GR-300, SiRFstarIII, Cute Ultra-High Performance GPS Smart Antenna Dongle



RoHS Compliant

Overview

GR-300 is a cute, easy to bring, ultra-high performance, low power GPS smart antenna with USB connector. The built-in SiRFstarIII chip and our experienced design provide fast acquisitions and excellent tracking performance. It is a perfect companion with Notebook PC, UMPC etc.

The embedded string hole allows one to bring this cute device as a necklace or a key chain.

Applications

- Vehicle navigation device
- Automatic vehicle location

Features

- Cute, sleek, lightweight
- Based on SiRF's GSC3f low power single chip
- High performance: -159dBm tracking sensitivity
- Low power: 50mA at continuous tracking
- SBAS (WAAS and EGNOS) support (optional)
- Backup battery keeps fixing data for 10 days for faster position fix after first initial fully charging. Charging time is 4 hours.
- Green LED for GPS position fix indication
- Cute design for bringing as necklace or key chain

Technical Specifications

Receiver Performance Data +

Receiver Type	20-channel, L1 frequency, C/A code
Horizontal Position Accuracy	< 2.5m (Autonomous) < 2.0m (WAAS) (50% 24hr static, -130dBm)
Velocity Accuracy	<0.01 m/s (speed) <0.01° (heading), (50%@30m/s) Static navigation < 0.5m/s
Time To First Fix Hot start Warm start Cold start	Autonomous <1sec <35sec <42sec (50% -130dBm)
Sensitivity (Autonomous)	-142dBm (acquisition) -159dBm (tracking) (-142dBm 28dB-Hz with 4dB noise figure)
Max. Update Rate	1Hz
Max. Altitude	<18,000 m
Max. Velocity	<1,852 km/hr
Protocol Support	NMEA v3.00, 4800bps N,8,1; GGA, GSA, GSV, RMC, VTG
Datum	WGS-84
SBAS Support	WAAS, EGNOS (optional)
Dynamics	<4g

+ According to SiRF IC data.

Electrical Data

Power Supply	5 VDC
Power Consumption	50mA/average tracking

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Environmental Data

Operating	Temperature	-20 ~ 60℃
	Humidity	5~95% non-condensing
Storage	Temperature	-20 ~ 60℃
	Humidity	5~95% non-condensing

Other Data

Dimension	21 x 65.9 x 13.4 (±0.25; mm)
Weight	16.4 ± 0.5 g
Color	Black

LED

Color	Green
Power off	Always off
Power on, position is not fixed	Always ON
Power on, position is fixed	Blinking

Connector

USB A-type

Male Plug



A	GGA, GSA, GSV, RMC, VTG@1Hz 4800bps, N-8-1

Note. Other baud rate, NMEA sentences, or even datum could be customized based on MOQ.

Optional Accessory

- USB cable of length 1m for extending the GPS signal reception range.

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