

ANTENNAS | GPS-1

GPS/GLONASS ACTIVE ANTENNA

GPS/GLONASS



- **GPS / GLONASS**
- **Robust (IK10), vandal resistant and water proof (IP68) GPS**
- **Ideal for positioning and timing systems for transportation, marine and IoT/M2M use**
- **Ultra-versatile mounting options for easy installation**



Product Overview

Poynting's new V2 version of the GPS-1 antenna offers a small profile antenna for use in the IoT/M2M and transportation markets, where rugged and accurate positioning and timing is required. This new enclosure for the active GPS antenna keeps implementation as simple as possible with its many mounting options. The GPS/GLONASS system frequency band is 1575.42/1600 MHz and operating at temperatures as low as -40°C

Features

- Small & Low-Profile (100mm x h 36mm)
- Careful mechanical design provides ruggedness, corrosion, water, dust resistance (IP68)
- Fire Resistant (complies with ECE-R 118.02)
- UV Stable Enclosure
- Easy installation; multi implementation options (as standard)
 - Spigot Mount
 - Magnetic Mount
 - Adhesive Tape Mount
 - Bracket Mount

Application Areas

- Industrial automation, robotic machinery and other M2M systems
- Transport, tracking (Busses, Utility & Public Safety)
- Mining Vehicles & Machinery communications and positioning (M2M & IoT)
- Agricultural machinery
- Marine: small boats, yachts.
- Clocking and timing systems



Antenna Overview

	
Ports	1
Frequency Bands	1575.42 MHz/1600 MHz
Peak Gain	21 dBi
Coax Cable Type	RTK-031
Coax Cable Length	2m
Connector Type	SMA Male

GPS/Glonass Antenna Electrical Specifications

Frequency Range (GPS):	1575.42MHz/1600MHz
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:	RTK-031
Connector:	SMA male
Voltage:	2.7 - 3.3V
Max. Power-W:	50
Polarisation:	RHCP
Filter Out Band Attenuation:	12dB Min f0+50MHz, 16dBi Min f0-50MHz
Voltage:	2.7 - 3.3V
Max. Power-W:	50

Coax Cable & Connector Type - GPS

Cable length:	2m ±5%
Coax cable type:	RTK-031
Connector type:	SMA (Male)

*The coax cables & connectors are factory mounted to the antenna

Product Box Contents

Antenna:	A-GPS-0001-V2-01
Mounting bracket:	Ø20 Threaded Spigots (Up to 60mm clamping thickness), Adhesive Surface Mounting & Magnetic Mount

Ordering Information

Commercial name:	GPS-1
Order product code:	A-GPS-0001-V2-01
EAN number:	0707273469823

Mechanical Specifications

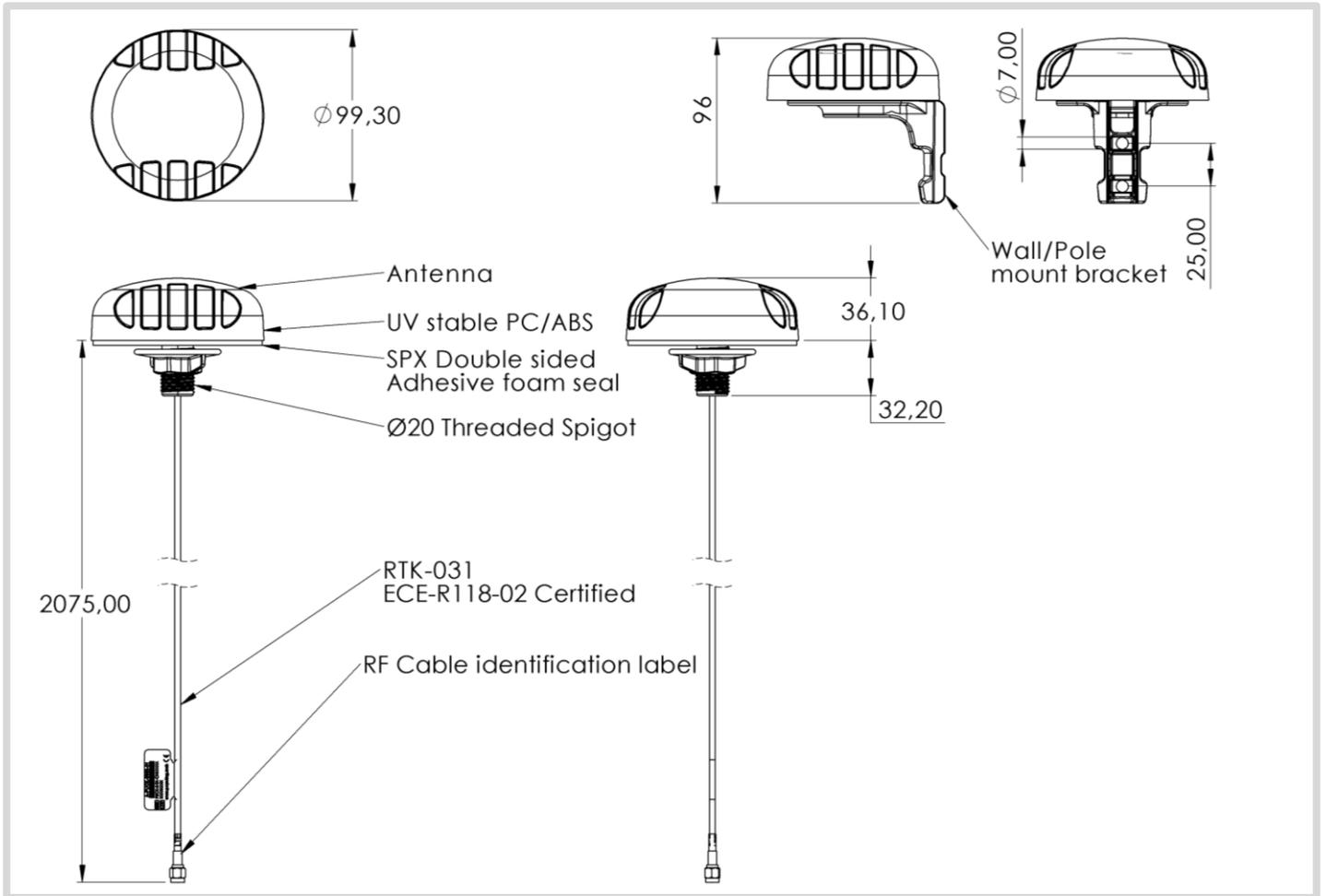
Product dimensions	Ø99.3 mm x 36 mm
Packaged dimensions:	150 mm x 150mm x 120mm
Weight:	0.312kg
Packaged weight:	0.443kg
Radome material:	PC+ABS (Halogen free)
Radome colour:	Pantone Black
Mounting Type:	Ø20 Threaded Spigot, Pole, Wall, Surface and Magnetic mount

Environmental Specifications, Certification & Approvals

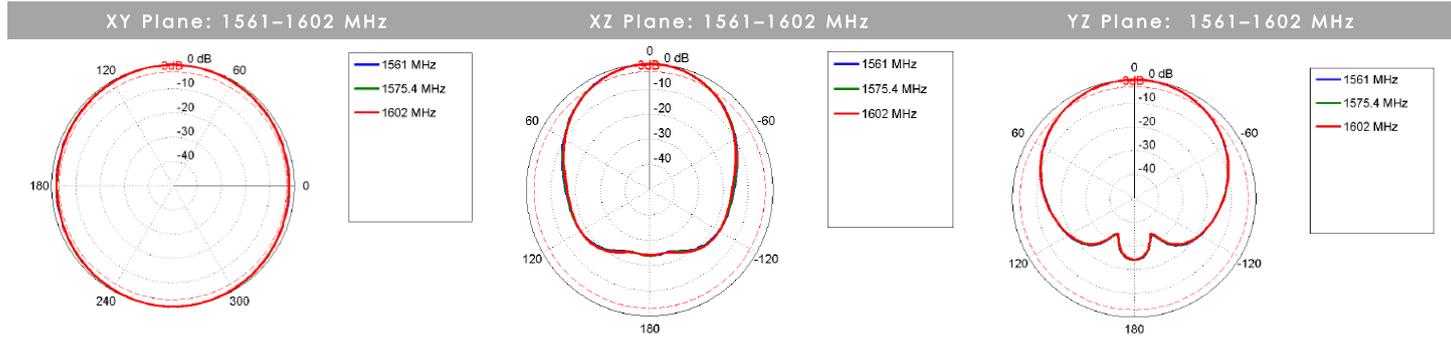
Wind Survival:	<220 km/h
Temperature Range (Operating):	-40°C to +80°C
Environmental Conditions:	Outdoor/Indoor
Water ingress protection ratio/standard:	IP 68
Salt Spray:	MIL-STD 810F/ASTM B117
Operating Relative Humidity:	Up to 98%
Storage Humidity:	5% to 95% - non-condensing
Storage Temperature:	-40°C to +80°C
Flammability Rating:	UL 94-HB, ECE-R118.02 Certified cables
Impact resistance:	IK 10
Product Safety & Environmental:	Complies with CE, EN, CSA, RoHS and IEC standards, E-mark certified



Technical Drawings



Radiation Patterns – GPS

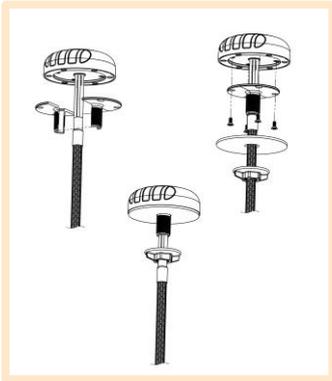


Mounting Options

Many Mounting Possibilities – included as standard

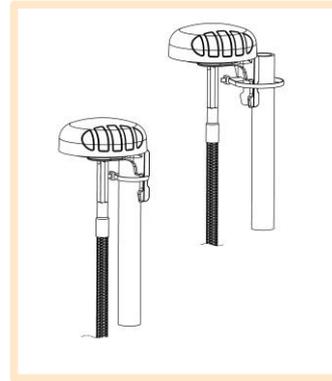
Poynting's new PUCK antenna range provides easy installation with the multiple mounting options. This includes as standard:

- Spigot Mount - two different lengths included (40mm & 80mm)
- Vertical Pole mount (inner & outer mounting for smaller and larger poles)
- Horizontal Pole Mount (e.g. marine rails)
- Magnetic Mount
- Surface Mount (Double Sided Tape)
- Wall Mount



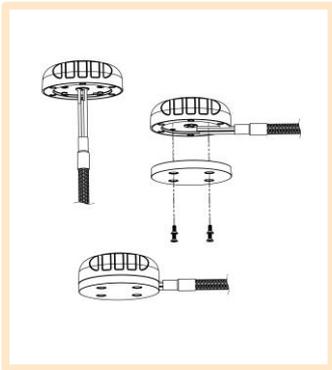
Spigot Mount

Removable 40mm & 80mm threaded spigot (included)



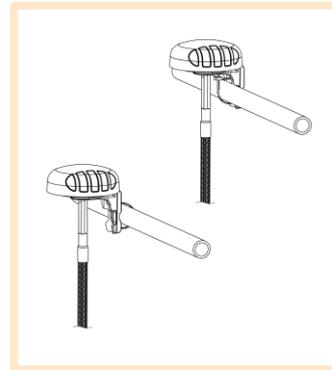
Vertical Pole Mount

Pole/Wall Mounting bracket (included)



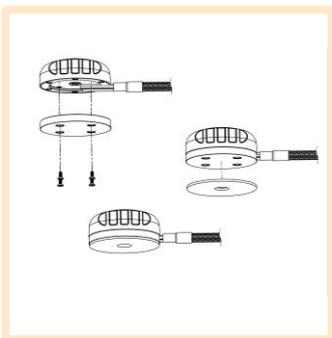
Magnetic Mount

Magnetic Base (included)
 For temporary and low mobility installations.



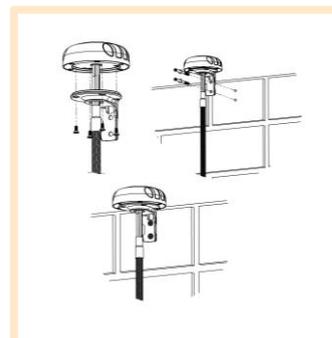
Horizontal Pole Mount

Pole/Wall Mounting bracket (included)



Surface Mount

Adhesive Surface Mounting (included) or can also be directly secured with longer M4 bolts (not included) to the female threaded inserts located in the antenna base



Wall Mount

Pole/Wall Mounting bracket (included)

Additional Accessories

See accessories technical specifications on www.poynting.tech

Contact Poynting

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