

ANTENNAS | OMNI-703 SERIES

OMNI-DIRECTIONAL, WI-FI ANTENNA

2400 - 2500 MHz, 4.5 dBi





Machine to

Machine



4.5 dBi



Increase

X Mb/s



Omni-

Directional



2.4 - 2.5 GHz

IP 69K



Internet of

Things

Chemical

Protection





APPLICA

AREA











IK 10

- 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 (IP 69K)

Fire Resistant -40°C to +80°C

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.

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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

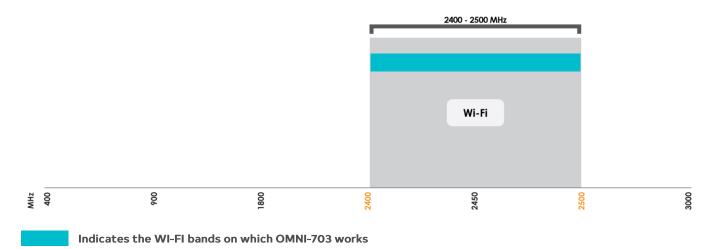
- Smart Utilities: Smart Power Metering, Gas & Water Metering
- Smart Buildings: Climate control, access control, security, irrigation
- Smart Environmental & Water Systems
- Warehouses & Logistics systems
- Industrial factory automation and M2M systems
- Farming & Agricultural M2M IoT





Frequency Bands

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



Antenna Overview

	W Fi
Ports	1
SISO / MIMO	SISO
Frequency Bands	2400 - 2500 MHz
Polarisation	Linear Vertical
Peak Gain	4.5 dBi
Connector Type	N-Type (F)
Coax Cable Type	N/A
Coax Cable Length	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

50 Ohm (nominal) Input Impedance:

Polarisation: Linear Vertical

DC Short: Yes

Product Box Contents

Antenna: A-OMNI-0703

Mounting Bracket (Included): Adhesive Disc

& L-Bracket (Ø20-70mm Pole)

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

UV Stable ASA **Radome Material:**

Radome Colour: Grev

Pantone 429C

Mounting Type: Pole, wall and surface mount

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 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

IK 10 Impact Resistance:

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



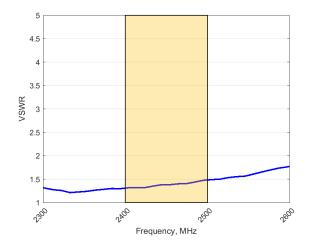






Antenna Performance Plots

VSWR



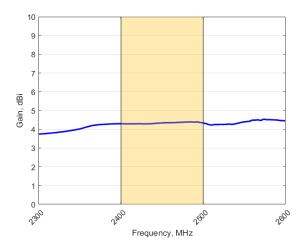
Voltage Standing Wave Ratio (VSWR)*

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

*VSWR measured without a cable.

GAIN (EXCLUDING CABLE LOSS)

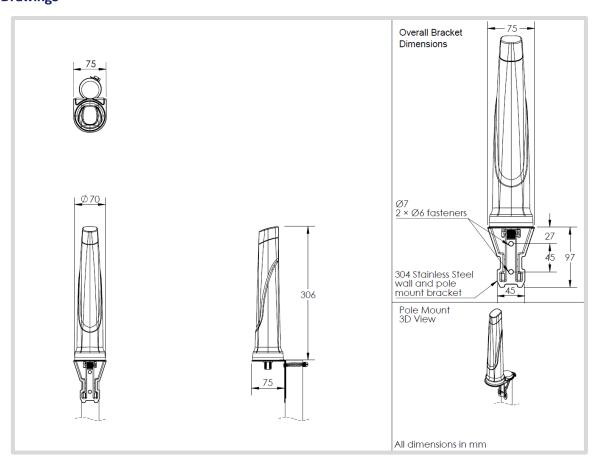


Gain⁺ in dBi

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

*Antenna gain measured with polarisation aligned standard antenna

Technical Drawings



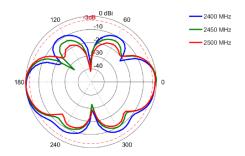


Radiation Patterns

Azimuth: 2400 - 2500 MHz

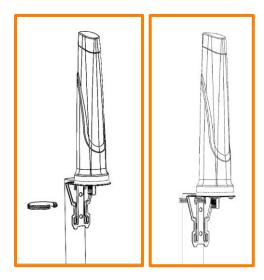
120 308 60 — 2400 MHz — 2450 MHz — 2500 MHz — 180 0

Elevation: 2400 - 2500 MHz



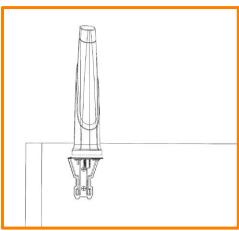


Mounting Options



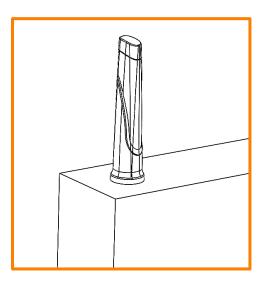
Pole Mount

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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