



GPS/GLONASS Active Antenna

(Model: A-GPSAGL3xx5)



Specifications

Electrical Specifications - Dielectric Antenna

No.	Item	Specifications	Post Environmental Tolerance
1	Centre Frequency (MHz)	1575.42 MHz	± 3 MHz
2	Bandwidth (MHz)	± 5 MHz	± 1 MHz
3	V.S.W.R (in BW)	1.5 : 1	-
4	Gain (Zenith)	3 dB	± 0.5 dB
5	Polarisation	RHCP	-
6	Impedance	50 ohms	-

1	Centre Frequency (MHz)	1602 MHz	± 3 MHz
2	Bandwidth (MHz)	± 25 MHz	± 1 MHz
3	V.S.W.R (in BW)	1.5 : 1	-
4	Gain (Zenith)	3 dB	± 0.5 dB
5	Polarisation	RHCP	-
6	Impedance	50 ohms	-

Electrical Specifications - LNA/Filter

No.	Item	Specifications	Post Environmental Tolerance
1	LNA Gain	28 ± 2 dB	± 2.5 dB
2	Noise Figure	1.5 dB	-
3	Filter Out Band Attenuation	12 dB min. f ₀ + 50 MHz 16 dB min. f ₀ - 50 MHz	± 1.0 dB
4	DC Voltage	2.2 ~ 5V	
5	DC Current	5 ~ 15 mA	

1	LNA Gain	28 ± 2 dB	± 2.5 dB
2	Noise Figure	1.5 dB	-
3	DC Voltage	2.2 ~ 5V	
4	DC Current	5 ~ 15 mA	

Mechanical Specifications

No.	Item	Specifications
1	Cable	RG174 5m standard (other lengths on request)
2	Connector	SMA Male or others (see page 3)
3	Plastic Housing	Black
4	Mounting	Magnet



Reliability Condition

Temperature	40±5°
Load	DC=5V±0.5 V
Quantity	2000pcs
Sustained Time	480h

Environmental Specifications

Post Environmental Tolerance	(Refer to the form 1~2)
Condition Temperature Range	25±3°
Relative Humidity Range	55~75%RH
Operating Temperature Range	-40°~+85°
Storage Temperature Range	-40°~+100°

Moisture Proof

The device should satisfy the electrical characteristics specified above after exposed to the temperature 40±2° and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

Vibration Resist

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

Drop Shock

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

High Temperature Endurance

The device should satisfy the electrical characteristics specified above after exposed to temperature 80±5° for 24±2 hours and 1~2 hours recovery time under normal temperature.

Low Temperature Endurance

The device should also satisfy the electrical characteristics specified above after exposed to the temperature -40°±5° for 24±2 hours and to 2 hours recovery time under normal temperature.

Temperature Cycle Test

The device should also satisfy the electrical characteristics specified above after exposed to the low temperature -25° and high temperature +85° for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

Weatherproof

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



Part Number Options

A-GPSAGL3 X X 5



P	Plug (Male Connector)
S	Socket (Female Connector)

Connector Style	
S	SMA Type Connector
B	BNC Type Connector
M	MCX Type Connector
T	TNC Type Connector
N	N Type Connector
O	No Connector

