

# **GPS+GSM Combination Antenna**

Model: AGC601



# 1 Part Number

# AGC601-XXX

AG= Glyn Antenna

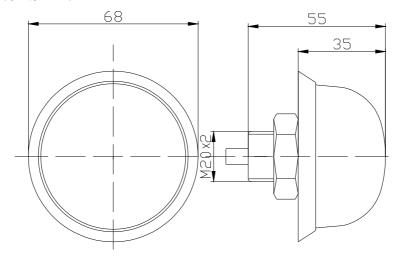
C = Combo GSM/GPS antenna

**601** – Series

**XXX** – Customer part number



# 2 Dimension (Unit: mm)



# 3 Electrical Characteristics

## 3.1 GSM Antenna

Form 1

No.	Item	Specifications
1	Frequency	824~960 MHz/1710~1990 MHz 1920~2170MHz
2	V.S.W.R (5m)	≤2.0∶1
3	Gain (Zenith)	2 dBi
4	Impedance	50 Ω

# 3.2 Dielectric Antenna

Form 2

No.	Item	Specifications	Post Environmental Tolerance
1	Center Frequency	1575.42 MHz	±3 MHz
2	Band Width	±5 MHz	$\pm$ 1 MHz
3	V.S.W.R (in BW)	1.5 : 1	_
4	Gain (Zenith)	3 dB	$\pm 0.5~\mathrm{dB}$
5	Polarization	RHCP	_
6	Impedance	50 Ω	_



### 3.3 LNA/Filter

#### Form 4

No.	Item	Specifications	Post Environmental Tolerance
1	LNA Gain	14±2 dB	$\pm 2.5~\mathrm{dB}$
2	Noise Figure	1.5 dB	_
4	DC Voltage	2.7~5.5 V	
5	DC Current	5~15 mA	

## 4.0 Mechanical

#### Form 5

No.	Item	Specification
1	Cable	RG174/RG58 3m/5m or others
2	Connector	SMA/SMB/MCX or others
3	Plastic Housing	Black
4	Mounting	Screw

# 5 Reliability

Condition: Temperature:  $40\pm5^{\circ}$ C

Load: DC=5V±0.5 V Quantity: 2000pcs Sustained Time: 480h

# 6 Environmental Specifications

Post Environmental Tolerance (Refer to the form 2~3)

Condition: Temperature range  $25\pm3^{\circ}$ C

Relative Humidity range 55~75%RH

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

Storage Temperature range -40°C~+100°C

# 6.1 Moisture Proof

The device should satisfy the electrical characteristics specified in form  $1\sim2$  after exposed to the temperature  $40\pm2^{\circ}$ C and the relative humidity  $90\sim95\%$  RH for 96 hours and  $1\sim2$  hours recovery time under normal condition.



### 6.2 Vibration Resist

The device should satisfy the electrical characteristics specified in form  $1\sim2$  after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X , Y and Z directions.

## 6.3 Drop Shock

The device should satisfy the electrical characteristics specified in form 1~2 after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

# 6.4 High Temperature Endurance

The device should satisfy the electrical characteristics specified in form  $1\sim2$  after exposed to temperature  $80\pm5$ °C for  $24\pm2$  hours and  $1\sim2$  hours recovery time under normal temperature.

## 6.5 Low Temperature Endurance

The device should also satisfy the electrical characteristics specified in form  $1\sim2$  after exposed to the temperature  $-40\%\pm5\%$  for  $24\pm2$  hours and to 2 hours recovery time under normal temperature.

## 6.6 Temperature Cycle Test

The device should also satisfy the electrical characteristics specified in form  $1\sim2$  after exposed to the low temperature  $-25\,^{\circ}$ C and high temperature  $+85\,^{\circ}$ C for  $30\pm2$  min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

## 7 Weatherproof

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