

GR-300, SiRFstarIII, Compact

Ultra-High Performance

USB Dongle GPS Receiver



Overview

GR-300 is a compact, easy to bring, ultra-high performance, low power USB GPS receiver. The built-in SiRFstarIII chip and our experienced design provide fast acquisitions and excellent tracking performance. It is a perfect companion with Notebook/Tablet PC, UMPC etc. The embedded string hole allows one to bring this slim device as a necklace or a key chain.

Applications

- USB GPS souvenir
- Navigation companion device
- GPS supplement to tablet PC

Features

- Compact, sleek, lightweight
- Based on SiRF's GSC3f low power single chip
- High performance: -159dBm tracking sensitivity
- Low power: 44mA at continuous tracking
- SBAS (WAAS, EGNOS, MSAS) support (optional)
- Backup battery keeps fixing data for 10 days for faster position fix after first initial fully charging.
- Green LED for GPS position fix indication
- Slim 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)
Time To First Fix	Autonomous
Hot start	<1sec
Warm start	<35sec
Cold start	<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, MSAS (optional)
Dynamics	<4g

Electrical Data

Power Supply	5 VDC
Power Consumption	44mA/average tracking

Environmental Data

Operating temperature	-20 ~ 60°C
Storage temperature	

Navisys Technology Corp.

Tel : +886-3-5632598

Sales contact: sales@navisys.com.tw

Address: 2F, No.56, Park Ave. II, Science-Based Industrial Park, Hsinchu 300, Taiwan (R.O.C.)

<http://www.navisys.com.tw/>

Fax: +886-3-5632597

Technical support: service@navisys.com.tw

Other Data

Dimension

With Cap	21 x 72 x 13.4 (±0.25; mm)
Without Cap	21 x 65.9 x 13.4 (±0.25; mm)

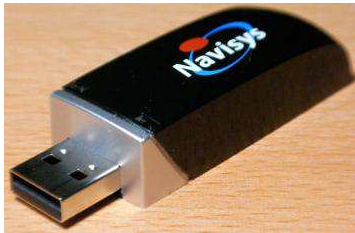
Weight

With Cap	18±0.5 g
Without Cap	16.4±0.5 g

Connector

USB A-type

Male Plug



Ordering Information

GR-300X

A	GGA, GSA, RMC, VTG@1Hz, GSV@1/5Hz 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 1.5m for extending the GPS signal reception range.

*This document is subject to change without notice.