GR-700, u-blox 7, Slim, Ultra-High Performance USB Dongle GPS Receiver



Overview

GR-700 is a slim, compact, easy to bring, ultra-high performance, low power USB dongle GPS receiver. The built-in u-blox 7 chip and our experienced design provide fast acquisitions and excellent tracking performance. It is a perfect companion with tablet PC, Netbook, UMPC, Notebook PC etc. The embedded string hole allows one to bring this sleek device as a necklace or a key chain.

Applications

- Vehicle navigation device
- Companion to notebook/tablet PC, UMPC

Features

- Sleek, compact, lightweight
- Based on u-blox 7 low power single chip
- High performance+: -162 dBm tracking sensitivity
- Enhanced noise resistance
- Low power: 56mA at continuous tracking
- SBAS (WAAS, EGNOS, MSAS) support (optional)
- Green LED for GPS position fix indication
- Backup battery keeps fixing data for 7 days for faster position fix. First initial fully charging takes 5 hours.
- Windows **location sensor** support
- Supports all major operating systems (Windows, Linux, Android, MAC OS etc.)&

& For Android, please remember to build with the GPS enabled. u-center is suggested for viewing.

Technical Specifications

Receiver Performance Data+

Receiver Type	56-channel, L1 frequency, C/A code
Horizontal Position Accuracy	< 2.5m (Autonomous) < 2.0m (WAAS) (CEP, 50% 24hr static, -130dBm)
Velocity Accuracy	<0.1 m/s (speed) <0.5° (heading), (50%@30m/s)
Time To First Fix Hot start Warm start Cold start	Autonomous <1sec <28sec <29sec (50% -130dBm)
Sensitivity+ (Autonomous)	-148dBm (acquisition) -162dBm (tracking & navigation)
Max. Update Rate	Max. 10Hz Default 1Hz
Max. Altitude	<50,000 m
Max. Velocity	500 m/s
Protocol Support	NMEA 0183 v2.3 (compatible to 3.0), 4800~115200bps N,8,1; GGA, GLL, GSA, GSV, RMC, VTG
Datum	WGS-84
SBAS Support	WAAS, EGNOS, MSAS
Dynamics	<4g

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+ Spec by IC supplier, within 2 dBm, 3D

Electrical Data

Power Supply	5 VDC
Power Consumption	56mA/average tracking

Environmental Data

Operating temperature/ Storage temperature	-20 ~ 60℃

Other Data

Dimension

With Cap	60 x 18 x 10 (±0.25; mm)
Without Cap	55 x 18 x 10 (±0.25; mm)

Connector

USB A-type

Male Plug



Ordering Information

GR-700X

A	GGA, GLL, GSA, GSV, RMC, VTG

Optional Accessory

- USB cable of length 1.5m for extending the GPS signal reception range.

*This document is subject to change without notice.

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