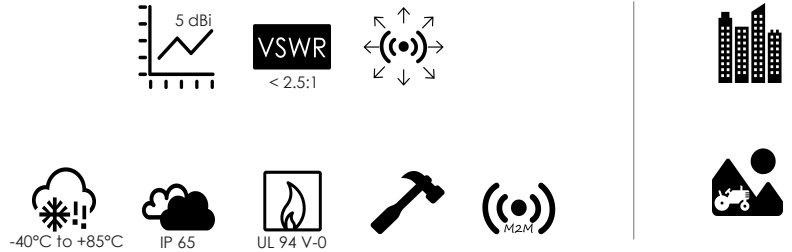


**ANTENNAS | GPS-0001**

# GPS-1

GPS/GLONASS L1&L2 ACTIVE ANTENNA



- GPS/Glonass technology
- Covers GPS L1 & L2 frequencies

## Product Overview

This GPS / Glonass antenna is a high performance active antenna module operating down to -40 degrees. It covers the GPS L1 and L2 frequencies at 1250MHz and 1600MHz respectively, as well as the Glonass frequency of 1602MHz. This antenna is provided with a 0.5m cable terminated in a SMA(m) connector.

## Features

- Water resistant enclosure
- Lightweight
- Ground plane independent
- Easy installation
- Robust
- Foam Cell Filled

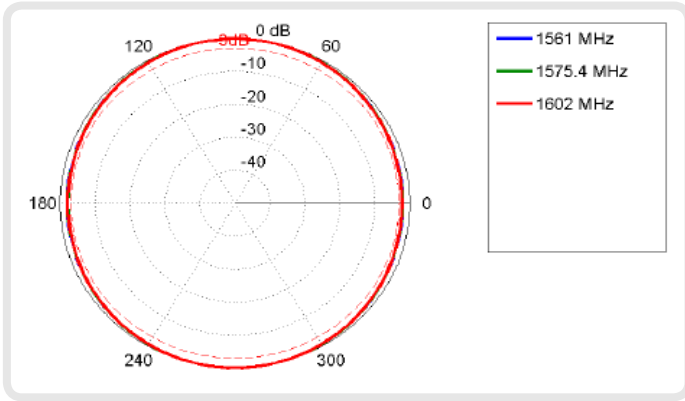
## Application areas

- Urban and rural areas
- Vehicular mounting applications
- Location based
- Remote monitoring
- Timing for base stations and power utility sub stations
- Vehicle fleet tracking
- M2M / IoT
- Telematics
- Military Applications

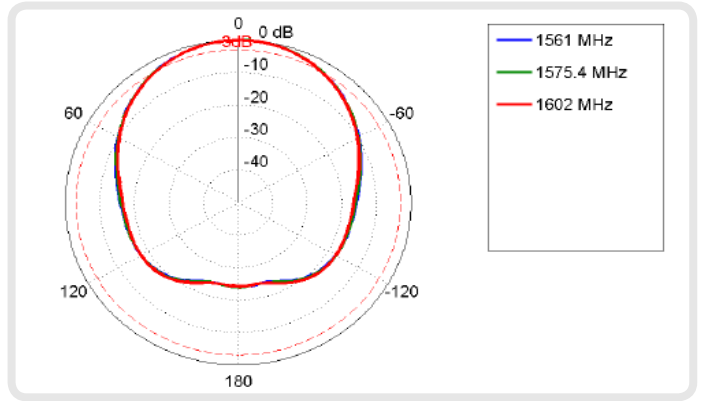


## Radiation Patterns - GPS

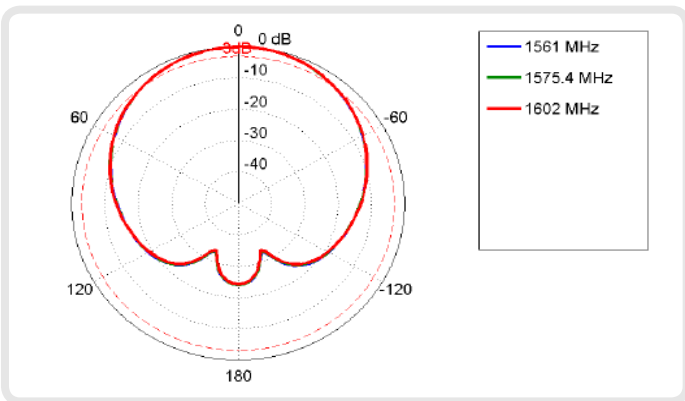
XY Plane:



XZ Plane:



YZ Plane:



### 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. GPS-0001 delivers superior performance with a VSWR of 1.5:1 or better.

## Electrical Specifications

Frequency Range L1:	1565-1610 MHz
Frequency Range L2:	1217-1250 MHz
Gain (max):	21±2dBi
VSWR:	< 1.5:1
DC Voltage:	2.7-3.3 V
DC Current:	5-15mA
Noise Figure:	≤1.5 dB
Nominal Impedance:	50 Ω
Polarisation:	RHCP
Filter Out Band Attenuation:	12dB Min f0+50MHz 16dBi Min f0-50MHz

Cable:	0.5m 1.13 Coaxial cable
Connector:	SMA (m)
Voltage:	2.7-3.3 V
Max. Power-W:	50W

## Environmental Specifications

Wind Survival:	160 km/h
Temperature Range (Operating):	-40°C to +80°C
Environmental Conditions:	Outdoor
Operating Relative Humidity:	Up to 98%
Storage Humidity:	10% to 95% - non-condensing
Storage Temperature:	-45°C to +85°C

## Ordering Information

Commercial name:	GPS-1
Order Product Code:	A-GPS-0001-V1
EAN number:	0707273469823

## Additional Accessories Available

Extension Cables:	None
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For more detailed information and availability in your region, visit our web site: [www.poynting.tech](http://www.poynting.tech)

## Contact Poynting

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

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Samrand, 0157  
South Africa

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

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

## Mechanical Specifications

Product Dimensions (L x W x D):	25 mm X 25 mm x 6.7 mm
Packaged Dimensions:	TBD
Weight:	0.164kg
Packaged Weight:	0.167kg
Radome Material:	ABS (Halogen Free)
Radome Colour:	Pantone - Black RAL - Black

## Product Box Contents

Antenna:	A-GPS-0001-V1
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## Certification Approvals and Standards

Flammability rating:	UL 94-V0 EN 13823
Water Ingress Protection Ratio/Standard:	IP 67 (NEMA 6)
Impact resistance:	IK 08
Salt Spray:	MIL-STD 810F/ASTM B117
Product Safety:	Complies with UL, CE, EN, CSA and IEC standards

