

# **BT-23 GPS Bluetooth Receiver**

# **GENERAL DESCRIPTION**

BT-23 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. BT-23 allows from 12 hours continuous use to stand-by time up to one week with a single battery charge. BT-23 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 BT-23 is an ideal receiver to be used in any strict weather condition, so to easily find your way.

# **Key features**

- High sensitivity, acquire 32 satellites in parallel
- Superior tracking capability: -157dBm tracking
- Capable of in-door use: <20m (RMS)</p>



- 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
- Optional data USB cable (Auto-off functional will be disabled if select data USB cable.)

#### **SPECIFICATIONS**

#### **GPS Features**

Chipset RFMD

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

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

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  $\pm 100$ ns 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°C to + 100°C

#### **Datum**

WGS-84 (or by demanded)

# **Dynamic Conditions**

Altitude	<18,000m
Velocity	<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, AC adaptor, Manual CD, Non-slip pad

#### Certificates

CE, FCC & BQB

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Accessories Package