
2400 - 2500 MHz
Linear Vertical
4.5 dBi
N-Type (F)
N/A
N/A

\*The connector is factory mounted to the antenna

### **OMNI-703**

Electrical Specifications	
Frequency Bands:	2400 – 2500 MHz
Gain (Max):	4.5 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-0MNI-0703
Mounting Bracket:	Included L-Bracket and Adhesive Disc
Ordering Information	
Commercial Name:	OMNI-0703
Order Product Code:	A-OMNI-0703-V1-01
EAN Number:	6009710921951

## Mechanical Specifications

Product Dimensions:	306 mm x Ø70 mm
Packaged Dimensions:	386 mm x 80 mm x 96 mm
Weight:	0.26 kg
Packaged Weight:	0.565 kg
Radome Material:	UV Stable ASA
Radome Colour:	Grey
	Pantone 429C
Mounting Type:	Pole, wall and surface mount

POYNTING

BEYOND A CONNECTED LIFE

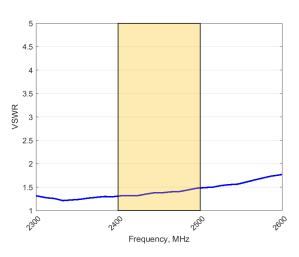
# Environmental Specifications, Certification & Approvals

Wind Survival:	<190 km/h
Temperature Range (Operating):	-40°C to +80°C
Environmental Conditions:	Outdoor/Indoor
Water Ingress Protection Ratio/Sta	andard: IP 69 K
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)\*

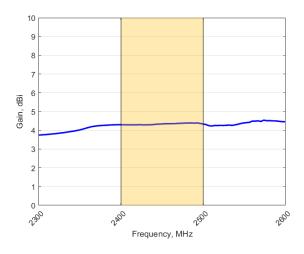
VSWR is a measure of how efficiently radio-frequency power is transmitted from a power source, through a transmission line, into a load. In an ideal system, 100% of the energy is transmitted which corresponds to a VSWR of 1:1.

The OMNI-703 delivers superior performance across all bands with a VSWR of <1.5:1.

#### \*VSWR measured without a cable.

**Technical Drawings** 

#### GAIN (EXCLUDING CABLE LOSS)



#### Gain<sup>+</sup> in dBi

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

\*Antenna gain measured with polarisation aligned standard antenna

All dimensions in mm

# 75 Overall Bracket Dimensions Ø70 Ø7 2 × Ø6 fasteners 27 45 97 304 Stainless Steel wall and pole mount bracket 306 Pole Mount 3D View П 75

**OMNI-703** ©2023 Poynting Antennas (Pty) Ltd. All rights reserved Product Specifications may change without prior notice Revised: March 2023

#### **Radiation Patterns**

180

#### Azimuth: 2400 - 2500 MHz

120

240

0 dBi

-10

-20

-30

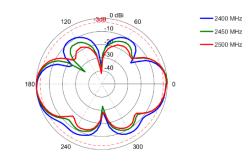
-40

60

300

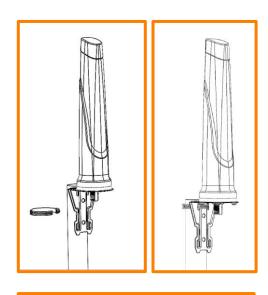
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#### Elevation: 2400 - 2500 MHz





#### **Mounting Options**



#### Pole Mount

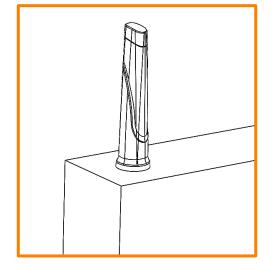
Pole mounted using included L-Bracket and cable clamp

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

#### **CONTACT POYNTING**

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