Fortuna Slim Bluetooth GPS Receiver

Product specification Reference Manual



Fortuna Electronic Corporation Version 1.0 2005/04/01 All Rights Reserved

Introduction

Overview

The Fortuna Slim Bluetooth GPS receiver is a Global Positioning System Receiver with Bluetooth wireless technology. This Bluetooth GPS receiver allows you to receive GPS data and send GPS position data over Bluetooth. You can position the receiver for the best reception without wires.

The Fortuna Slim Bluetooth GPS integrates Bluetooth module into GPS device. It shows the high performance, low power consumption, easily portable, and wireless data transmission. If you have a Pocket PC or other portable devices enabled with Bluetooth function, you can take advantage of your device's Bluetooth capability to wirelessly add GPS positioning technology. When you choose suitable navigation software, you can apply to personal, vehicle, and marine navigation.

Main Features

- *Three LED at the top of the device shows Bluetooth, GPS and Power Status.
- *Detachable 1200mALithium-Polymer battery lasts up to 8.5 Operating hours
- *Dimension: L= 74 mm, W= 38 mm, H= 23 mm
- *Weight: 80g
- *On/Off Switch
- *12 Channels (All-In-View) Tracking
- *Cold/ Warm/ Hot Start Time: 42/38/1 Seconds
- *Reacquisition Time: 0.1 seconds
- *Standard NMEA-0183 output at 38400 bps baud rate
- *Compatible with Bluetooth devices with Serial Port Profile (SPP)

Items included in the package

- 1.Battery
- 2.Screw
- 3.Screw driver
- 4.DC to USB cable
- 5.USB DC adapter
- 6.USB carlighter adapter
- 7.User's manual

Installation Instruction

- 1. Slide open the battery cover then place the battery into the battery compartment properly.
- 2.Slide the battery case back on and use the screwdriver to make sure the case will not be removable.

Caution: Please do not use any battery other than Slim Bluetooth GPS original battery.

Bluetooth connection

- 1.Switch on the Slim BTGPS.
- 2. Turn on your PDA device.
- 3.Go to <u>Bluetooth Manager</u> on PDA device.
- 4. Select Search for BT devices.
- 5. After found the <u>Slim BTGPS</u> then <u>Select</u> and <u>Saveit</u>.
- 6.Go to Action and select SPPslave.
- 7.Enter the passkey <u>0000</u> if required.
- 8.Click on the <u>Slim BTGPS</u> icon and then a 2 way arrow shows the Bluetoothis linking.
- 9. The Slim Bluetooth GPS LED light should be on and it means the Bluetooth link has been established.
- 10. Start your software application.
- 11. Please select the Baud rate at NMEA 38400 and proper com-port.

Technical Specifications

Electrical Characteristics

<u>General</u>

Chipset SiRF Star III

Frequency L1, 1575.42 MHz C/A code 1.023 MHz chip rate

Channels 12 channel all-in-view tracking Antenna Type Built-in Ceramic patch antenna

Accuracy

Position 10 meters, 2D RMS

5 meters 2D RMS, WAAS corrected

2.5 meters, DGPS corrected

Velocity 0.1 meters/ second

Time 1 microsecond synchronized to GPS time

Datum

Default WGS-84

Acquisition Rate(Open sky, stationary)

Reacquisition 0.1 sec., average Snap start 2 sec., average Hot start 1 sec., average Warm start 38 sec., average Cold start 42 sec., Average

Dynamic Conditions

Altitude 18,000 meters (60,000 feet) max.

Velocity 515 meters/second (1000 knots) max.

Acceleration 4g, max.

<u>Power</u>

Operational Power 3.3 VDC $\pm 10\%$ Input Power 5VDC $\pm 10\%$

Battery Source rechargeable and detachable lithium

Polymer battery with 5V DC input

charging circuit (1200 mA)

Operation Time 8.5 hours continuous operating after full

charge

Battery Charge time 3 Hours Approx.

Battery Low Approx. 30 min to stop operation

Main Interface

Connection: Communication with host platform via

Bluetooth Serial Port Profile

Protocol messages NMEA 0183 output protocol

Baudrate: 38400 bps

Data bit: 8 Stop bit: 1

Output format: GGA (1 sec), GSA (1 sec), GSV (5 sec),

RMC (1 sec), VTG (1 sec)

Environmental Characteristics

Operating temperature range -20° C to $+60^{\circ}$ C

Humidity range 5% to 95 % No condensing

Physical Characteristics

Length 74 mm
Width 38 mm
Height 23 mm
Weight 80 g

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FCC&CE Compliance Statement

The Slim Bluetooth GPS compliant with Part 15 of FCC limits for Class B (DoC). This device has been shown to be incompliance with and was tested in accordance with the measurement procedures specified in the standards Specification listed above. This product is for home and office use only.



Made in Taiwan

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