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## UGB-74S

44 Channels Superior Performance GPS Bluetooth® Receiver



### GENERAL DESCRIPTION

The UGB-74S is 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. UGB-74S is based on Skytraq low power chipset, which allows up to 22 hours continuous use to stand-by time more than one week with a single battery charge. UGB-74S 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 UGB-74S 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

- **44 channels "All-In-View" tracking**
- **Cold/Warm/Hot start time: 30/28/1 sec. (average)**
- **Superior sensitivity: -159dBm tracking**
- **Support A-GPS function**
- Reacquisition time: 0.1 sec.

- Built-in ceramic patch antenna
- Built-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 22 hours continuous use to stand-by time more than one week by 1100mAh battery
- Time to full recharge: within 3 hours
- **Vibration sensor for power management**
- 3 LEDs display GPS, Bluetooth, and power status
- Size: 81.0 (L) X 43.0 (W) X 17.6 (H) mm
- Weight: 70g (battery included)
- Non-slip back pad for a secure placement

## SPECIFICATIONS

### GPS Features

Chipset	Skytraq low power chipset
Frequency	L1, 1575.42MHz
C/A Code	1.023MHz chip rate
Channels	Supports 44 channels
Antenna (Internal)	Built-in low noise antenna

### Sensitivity

To – 159dBm Tracking, Superior Urban Canyon Performance

### Time to First Fix (TTFF)

Cold Start	30 sec, average
Warm Start	28 sec, average
Hot Start	1 sec, average
Reacquisition	0.1 sec
Update rate	1 Hz (std.)

### Accuracy

Position	5m CEP without SA 10m 2D, RMS
Velocity	0.1m/sec, without SA
Time	1µs synchronized to GPS time

### Power

Built-in rechargeable 1100mAh Li-ion battery and 5V DC input

Operation Current	~50mA (Average)
Operation Time	22hrs, fully charged, in continuous mode
Charging time	3.0hrs. (Typical)

### Datum

WGS-84

### Dynamic Conditions

Altitude	<18,000 m (60,000feet)
Velocity	<515 m/s (1000 knots)
Acceleration	<4G
Motional Jerk	20m/sec <sup>3</sup> 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; Skytraq Binary  
Data bit: 8, stop bit: 1 (Default)

### Device Size and Weight

81.0 (L) X 43.0 (W) X 17.6 (H) mm  
3.19 (L) X 1.69 (W) X 0.69 (H) inch  
70g (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*

## REVISION HISTORY

Revision	Date	Comments
V5.07	17_May_2007	First Release