



LTE-L-002

GPS-GLONASS Antenna

**AUTHORIZED TELIT
DISTRIBUTOR**

DATASHEET



1 Part Number

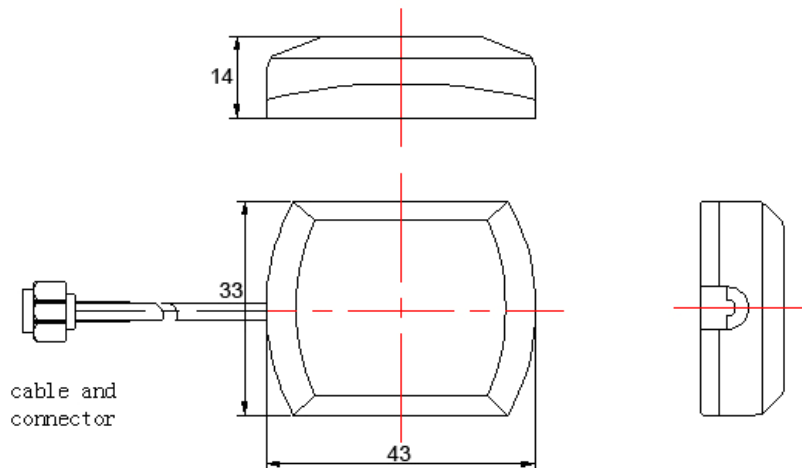
LTE L 002

Serial Number

A: GPS-GLONASS Antenna

LTE:Lte Electronic Co.

2 Dimension Unit mm



3 Electrical Characteristics

3.1 Dielectric Antenna

Form 1

No.	Item	Specifications	Post Environmental Tolerance
1	Center Frequency MHz	1602-1610MHz 1575.42±3MHz	±3 MHz
2	Band Width MHz	±5 MHz	±1 MHz
3	V.S.W.R in BW	1.5 1	—
4	Gain Zenith	3 dB	±0.5 dB
5	Polarization	RHCP	—
6	Impedance	50 Ω	—

3.2 LNA/Filter

Form 2

No.	Item	Specifications	Post Environmental Tolerance
1	LNA Gain	29±1 dB	±2.5 dB
2	Noise Figure	1.5 dB	—
3	Filter Out Band Attenuation	12dB Min f0+50MHz 16dB Min f0-50MHz	±1.0 dB
4	DC Voltage		2.2~5 V
5	DC Current		5~15 mA

3.3 Mechanical

Form 3

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

4 Reliability

Condition Temperature: $40 \pm 5^{\circ}\text{C}$
Load: $\text{DC}=5\text{V} \pm 0.5 \text{ V}$
Quantity: 2000pcs
Sustained Time: 480h

5 Environmental Specifications

Post Environmental Tolerance (Refer to the form 1~2)

Condition 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 1~2 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 1~2 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 1~2 after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

5.4 High Temperature Endurance

The device should satisfy the electrical characteristics specified in form 1~2 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 1~2 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 1~2 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.Put the antennas in 1m deep water for 12h , and find 100% waterproof.