



GA-005 – High Performance

GPS Active Antenna

Overview

Built-in SAW filter and high gain LNAs, GA-005 is a high performance, low power, variable bias voltage, GPS active antenna. It's an ideal companion to GPS receivers.

Applications

- Automatic vehicle location
- Fleet management
- Electronic-mapping application
- Security system

Features

- Compact
- Low power consumption
- Variable bias voltages
- High gain, low noise
- Variable cable length and connectors are available
- Magnetic mounting
- IP67 Water-resistance

Technical Specifications

Working Voltage	3.0 ~ 5.0V
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Antenna Performance Data

Ceramic Patch

Size	25mm*25mm*4mm
Center Frequency	1575.42±2 MHz
V.S.W.R	1.5:1
Bandwidth	10 MHz min
Impedence	50 ohm
Peak Gain	5.0 dBic
Test Ground Size	70mm*70mm
Polarization	R.H.C.P.

LNA

Gain	27 ± 3dB (25°C±10°C)
Noise Figure	1.5 dB (25°C±10°C)
Output VSWR	2.0 Max
Voltage	3.0~5.0 V
Current	10 mA @ 3.0V Typical

Filter

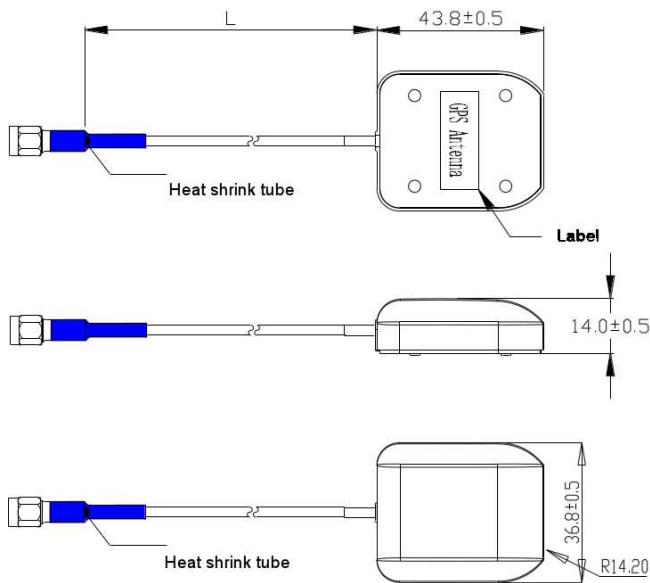
Center Frequency (fc)	1575.42 MHz
Insertion Loss	Max. 3.0dB (at 25 ± 5°C) Max. 3.5dB (at -40 ~ +85°C)
Bandwidth	fc ± 5MHz
VSWR	2.0 Max
Ripple	Max 0.5dB
Attenuation	Min 25dB (fc+100MHz) Min 40dB (fc-100MHz)
Impedence	50 ohm

Environmental Data

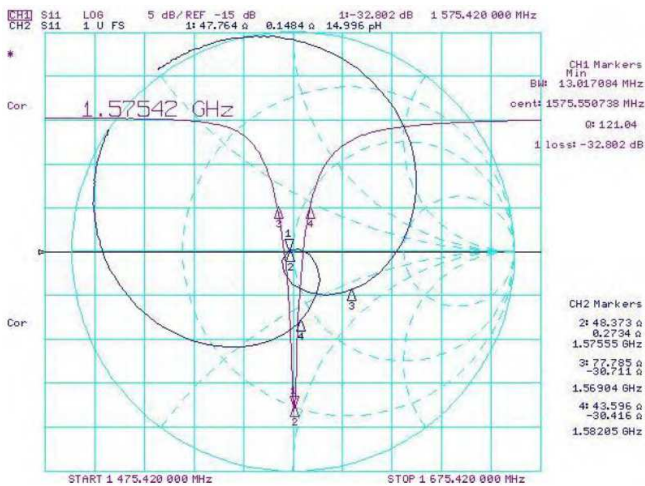
Operating temperature	-40 ~ 80°C
Storage temperature	-45 ~ 85°C
Vibration	10Hz to 50Hz, 1g
Waterproof	IP67

Mechanical Data

Dimension	43.8 (L) x 36.8 (W) x 14.0 (H) mm
Cable Type	RG174/U
Cable Length	1.5m, 3m (default), 5m, 10m, etc.
RF Connector	SMA (default) MCX, MMCX, SMB, GT5



Passive Antenna Characteristics



LNA Characteristics

