



GPS-BT55S

High Performance High Sensitivity GPS Bluetooth® Receiver

GENERAL DESCRIPTION

GPS-BT55S Bluetooth GPS receiver, a total solution of GPS Bluetooth wireless technology, is dedicated design for the user who is usually carry the portable device such as PDAs/smart phones all the time. GPS-BT55S Bluetooth GPS receiver works to all Bluetooth smart phones, lap-top, PDA regardless of brand in an operating range of more than 10 meters. The high performance high sensitivity GPS-BT55S is an ideal receiver to be used in any strict weather condition, so to easily find your way.

APPLICATIONS

- Automotive
- Fleet management/Asset tracking
- Personal/Portable Navigation (PDA, Pocket PC etc.)
- Location Based Services enabled devices
- Sports and Recreation
- Geographic Surveying

KEY PRODUCT FEATURES

- 20 channels "All-In-View" tracking
- Cold/Warm/Hot start time: 42/38/1 sec. (average)
- Superior sensitivity: -159dBm tracking
- Reacquisition time: 0.1 sec.
- Build-in ceramic patch antenna
- Build-in rechargeable Li-ion battery
- Support standard NMEA-0183 at 38400 bps baud rate
- Compatible with Bluetooth devices with Serial Port Profile (SPP)
- Ultra low power consumption: up to 16 hours continuous use by using 710mAh battery
- Time to full recharge: 3 hours
- 2 LEDS display GPS and Bluetooth status
- Size: 61.5 (L) X 43.5 (W) X 20.5 (H) mm
- Weight: 51.4g (battery included)
- Non-slip back pad for a secure placement

SPECIFICATIONS

GPS Features

Chipset	SiRF Star III
Frequency	L1, 1575.42MHz
C/A Code	1.023MHz chip rate
Channels	Supports 20 channels
Antenna (Internal)	Built-in low noise antenna

Sensitivity

To – 159dBm Tracking, Superior Urban Canyon Performance

Time to First Fix (TTFF)

Cold Start	42 sec, average
Warm Start	38 sec, average
Hot Start	1 sec, average
Reacquisition	0.1 sec
Update rate	1 Hz (max.)

Accuracy

Position	5 – 25m CEP without SA
Velocity	0.1m/sec, without SA
Time	1 μ s synchronized to GPS time

Power

Built-in rechargeable 710mAh Li-ion battery and 5V

DC input

Operation Current	<45mA (Typical)
Operation Time	16hrs, fully charged, in continuous mode
Charging time	3.0hrs. (Typical)

Datum

WGS-84

Dynamic Conditions

Altitude	<18,000m (60,000feet)
Velocity	<515m/s (1000 knots)
Acceleration	<4G
Motional Jerk	20m/sec ³ max.

Interface

Communication Protocol: Communicate with host platform via Bluetooth (class 2) serial port profile

Bluetooth communication distance 10meters (Typical)

GPS Protocol: Default: NMEA-0183 - GGA, GSA, GSV, RMC, VTG

Data bit: 8, stop bit: 1(Default)

Device Size and Weight

61.5 (L) X 43.5 (W) X 20.5 (H) mm

2.42 (L) X 1.71 (W) X 0.80 (H) inch

51.4g (battery included)

Accessories

Car charger (12V in, 5V output)

AC adaptor (5.3V output, 500mA)

Environmental Characteristics

Operating Temperature - 10°C to + 60°C

Storage Temperature - 20°C to + 85°C

All specifications are subject to change without notice

BOX CONTENTS



GPS-BT55S



AC Adaptor



Car Charger



*Li-ion rechargeable
Battery*



CD (Documentation)



Anti-Slip Rubber Pad



REVISION HISTORY

Revision	Date	Comments
V4.06	26_Apr_2006	Box contents added
V9.06	08_Sept_2006	Performed minor changes
V11.06	03_Nov_2006	Updated items: Operation current: <45mA (typical) Operation time: updated to 16 hrs.