

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

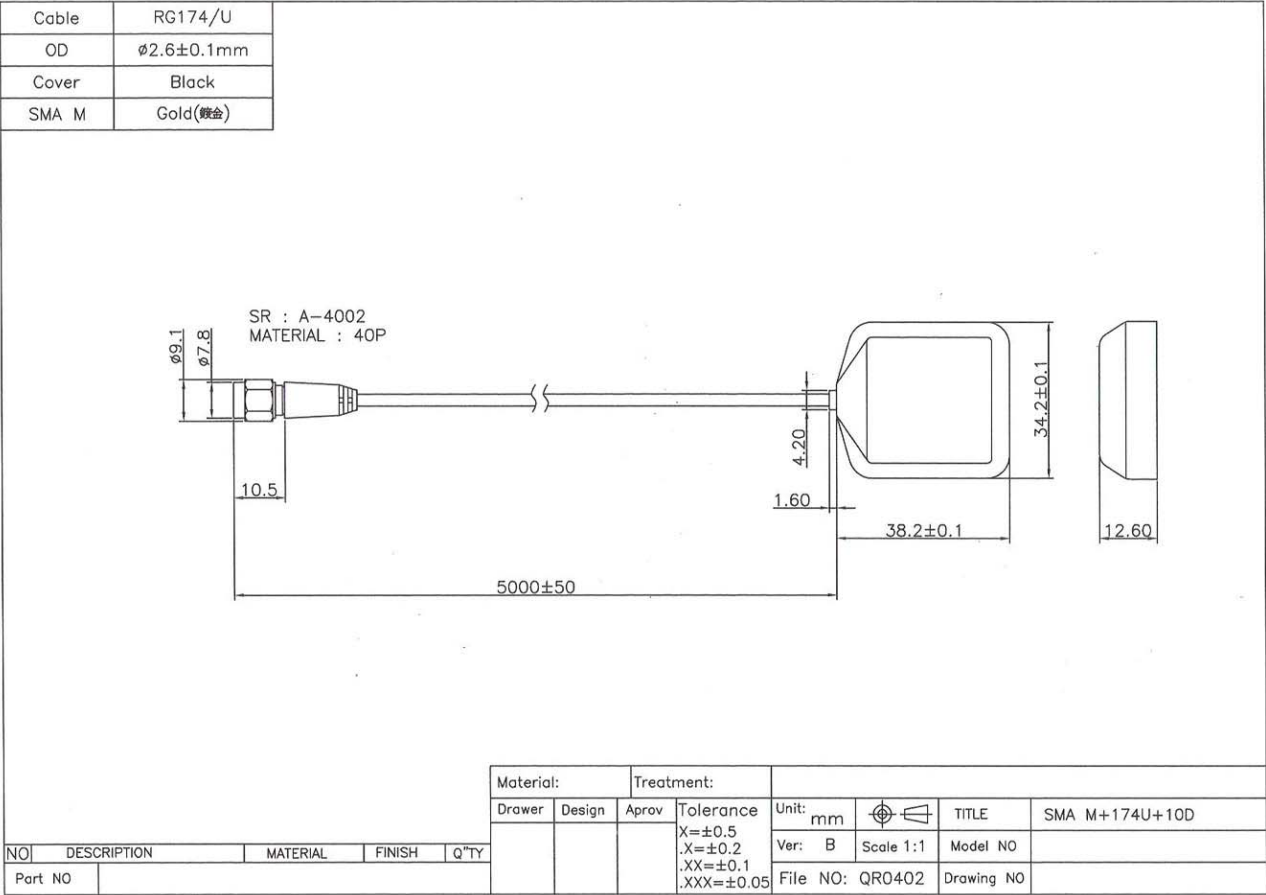
A compact Antenna for GPS applications where high performance is required from a small size. The antenna includes a Low Noise Amplifier and incorporates both magnetic mount and screw fixings.

Ordering Information

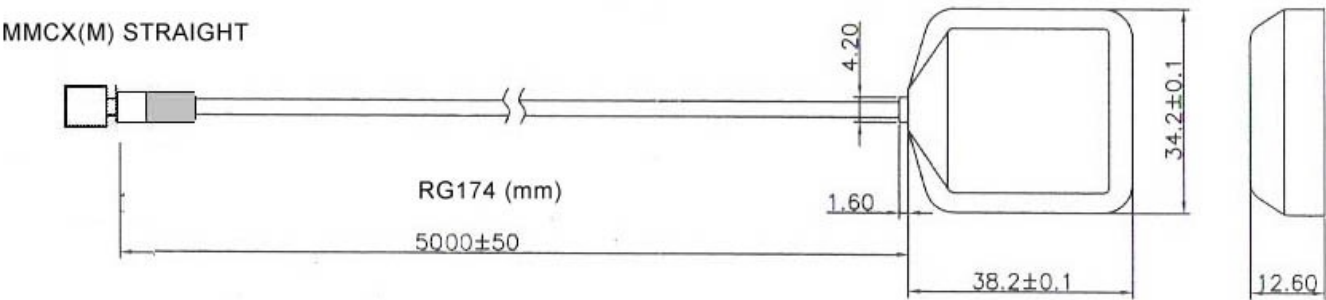
Part Number	Description	Cable Length	Connector
ANT-GPSC-SMA	Active GPS with cable and connector	5metres	SMA (M)
ANT-GPSC-MMCX	Active GPS with cable and connector	5metres	MMCX (straight)

Mechanical Detail

ANT-GPSMG



ANT-GPSMG-MMCX



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 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 fo + 20MHz 7dB MIN. fo + 50MHz 20dB MIN. fo + 100MHz 30dB MIN.
OUTPUT IMPEDANCE	50ohm

Other Specifications

ESD	ANTENNA SURFACE 5KV
WEEE & Rohs compliant	Yes

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DO NOT

Discard with normal waste, please recycle.

ROHS Directive 2002/95/EC

Specifies certain limits for hazardous substances.

WEEE Directive 2002/96/EC

Waste electrical & electronic equipment. This product must be disposed of through a licensed WEEE collection point. RF Solutions Ltd., fulfills its WEEE obligations by membership of an approved compliance scheme.

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