

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

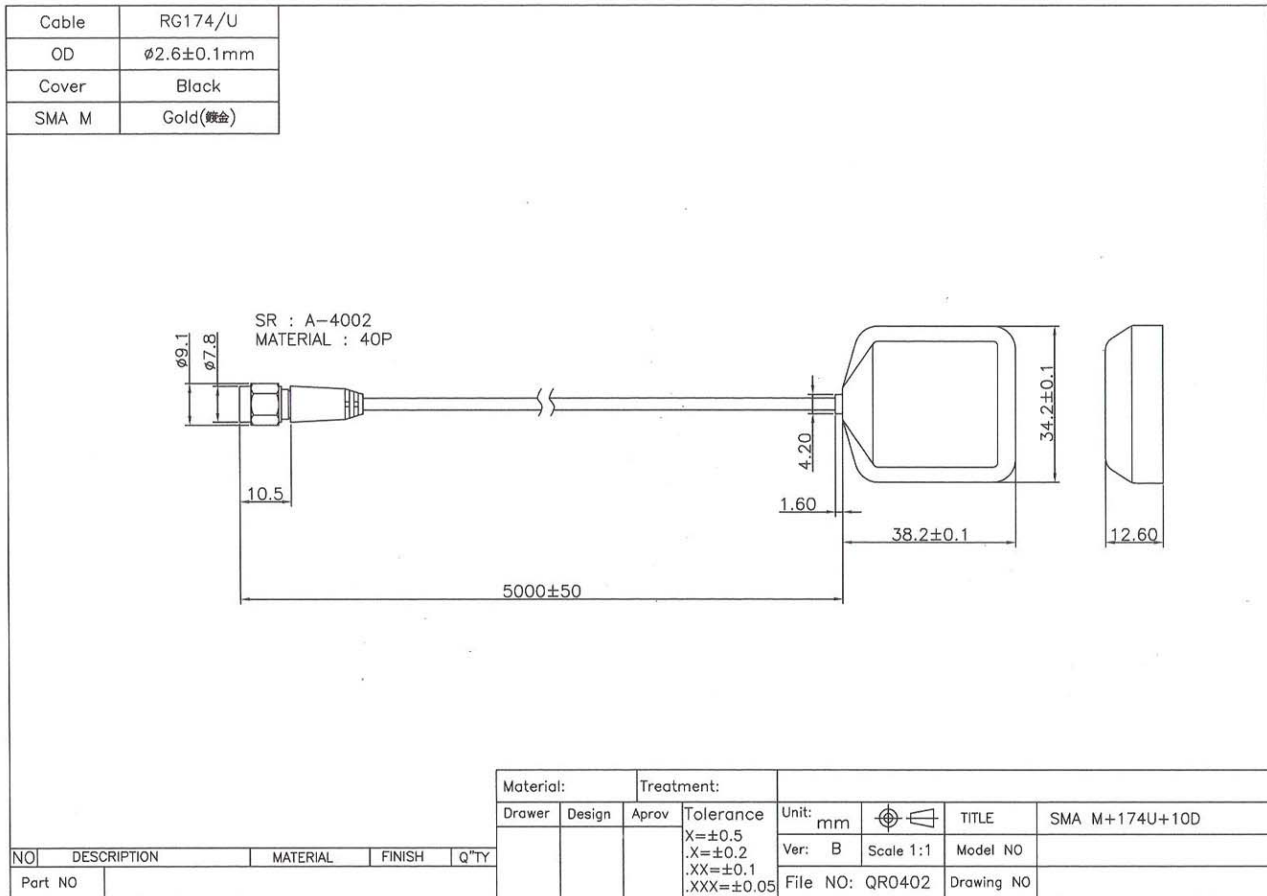
A compact Antenna for GPS applications where high performance is required from a small size. The antenna includes a Low Noise Amplifier and incorporates both magnetic mount and screw fixings.

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)

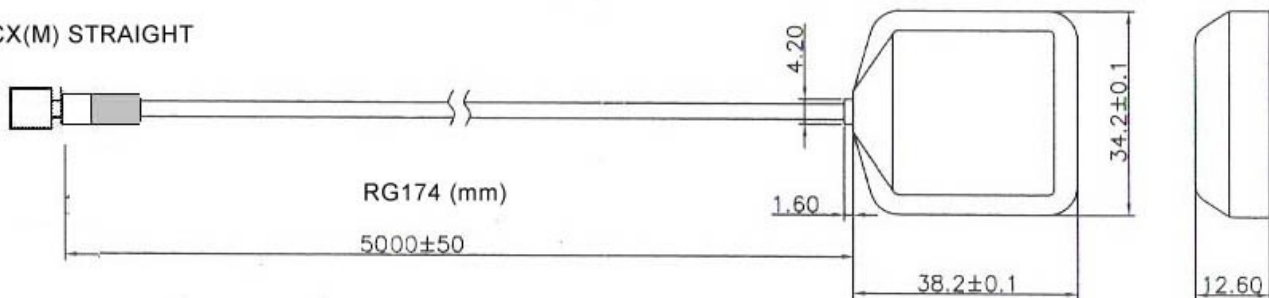
Mechanical Detail

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 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

RF Solutions Ltd. Recycling Notice Meets the following EC Directives:

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.

Disclaimer:

Whilst the information in this document is believed to be correct at the time of issue, RF Solutions Ltd does not accept any liability whatsoever for its accuracy, adequacy or completeness. No express or implied warranty or representation is given relating to the information contained in this document. RF Solutions Ltd reserves the right to make changes and improvements to the product(s) described herein without notice. Buyers and other users should determine for themselves the suitability of any such information or products for their own particular requirements or specification(s). RF Solutions Ltd shall not be liable for any loss or damage caused as a result of user's own determination of how to deploy or use RF Solutions Ltd's products. Use of RF Solutions Ltd products or components in life support and/or safety applications is not authorised except with express written approval. No licences are created, implicitly or otherwise, under any of RF Solutions Ltd's intellectual property rights. Liability for loss or damage resulting or caused by reliance on the information contained herein or from the use of the product (including liability resulting from negligence or where RF Solutions Ltd was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict RF Solutions Ltd's liability for death or personal injury resulting from its negligence.