

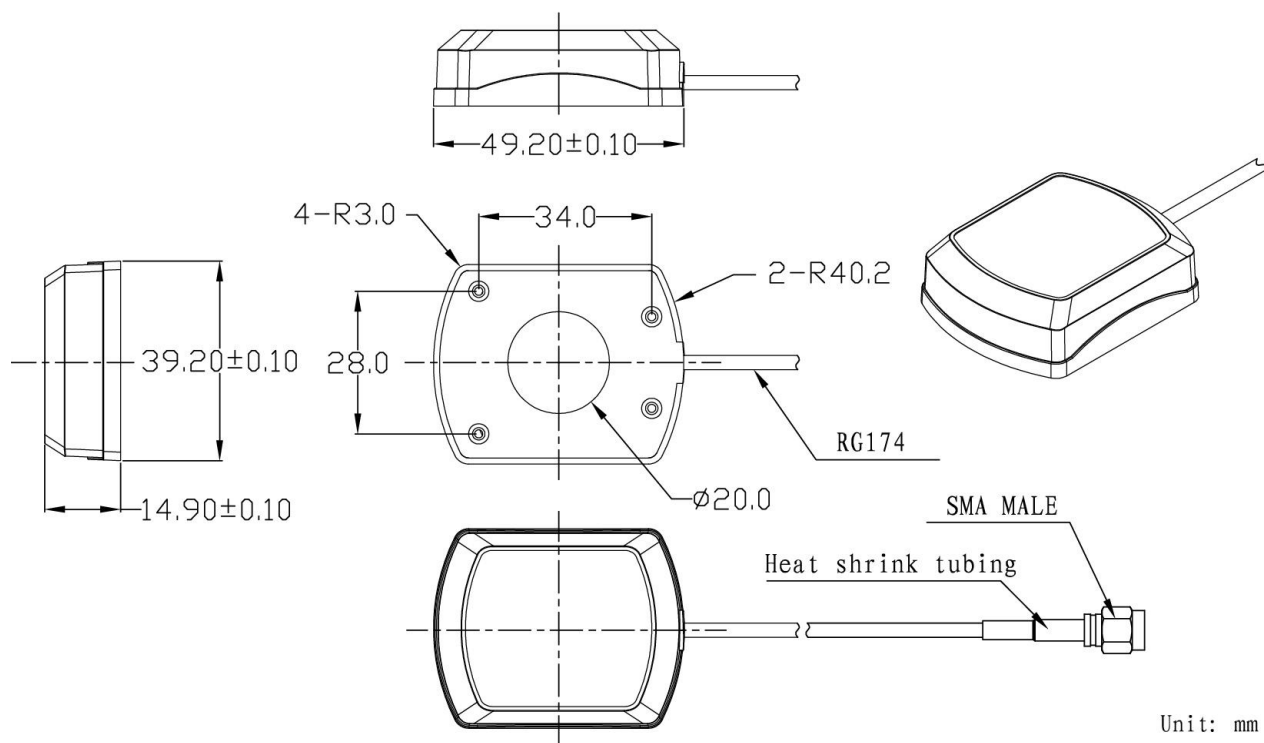
: PRODUCT GPS+Glonass antenna APG01/GL



- Size: 43x33x14mm
- Cable RG174 5m / 3m / or others
- Connector SMA / SMB / MCX / or others
- Housing Black or others
- Dielectric Antenna

PRODUCT FEATURE

1. Dimension (Unit: mm)



2. Electrical Characteristics

Dielectric Antenna	
Frequency	1575MHZ - 1610MHz
Center Frequency	1590MHz
V.S.W.R	1.5:1
Band Width	50 MHz Min. at -10dB
Impedence	50 ohm
Peak Gain	5dBic Min/1575MHz 4dBic Min/1602~1616MHz
Gain Coverage	≥- 4dBic at -90°~90°(over75% volume)
Power Handling	1 watt
Polarization	RHCP

2.1 LNA/Filter

LNA Gain(Without cable)	32dB Typical
Noise Figure	1.5dB
V.S.W.R	2.0
DC Voltage	3.0V to 5.0V
DC Current	11mA Max

2.2 Mechanical

Weight	Less than 110gram
Size	44×38×13mm
Cable	RG174, 3meters or other
Connector	SMA(male) Magnetic base
Housing	Black

3. Reliability

Condition: Temperature: 40±5°C

Load: DC=5V±0.5 V

Quantity: 2000pcs

Sustained Time: 480h

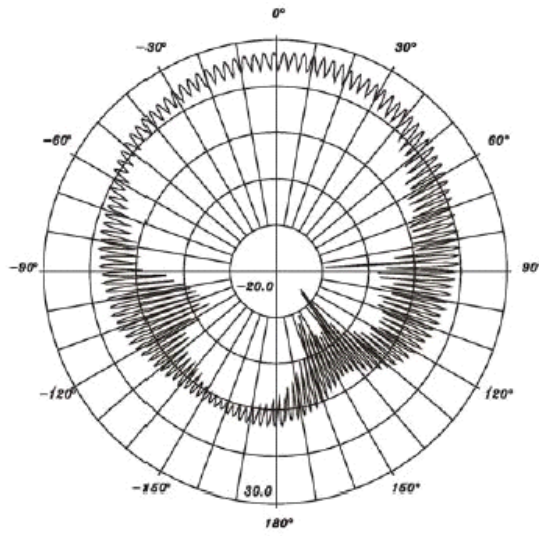
4. Gain Pattern

GPS / GLONASS (Voltage : 3.3V)

1.573GHz

Gain:25.5dB

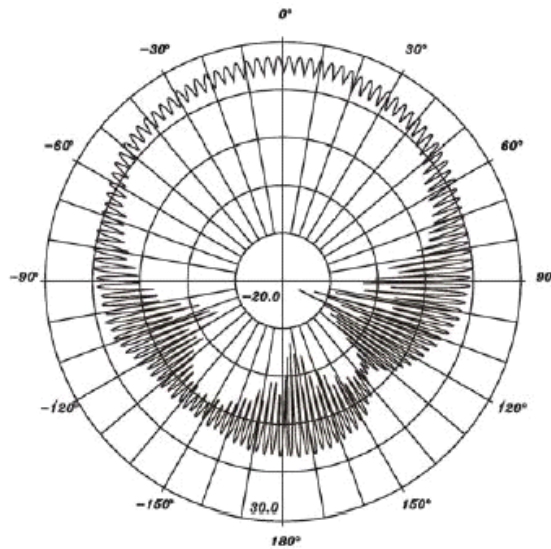
Ellipticity of polarization(AR):2.91



1.590GHz

Gain:26.8dB

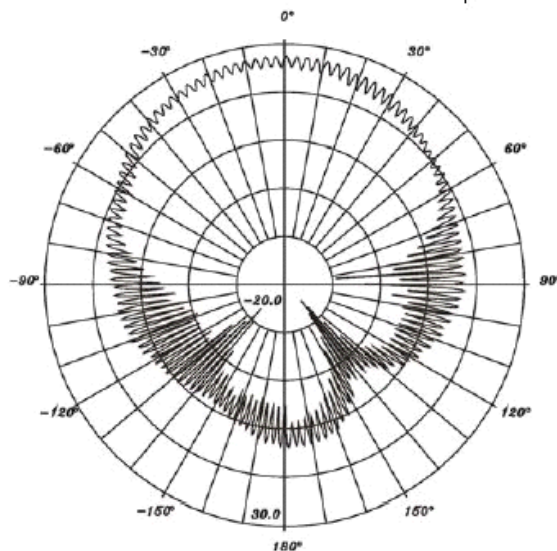
Ellipticity of polarization(AR):2.78



1.610GHz

Gain:27.1dB

Ellipticity of polarization(AR):2.56



5. Environmental Specifications

Condition:

Post Environmental Tolerance (Refer to the form 1)

Temperature range $25 \pm 3^{\circ}\text{C}$

Relative Humidity range 55~75%RH

Operating Temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Storage Temperature range $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$

5.1 Moisture Proof

The device should satisfy the electrical characteristics specified in form 1 after exposed to the temperature $40 \pm 2^{\circ}\text{C}$ and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

5.2 Vibration Resist

The device should satisfy the electrical characteristics specified in form 1 after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X , Y and Z directions.

5.3 Drop Shock

The device should satisfy the electrical characteristics specified in form 1 after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

5.4 High Temperature Endurance

The device should satisfy the electrical characteristics specified in form 1 after exposed to temperature $80 \pm 5^{\circ}\text{C}$ for 24 ± 2 hours and 1~2 hours recovery time under normal temperature.

5.5 Low Temperature Endurance

The device should also satisfy the electrical characteristics specified in form 1 after exposed to the temperature $-40^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 24 ± 2 hours and to 2 hours recovery time under normal temperature.

5.6 Temperature Cycle Test

The device should also satisfy the electrical characteristics specified in form 1 after exposed to the low temperature -25°C and high temperature $+85^{\circ}\text{C}$ for 30 ± 2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

6. Weatherproof

Put the antennas in 1m deep water for 12h, and find 100% waterproof.