# **GPS** Instant FIX

*Product Briet* GPS-BT74R





## **GPS-BT74R**

### High Sensitivity GPS Bluetooth® Receiver

#### GENERAL DESCRIPTION

GPS-BT74R Bluetooth GPS receiver, a total solution of GPS Bluetooth wireless technology, acquires 32 satellites in parallel, provides unbelievable positioning sensitivity and transmitting ability to an easy position-fix from urban or canyon area. GPS-BT74R allows from 12 hours continuous use to stand-by time up to one week with a single battery charge. GPS-BT74R 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 GPS receiver GPS-BT74R 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**

- Approx. 45000 effective correlators for fast TTFF and high sensitivity acquisition
- Acquires 32 satellites in parallel
- Superior tracking capability: -157dBm tracking
- Capable of in-door use: <20m (RMS)
- NMEA-0183 V2.2 compatible
- Data rate: 9600/38400bps
- Ultra low power consumption: 12 hours continuous use to stand-by time up to one week by 1000mAh battery
- Time to full recharge: within 3 hours
- 3 LEDS display all GPS, Bluetooth and power status
- Auto power on/off function
- 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
- Optional external MMCX antenna
- Car charger, adaptor, and CD driver are included in package

### Product Briet

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#### **SPECIFICATIONS**

**GPS Features** 

**RFMD** 

Frequency

Chipset

L1, 1575.42MHz

C/A Code

1.023MHz chip rate

Channels

Adaptive, 8 – 32 SVs (best 8 used in solution) Velocity

Antenna (Internal)

Built-in low noise antenna

External Active MMCX Antenna

Sensitivity

To – 157dBm Tracking, Superior Urban Canyon Performance

Time to First Fix (TTFF)

Cold Start

43 sec, average

Warm Start

25 sec, average

Hot Start

4 sec, average

Reacquisition

< 3sec

Update rate

1 sec

Accuracy

Position

Open sky: <5m (RMS)

In door: <20m (RMS)

Velocity

0.1m/sec, without SA

Time

±100ns synchronized to GPS time

**Power** 

Built-in rechargeable 1000mAh Li-ion battery and 5V DC input

**Operation Current** 

<80mA (Typical)

Operation Time

12hrs, fully charged, in continuous mode

**Charging time** 

3.0hrs. (Typical)

**Environmental Characteristics** 

Operating Temperature - 20°C to + 60°C

Storage Temperature  $-50^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$ 

**Datum** 

WGS-84 (or by demanded)

**Dynamic Conditions** 

Altitude

<18.000m

<515m/s

Acceleration

<1G

Motional Jerk

4 m/sec

**Interface** 

Communication Protocol: Communicate with host platform

via Bluetooth (class 2) serial port profile

Bluetooth communication distance 10meters (Typical)

GPS Protocol: Default: NMEA-0183 V2.2 - GGA, GSA, GSV,

GLL, RMC, VTG, Baud rate 9600/38400 bps,

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)

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