Fortuna Slim Bluetooth GPS Receiver

Product specification Reference Manual

Fortuna Electronic Corporation

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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 1200mA Lithium-Polymer battery lasts up to 8.5 Operating hours
*Dimension: L= 74mm, W= 38mm, H= 23mm
*Weight: 80g
*On/Off Switch
*12 Channels (All-In-View) Tracking (up to 20 channels)
*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 car lighter 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 Bluetooth Manager on PDA device.
4. Select Search for BT devices.
5. After found the Slim BTGPS then Select and Save it.
6. Go to Action and select SPP slave.
7. Enter the pass key 0000 if required.
8. Click on the Slim BTGPS icon and then a 2 way arrow shows the Bluetooth is linking.
9. The Slim Bluetooth GPS LED light should be on and it means the Bluetooth link has been established.
10. Start your navigation software application.
11. Please select the Baud rate at NMEA 38400 and proper com-port.

Technical Specifications

Electrical Characteristics

General

Chipset	SiRF Star III
Frequency	L1, 1575.42 MHz
C/A code	1.023 MHz chip rate
Channels	12 Channels (All-In-View) Tracking (up to 20 Channels)
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.

Power

Operational Power	3.3 VDC ±10%
Input Power	5VDC ± 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^{o}C to +60^{o}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 in compliance 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.

This device complies with part 15 of the FCC Rules. Operation is subject to
the following two conditions: (1) This device may not cause harmful
interference, and (2) this device must accept any interference received,
including interference that may cause undesired operation.

FCC Statement

This equipment complies with FCC radiation exposure limits set forth for
an uncontrolled environment. End users must follow the specific operating
instructions for satisfying RF exposure compliance. This transmitter must
not be co-located or operating in conjunction with any other antenna or
transmitter.
Notice: Any changes or modification not expressly approved by the party
responsible could void the user's authority to operate the device.

Made in Taiwan

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