

ANT12000001

GPS antenna



ENVIRONMENTAL CONDITIONS

Operation Temperature	-40°C to + 85°C
Storage Temperature	-40°C to + 100°C
Relative Humidity	40% to 95%

ELECTRICAL SPECIFICATIONS

Operation Voltage	Min: 2.5 V Typ: 3.0 V Max: 5.5V
Current Consumption	Typ: 11 mA Max: 15mA @ 3.0V

MECHANICAL SPECIFICATIONS

Mounting	Magnet mount.
Water Proof	Deep into water 50cm, 30 Min.
Shock	10msec. Half sine wave.
Vibration	10~200Hz Log. Sweep 3.0G sweep time: 15 Minutes, 3 Axes.
Cable Pulling Off Force	At room temperature Min 7Kg /10sec. Apply 7Kg /10sec pulling force between the cable and the antenna unit, no visible damage shall appear on the cable and connector.
Bending Test	After bending 90° right and left for 1,000 cycles, no permanent damage were found.

ANTENNA

Frequency Range	1575.42 ± 1.023 MHz.
Bandwidth	15 MHz min. (Return loss -10 dB)
Gain	at Zenith : + 5.0 dBic Typ. at 10° Elevation: -1.0 dBic Typ . Mounted on the 70mm*70mm ground plane.
Polarization	RHCP
Axial Ratio	3.0dB Max. Mounted on the 70mm*70mm ground plane.

LNA

Frequency Range	1575.42±1.023 MHz
Gain	28±2dB (+ 25 °C ± 5°C)
Noise Figure	1.6 dB Max. (+ 25 °C ± 5°C) @ 3.0V
Output Impedance	50Ω

TOTAL SPECIFICATIONS (Through Antenna, LNA, Cable and Connector)

RF Cable	RG174 , $\phi 2.7 \pm 0.2\text{mm}$, Black Cable Length = 3M ± 5cm
RF Connector	SMA (M)
Frequency Range	1575.42 ± 1.023MHz
Gain	at Zenith : Typ 33 dBic – (cable loss) Note:1 mounted on the the 70mm*70m ground plane
Output Impedance	50Ω
VSWR	2.0 Max

Note 1: Cable Loss = Max.(-1.3dB / m)

