

# GR-600, u-blox 6, Slim, Ultra-High Performance USB Dongle GPS Receiver



## Overview

GR-600 is a slim, compact, easy to bring, ultra-high performance, low power USB dongle GPS receiver. The built-in u-blox 6 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 6 low power single chip
- High performance<sup>+</sup>: -161dBm tracking sensitivity
- Enhanced noise resistance
- Low power: 56mA at continuous tracking
- SBAS (WAAS, EGNOS, MSAS) support (optional)
- Green LED for GPS position fix indication
- Sleek design for bringing as necklace or key chain
- Windows **location sensor** support
- Supports all major operating systems (Windows, Linux, MAC OS etc.)

## Technical Specifications

### Receiver Performance Data<sup>+</sup>

Receiver Type	50-channel,
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	L1 frequency, C/A code GPS:1575.42MHz
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	Autonomous
Hot start	<1sec
Warm start	<32sec
Cold start	<32sec (50% -130dBm)
Sensitivity (Autonomous)	-147dBm (acquisition) -161dBm (tracking & navigation)
Max. Update Rate	5Hz
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, GAGAN
Dynamics	<4g

<sup>+</sup> Spec by IC supplier

### Electrical Data

Power Supply	5 VDC
Power Consumption	56mA/average tracking

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### Environmental Data

Operating temperature/	-20 ~ 60°C
Storage temperature	

### 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-600X

A	GGA, GLL, GSA, GSV, RMC, VTG
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### Optional Accessory

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

\*This document is subject to change without notice.