

## AR-05 GPS Antenna



The AR-05 is one of the smallest active GPS antennas currently available. It's state of the art technology allows for small size, low voltage operation and low power consumption with no loss in performance making it a perfect choice for many fixed-mount or hand-held GPS applications.

The AR-05 features a LNA with a typical gain of +28dB and is compatible with virtually all manufacturer's OEM GPS receiver products. It is also compatible with a wide variety of consumer, hand-held GPS products that make provisions for an external antenna.

Features include:

- Small size and rugged construction for applications demanding high performance and durability in harsh environments.
- Performs well in presence of EMI
- Excellent temperature stability
- Fully weatherproof

## Physical Specifications:

Parameter	Value
Construction	Polycarbonate Radome on metal base. Dark gray standard
Dimensions	33.95 mm (L) x 25.20 mm (W) x 10.6 mm (H)
Weight	30 grams (excluding cable & connector)
Color of Radome	Standard dark gray, other colors available on request
Mounting	Magnetic or screw mount
Screw Mount	Threaded for 10mm screw, 3mm deep

**For configuration assistance, order placement and technical support call:**



**SYNERGY SYSTEMS, LLC**  
Time proven products and support

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**RoHS Compliant**

## Low Noise Amplifier Performance:

Parameter	Value
Center Frequency:	1575.42 MHz +/-1.023 MHz
Gain:	28dB typical over full supply voltage range.
Bandwidth:	2 MHz min.
Noise Figure:	1.5 Max
Out Band Attenuation:	20dB min. @FO +/- 50MHz
Supply Voltage:	2.5 - 5.5 Volts DC
Current consumption:	12 mA +/- 2 mA typ @5.5V 6 mA +/- 1 mA typ @2.5V
VSWR:	1.5 : 1
Output Impedance:	50 Ω

## Antenna Element Performance:

Parameter	Value
Center Frequency:	1575.42 MHz
Polarization:	Right-Hand Circular (RHCP)
Absolute Gain, Zenith:	+5 dBi Typical
Gain at 10 Deg. Elev.	-1 dBi typical
Axial Ratio:	3 dB (max)
Output VSWR:	1.5 : 1
Output Impedance:	50 Ω

## Environmental Specifications:

Parameter	Value
Temperature:	Operational: -40°C to 85°C Storage: -50°C to +90°C
Relative Humidity:	95% non-condensing

## Ordering Information:

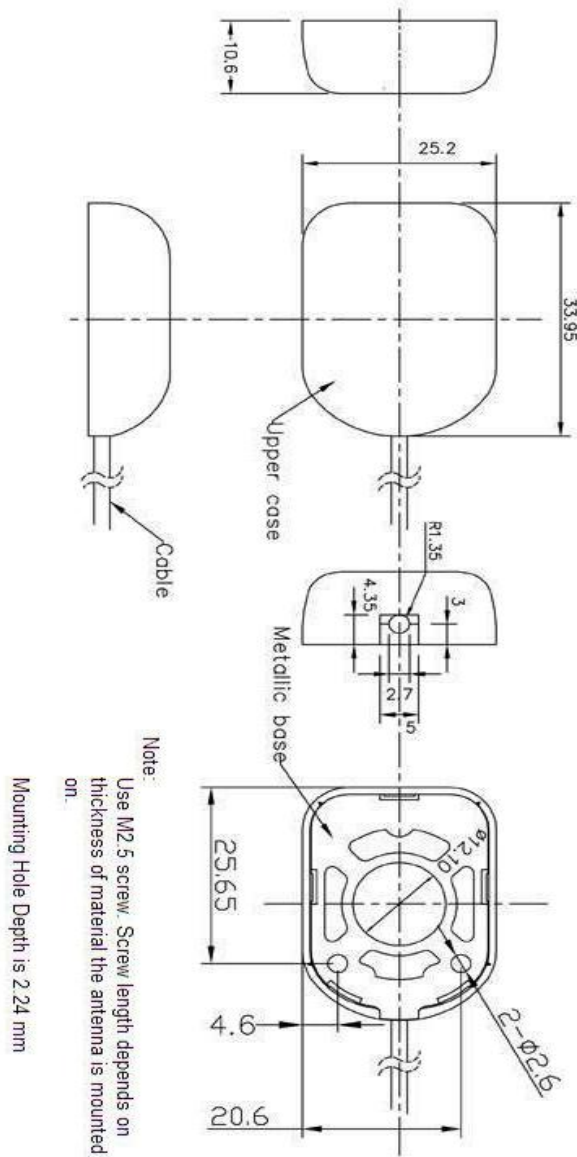
Part Number	Connector type
10001341G	3m RG-174 cable, ra MMCX
10001345G	3m RG-174cable, ra MCX
10001346G	3m RG-174 cable, st MCX

Other cable lengths and connectors on request

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#### Mounting and Installation Details:

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