

## Mini GPS Antenna

### Features

- Mini GPS Antenna with High Gain
- 1575.42MHz +/- 3MHz
- Active gain: >4dB
- Active LNA/Filter +28dBi
- Noise 1.5dB
- VSWR <2.00
- DC Voltage 3.3V +/-0.3V
- Polarisation RHCP
- VSWR <1.5:1
- 5metres RG174 Cable
- Waterproof to IP67
- SMA or MMCX Male Connector
- Dimensions 38 x 34 x 12 (Approx.)
- Mag Mount and Screw Fix



### Applications

- Car GPS Systems
- Hand held GPS Systems

### Description

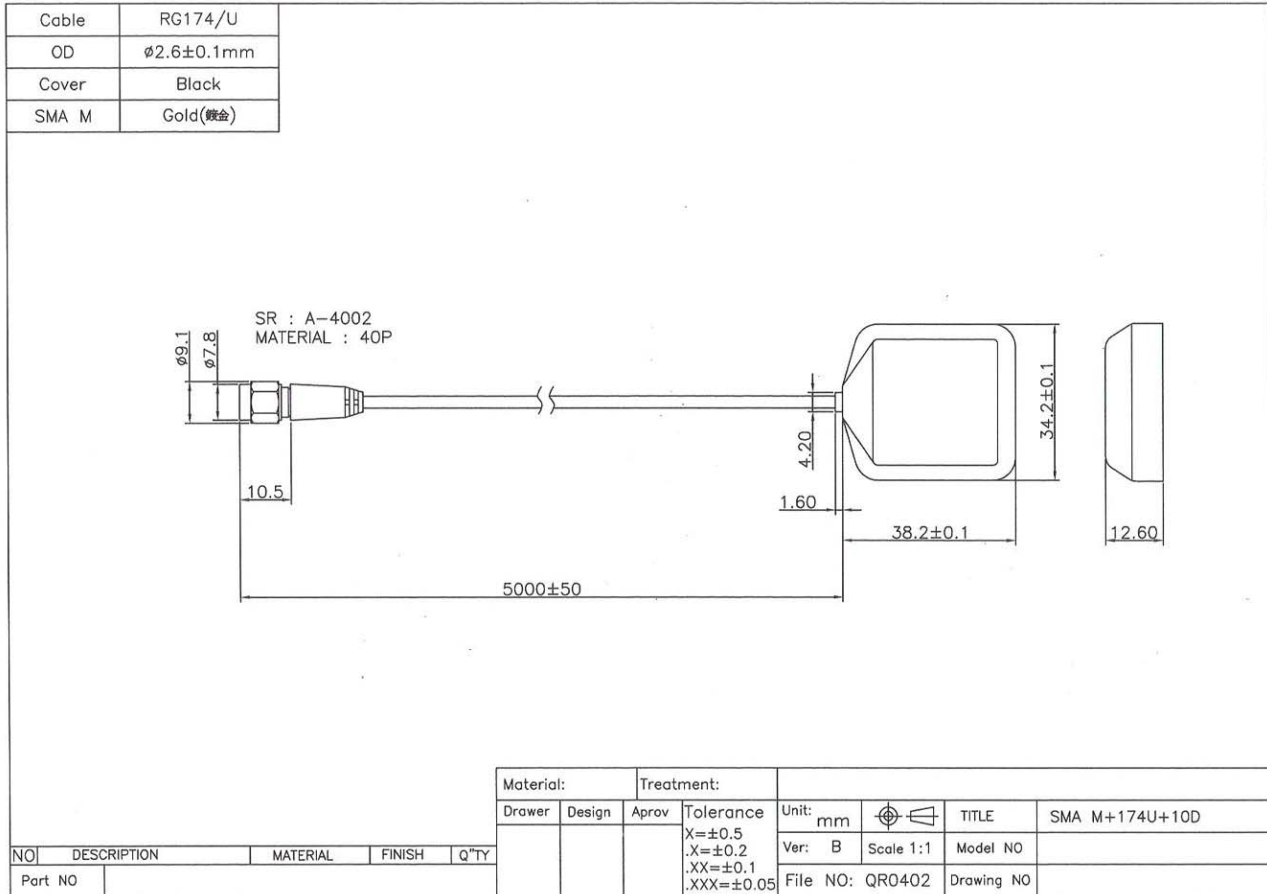
A compact Antenna for GPS applications where high performance is required from a small size. The antenna includes a Low Noise Amplifier and incorporates both magnetic mount and screw fixings.

### Ordering Information

| Part Number   | Description                         | Cable Length | Connector       |
|---------------|-------------------------------------|--------------|-----------------|
| ANT-GPSC-SMA  | Active GPS with cable and connector | 5metres      | SMA (M)         |
| ANT-GPSC-MMCX | Active GPS with cable and connector | 5metres      | MMCX (straight) |

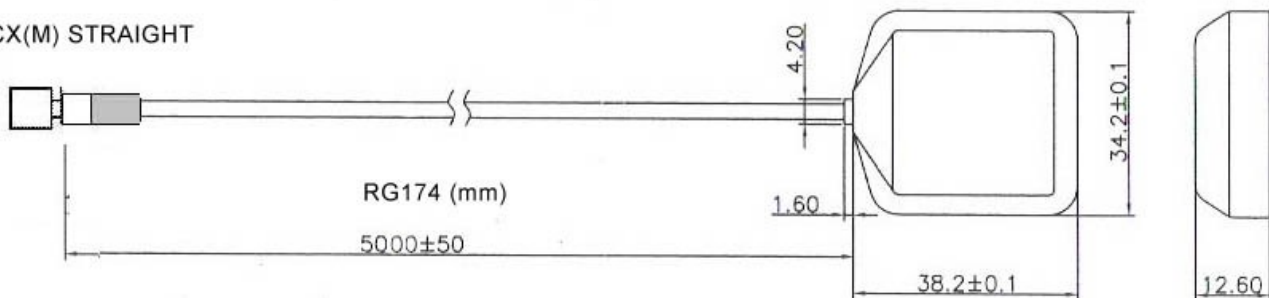
## Mechanical Detail

### ANT-GPSMG



### ANT-GPSMG-MMCX

#### MMCX(M) STRAIGHT



## Test Data

### GENERAL

#### ENVIRONMENTAL CONDITIONS

|                       |                                 |
|-----------------------|---------------------------------|
| OPERATING TEMPERATURE | -30°C TO +60°C                  |
| STORAGE TEMPERATURE   | -40°C TO +90°C (110°C MAX 1HR.) |
| RELATIVE HUMIDITY     | 20% TO 95%, rain                |

#### ELECTRICAL SPECIFICATIONS

|                        |  |
|------------------------|--|
| INPUT VOLTAGE Require: | 3.0 to 5.0 VDC                           |
| POWER CONSUMPTION      | 10~25 mA                                 |
| OUTPUT CONNECTOR       | SMA male                                 |
| Coax Cable             | RG174U                                   |
| VSWR                   | <2.00                                    |
| Max Gain               | >-4dBic @ -90deg<0<+90deg (over 75% Vol) |

#### MECHANICAL SPECIFICATIONS

|                         |   |
|-------------------------|---|
| MOUNTING                | Magnetic Mount  |
| PULLING FORCE OF MAGNET | 29N   |
| WATER PROOF             | Waterproof IP67   |
| MAGNET MOUNT            | Withstand speed of upto 180Km/h.  |
| CABLE PULLING FORCE     | 49N   |
| BENDING TEST 1" radius  | After bending test 90 degree right and left<br>1,000 cycles, no permanent damage found. |

#### LNA Gain (without Cable)

|                 |                    |
|-----------------|--------------------|
| FREQUENCY RANGE | 1,575.42 + 1.1 MHz |
| GAIN            | 28dB (+30°C)       |

|                       |  |
|-----------------------|--|
| NOISE FIGURE          | 1.8 dB MAX. (+30°C)  |
| OUT OF BAND REJECTION | fo =1,575.42 MHz<br>fo + 20MHz 7dB MIN.<br>fo + 50MHz 20dB MIN.<br>fo + 100MHz 30dB MIN. |
| OUTPUT IMPEDANCE      | 50ohm  |

#### Other Specifications

|                       |                     |
|-----------------------|---------------------|
| ESD                   | ANTENNA SURFACE 5KV |
| WEEE & Rohs compliant | Yes                 |

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Specifies certain limits for hazardous substances.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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