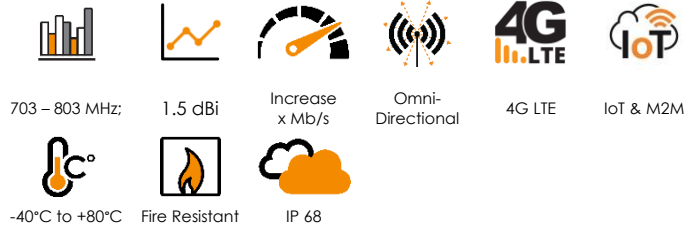


# OMNI-155

ANTENNAS | OMNI-155 SERIES

## OMNI-DIRECTIONAL LTE RHYNO ANTENNA

703 – 803 MHz, 1.5 dBi



- **Omni-directional LTE antenna**
- **Smart Meter, M2M and IoT applicable**
- **Low-profile design**
- **Weather and vandal resistant enclosure (IP68)**



### Product Overview

The OMNI-155 antenna is a customer specific antenna that was designed within our new “Rhyno” antenna enclosures. The antenna was specifically designed to cover LTE Band 28 from 703 to 803 MHz. The antenna has an omni-directional radiation pattern, making it suitable for indoor and outdoor applications. The ideal operation for the antenna will be for fixed installations with smart meter technologies, where the antenna will be mounted on either the top or side of the smart meter housings. Our new “Rhyno” enclosures ensure that the antenna is ready for easy installation and the antenna is weather resistant with an IP68 rating to ensure that the antenna is protected in the most adverse weather conditions.

### Features

- Omni-directional antenna
- Narrowband LTE antenna from 703 to 803 MHz
- Easy installation, pole- or wall mountable
- Stylish and robust design
- Water and dust proof enclosure (IP 68)

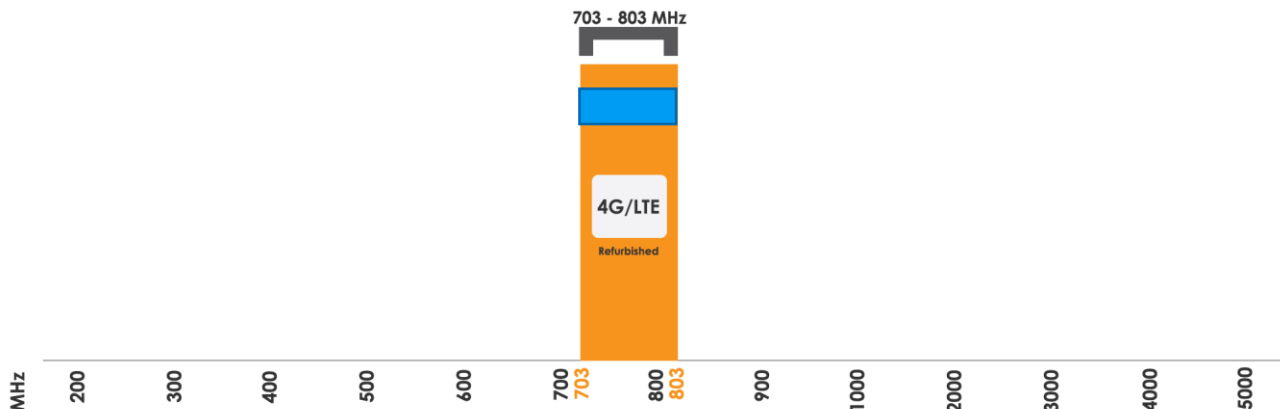
### Application Areas

- 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-155 is an omni-directional antenna that works from 703 – 803 MHz



Indicates the LTE bands on which OMNI-155 works

### Antenna Overview

Ports	1
SISO / MIMO	SISO
Frequency Bands	703 – 803 MHz
Polarisation	Linear Vertical
Peak Gain	1.5 dBi
Coax Cable Type	RG 58
Coax Cable Length	1m
Connector Type	SMA (M)

*\*The coax cable & connector are factory mounted to the antenna*

## Electrical Specifications

Frequency bands:	703 – 803 MHz
Gain (max):	1.5 dBi
VSWR:	<2:1
Feed power handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	Linear Vertical
Coax cable loss:	0.50 dB/m @ 700 MHz 0.52 dB/m @ 800 MHz
DC short:	Yes

## Product Box Contents

Antenna:	A-OMNI-0155
Mounting bracket:	Included L-Bracket, Adhesive Surface Mount

## Ordering Information

Commercial name:	OMNI-155
Order product code:	A-OMNI-0155-V1-01
EAN number:	6009710922149

## Mechanical Specifications

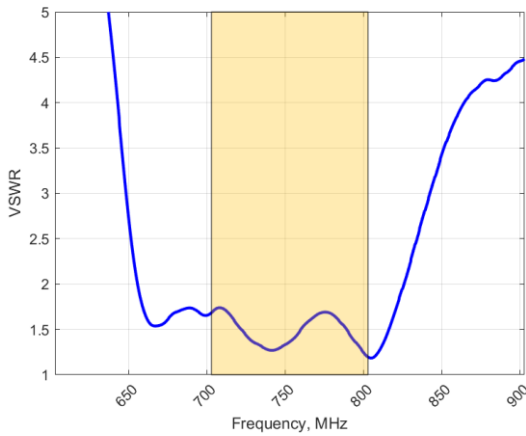
Product dimensions	155 mm x Ø70 mm
Packaged dimensions:	236 mm x 80 mm x 96 mm
Weight:	0,35 Kg
Packaged weight:	0,53 Kg
Radome material:	UV Stable ASA
Radome colour:	Grey Pantone 429C
Mounting Type:	Wall and Pole Mount Using Bracket, Surface Mount Using Adhesive Disc

## Environmental Specifications, Certification & Approvals

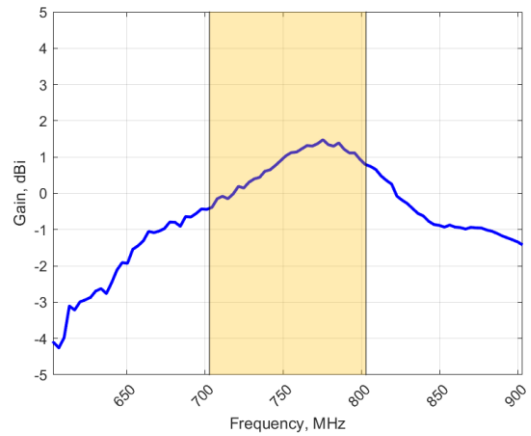
Wind Survival:	≤190 km/h
Temperature Range (Operating):	-40°C to +80°C
Environmental Conditions:	Outdoor/Indoor
Water ingress protection ratio/standard:	IP 68
Salt Spray:	MIL-STD 810G/ASTM B117
Operating Relative Humidity:	Up to 98%
Storage Humidity:	5% to 95% - non-condensing
Storage Temperature:	-40°C 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-155 delivers superior performance across all bands with a VSWR of 2:1 or better.

*\*Antenna VSWR measured with 300mm low loss cable*

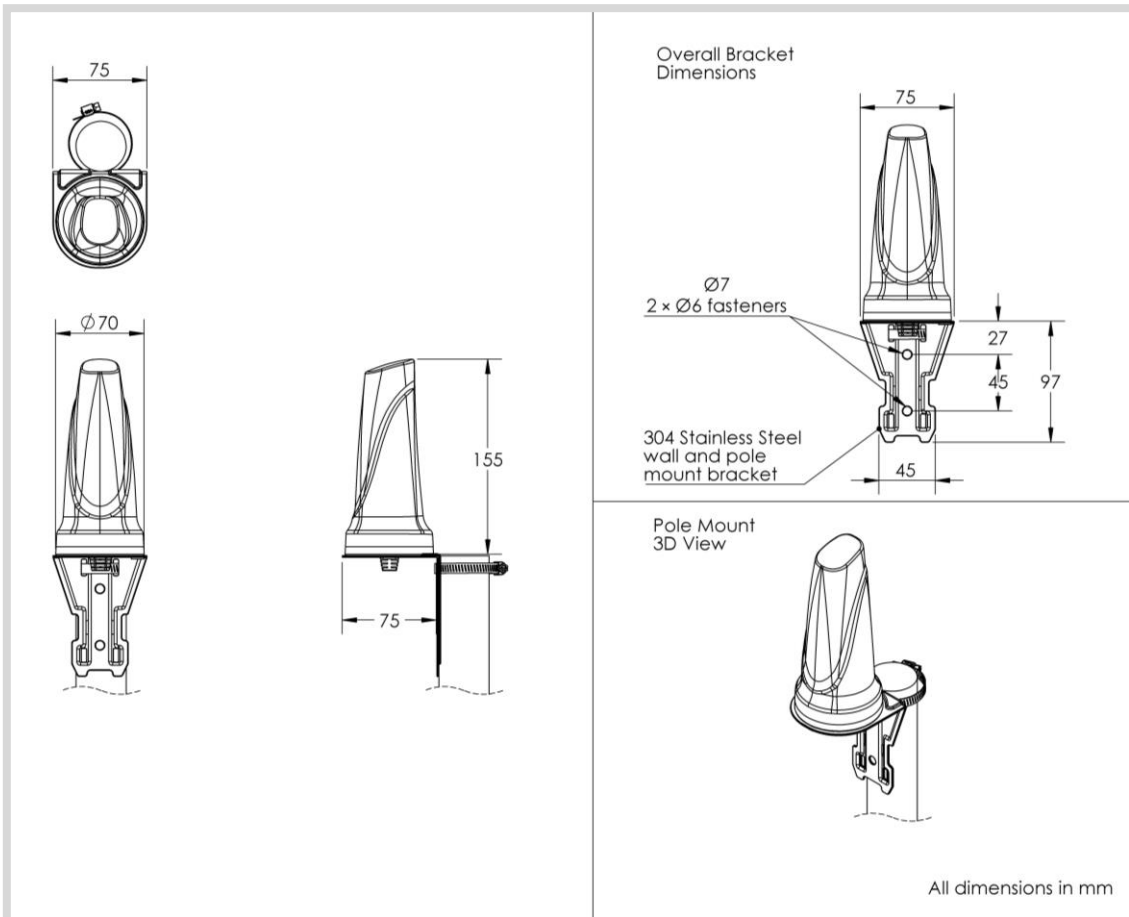
**Gain\* in dBi**

1.5 dBi is the peak gain across all bands from 703 – 803 MHz

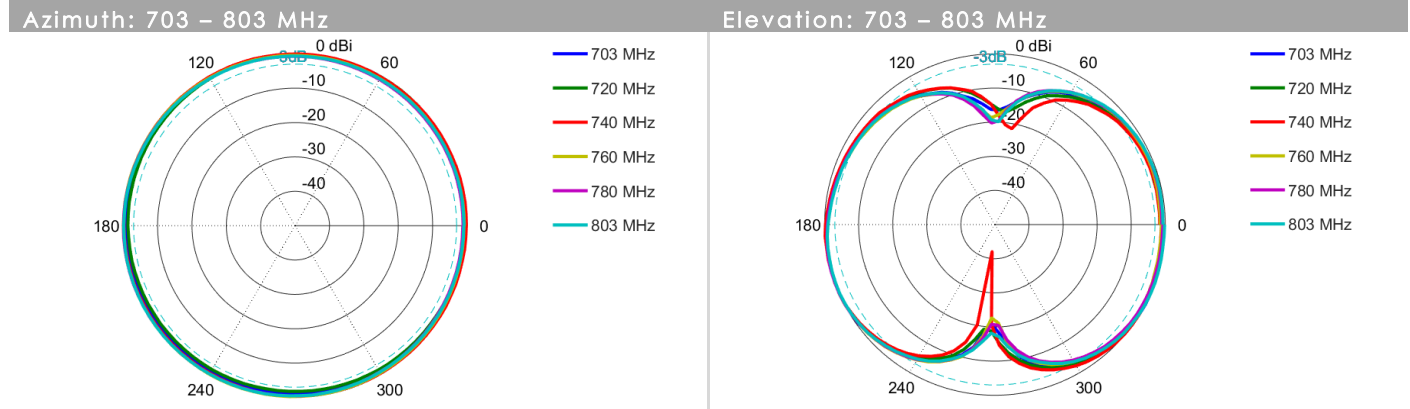
Gain @ 703 – 803 MHz: 1.5 dBi

*\*Antenna gain measured with polarisation aligned standard antenna*

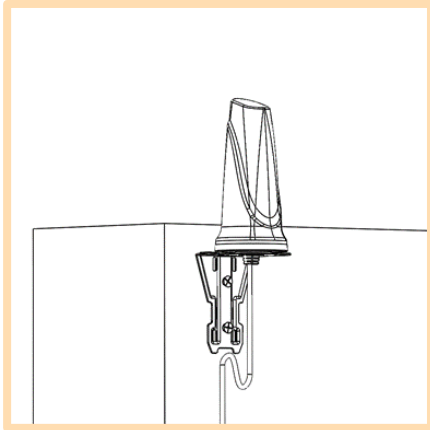
**Technical Drawings**



**Radiation Patterns**

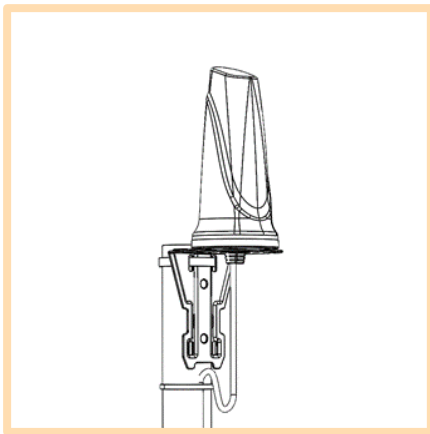


## Mounting Options



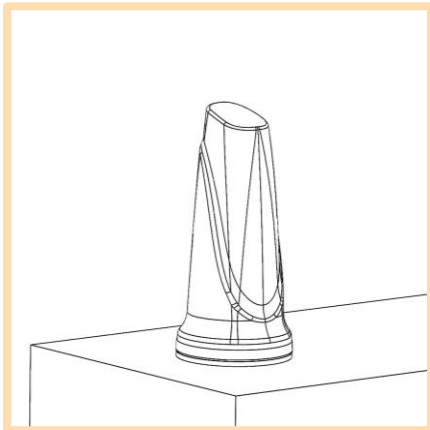
### Wall/Cabinet Mount

Wall/Cabinet mounted using included L-Bracket



### Pole Mount

Pole mounted using included L-Bracket and cable clamp



### Surface Mount

Surface mounted using included adhesive disc

---

## Optional Accessories

See accessories technical specifications on [www.poynting.tech](http://www.poynting.tech)

---

## Contact Poynting

### Poynting Antennas (Pty) Ltd - Head Office

Unit 4, N1 Industrial Park  
Landmarks Avenue,  
Samrand, 0157  
South Africa

**Phone:** +27 (0) 12 657 0050

**E-mail:** [sales@poynting.co.za](mailto:sales@poynting.co.za)

### Poynting Europe

Regus Business Center Neue Messe Riem  
Kronstadter Straße 4  
81677 München  
Germany

**Phone:** +49 89 208026538

**E-mail:** [sales-europe@poynting.tech](mailto:sales-europe@poynting.tech)