

OMNI-703



ANTENNAS | OMNI-703 SERIES

OMNI-DIRECTIONAL WI-FI ANTENNA

2400 – 2500 MHz; 4 dBi



2400 – 2500 MHz	4 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	Chemical Protection	IP 69K	IK 10

- **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 low-profile design**
- **High pressure water and dust ingress protected enclosure (IP69K)**

APPLICATION AREAS

- Rural/Farm
- Industrial
- Mining
- Tunnelling

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 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)

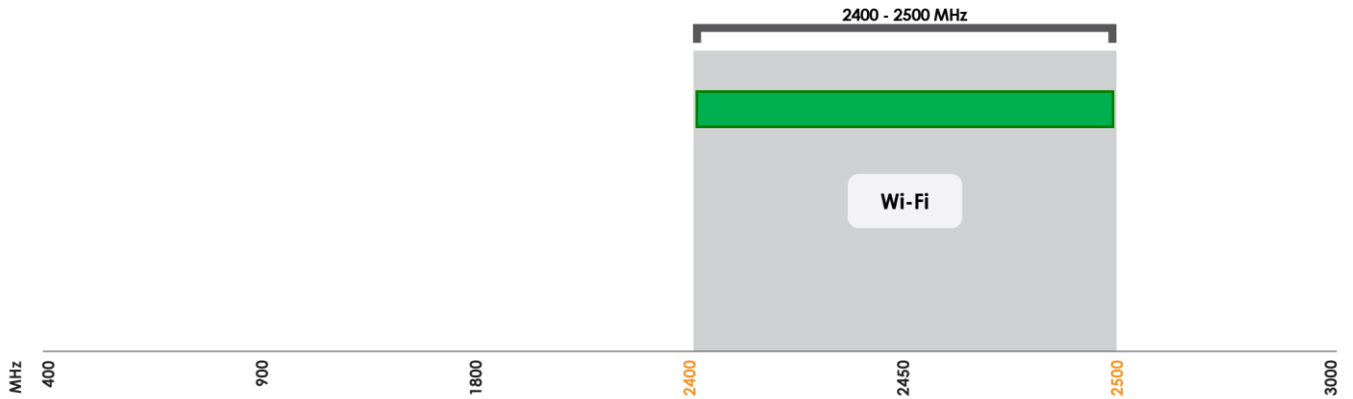
Application Areas

- 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




Frequency Bands

The OMNI-703 is an omni-directional antenna that works from 2400 – 2500 MHz



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

Antenna Overview

	
Ports	1
SISO / MIMO	SISO
Frequency Bands	2400-2500 MHz
Polarisation	Linear (Vertical)
Peak Gain	4 dBi
Coax Cable Type	N/A
Coax Cable Length	N/A
Connector Type	N-Type (F)

Electrical Specifications

Frequency bands:	2400 - 2500 MHz
Gain (max):	4 dBi
VSWR:	< 1.5:1 Over 95% of the bands
Feed power handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	Linear Vertical
Coax cable loss:	N/A
DC short:	Yes

Product Box Contents

Antenna:	A-OMNI-0703
Mounting bracket:	Included L-Bracket, Adhesive Surface Mount

Ordering Information

Commercial name:	OMNI-703
Order product code:	A-OMNI-0703-V1-01
EAN number:	6009710921951

Mechanical Specifications

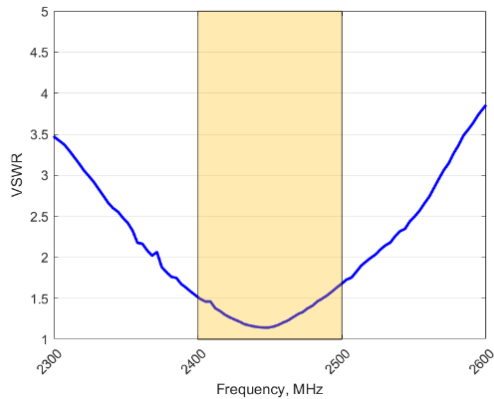
Product dimensions:	306 mm x Ø70 mm
Packaged dimensions:	TBC
Weight:	TBC
Packaged weight:	TBC
Radome material:	UV Stable ASA
Radome colour:	Grey Pantone 429C
Mounting Type:	Wall and Pole Mount Using Bracket, Surface Mount Using Adhesive Disc

Environmental Specifications, Certification & Approvals

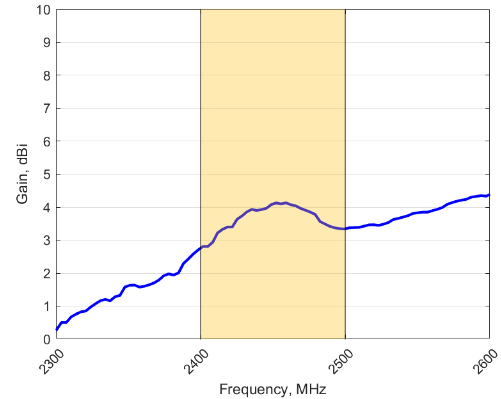
Wind Survival:	≤190 km/h
Temperature Range (Operating):	-40°C to +80°C
Environmental Conditions:	Outdoor/Indoor
Water ingress protection ratio/standard:	IP 69K
Salt Spray:	MIL-STD 810G/ASTM B117
Operating Relative Humidity:	Up to 98%
Storage Humidity:	5% to 95% - non-condensing
Storage Temperature:	-40°C 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-703 delivers superior performance across all bands with a VSWR of 1.5:1 or better across 95% of the bands.

*VSWR measured with no cable

Gain* in dBi

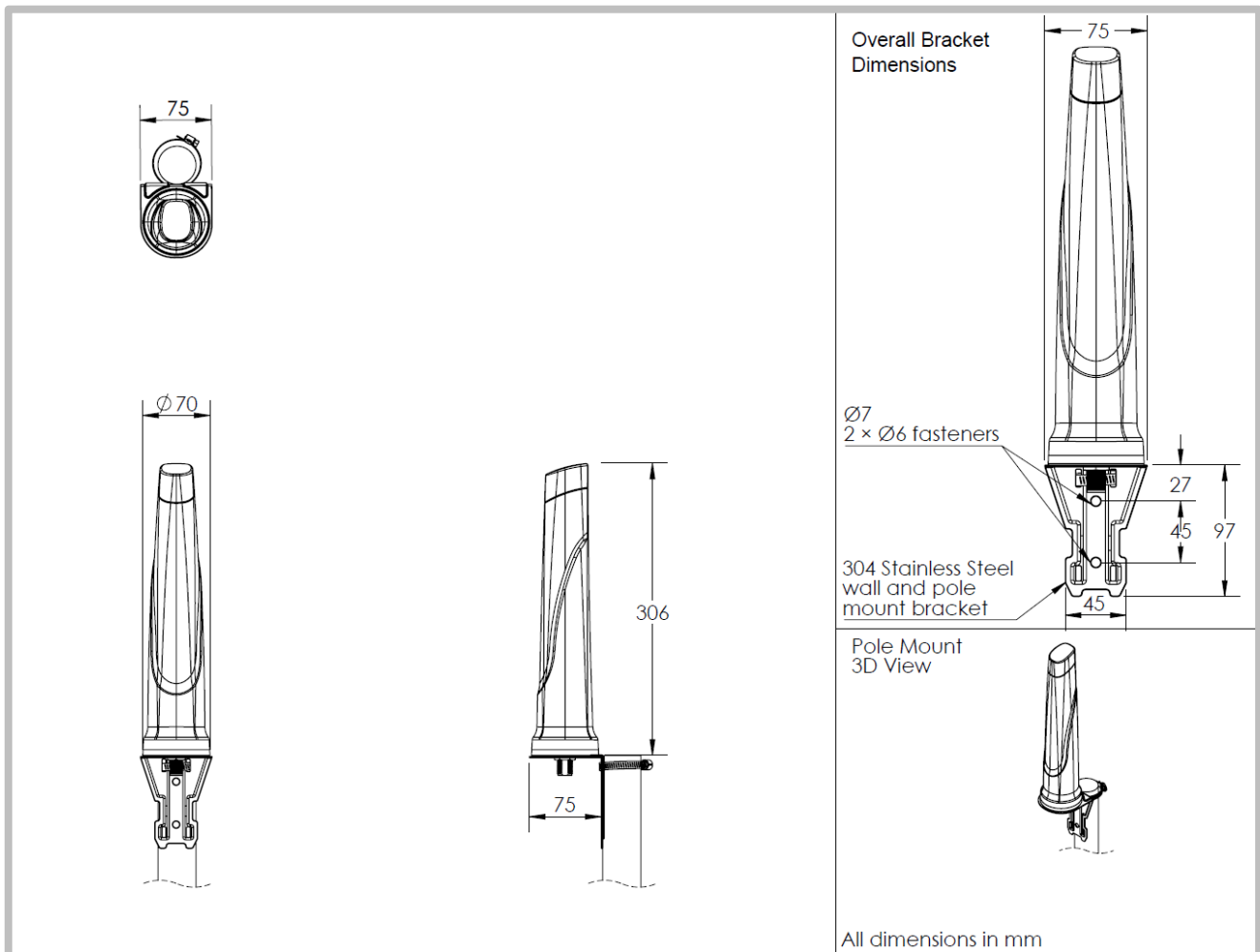
4 dBi is the peak gain across all bands from 2400 -2500 MHz

Gain @ 2400 – 2500 MHz:

4 dBi

*Antenna gain measured with polarisation aligned standard antenna

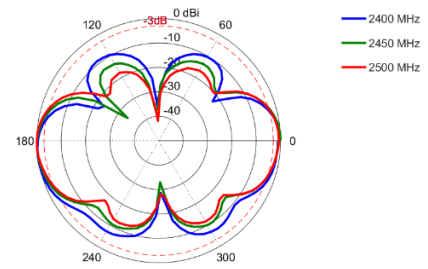
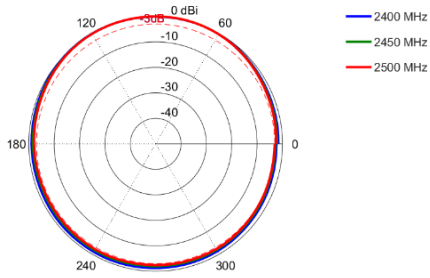
Technical Drawings



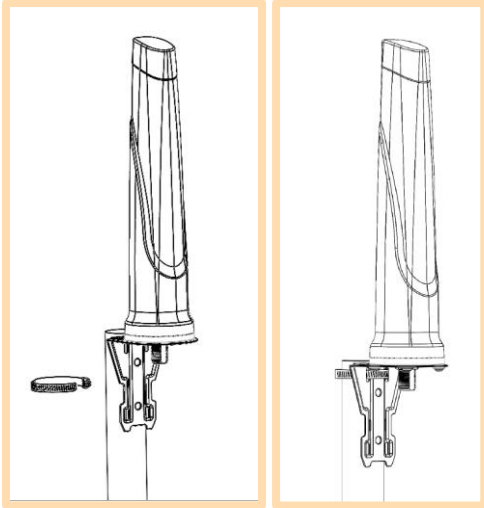
Radiation Patterns

Azimuth: 2400 – 2500 MHz

Elevation: 2400 – 2500 MHz

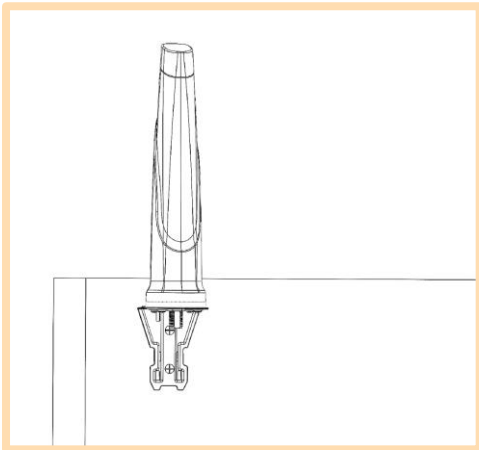


Mounting Options



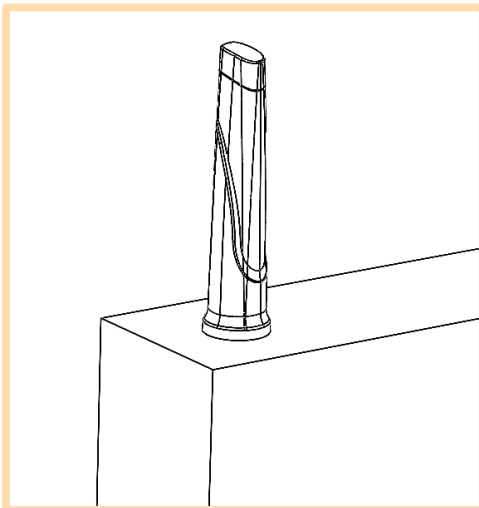
Pole Mount

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

Optional Accessories

See accessories technical specifications on www.poynting.tech

Contact Poynting

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