

# GPS Antenna Module

## MODEL: GAM-18

Compact & Sensitive GPS Antenna Module with Excellent Signal Amplification for Mobile Applications



- Operation temperature: -30°C to +80°C
- Input Voltage: 2.5V~5.5V
- Frequency range: 1575.42+1.023MHz
- Gain: 28 / 16 dB Typ.

**GAM-18** is the most compact GPS antenna module currently available on the market, thanks to our cutting-edge technology that makes the device the tiniest possible without sacrificing performance. With comprehensive coverage almost all the way to the horizon, it performs excellently in foliage or urban canyon environment. Featuring diminutive but substantial enclosure plus unparalleled performance, **GAM-18** is compatible with almost every GPS receiver model available on the market and provides a perfect alternative for a vast range of GPS applications in the fields of AVL, vehicle navigation, aviation and military.

### SPECIFICATIONS:

Specification	
<b>Physical Condition</b>	
Dimension	18.5mm (L) x 18.5mm (W) x 7mm (H)
Weight	>6 grams
<b>Environmental Conditions</b>	
Operation temperature	-30°C to +80°C
Storage temperature	-40°C to +100°C
Relative Humidity	40% to 95%
<b>Electrical Specifications</b>	
Input voltage	2.5V~5.5V
Power Consumption	at 2.5V 6.6mA Typ.

	at 3.0V 8.6mA Typ.
	at 4.0V 12.6mA Typ.
	at 5.0V 16.6mA Typ.
<b>Antenna</b>	
Frequency range	1575.42 ± 1.023 MHz
Gain at 10° elevation	-1 dBic Typ.
Gain at Zenith	5.0 dBic Typ.
Bandwidth	10 MHz min. @S11≤-10 dB
Polarization	RHCP
Axial Ratio	3.0dB Typ.
<b>LNA</b>	
Frequency range	1575.42 ± 1.023 MHz
Gain	28dB Typ. (or 16db)
Noise Figure	1.5 Typ.
Filter	20dB 25dB @ fo+/- 50MHz 30dB 35dB @ fo+/- 100MHz * fo=1575.42MHz
Output Impedance	50 ohm
Output VSWR	2.0 max.
<b>Total Specifications(Through Antenna, LNA, Cable and Connector)</b>	
Frequency range	1575.42 +/- 1.023 MHz
Gain	At 90° vertical to sky 30 ± 4.5dBi (cable loss) Note:1 Mounted on the 60mm x 60mm square ground plane
Output Impedance	50 ohm
VSWR	2.0 max.

\* This specification is subject to change without prior notice

Note:1:Cable Loss=(-1.2dB/m)

Data Updated: Jan 11, 2006