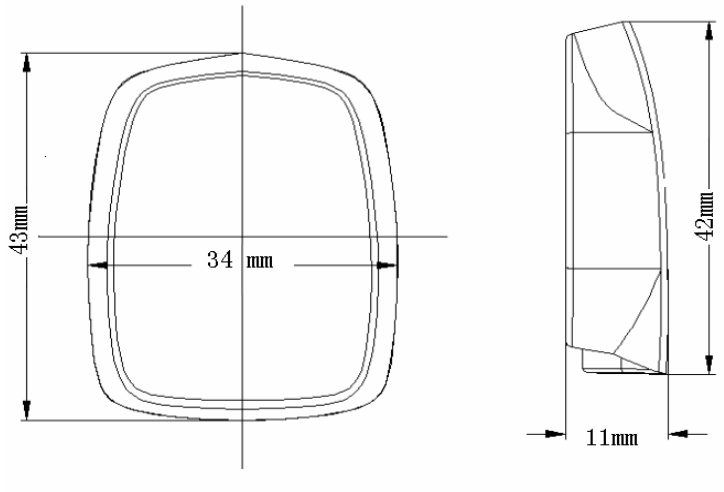
V.TORCH
Electronics Limited

GPS External Active Antenna

Part Number VTGPSA-10

1 Dimension (Unit mm)



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2 Electrical Characteristics

3.1LNA/Filter

Form 1

NO.	Item	Specifications	Post Invironment Tolerance
1	LAN gain	28±3 dB	±2.5 dB
2	Noise Figure	1.5 dB	—
3	Filter out Band Attenuation	14dB Min f0+50MHz 18dB Min f0-50MHz 30dB Min f0+100MHz 42dB Min f0-100MHz	
4	DC Voltage	3~5V	
5	DC Current	8~15mA	

3.2 Mechanical

Form 2

NO.	Item	Specification
1	Cabele	RG174 3m/5m or others
2	Connector	SMA/SMB/MCX or others
3	Plastic Housing	Black
4	Mounting	Magnetic/Stick

4 Reliability

Condition：Temperature: 40±5℃

Load: DC=5V±0.5 V

Quantity: 2000pcs

Sustained Time: 480h

5 Environmental Specifications

Condition：

Post Environmental Tolerance (Refer to the form 1)

Temperature range 25±3℃

Relative Humidity range 55~75%RH

Operating Temperature range -40℃~+85℃

Storage Temperature range -40℃~+100℃

5.1 Moisture Proof

The device should satisfy the electrical characteristics specified in form 1 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.

5.2 Vibration Resist

The device should satisfy the electrical characteristics specified in form 1 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 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 after exposed to temperature 80±5℃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 after exposed to the temperature -40℃±5℃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 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

6 Weatherproof

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