



BT-22

High Performance High Sensitivity GPS Bluetooth® Receiver

GENERAL DESCRIPTION

BT-22 Bluetooth GPS receiver, a total solution of GPS Bluetooth wireless technology, is a dedicated design for users who usually carry the portable devices, such as PDA, smart phones, all the time. BT-22 allows from 14 hours continuous use to stand-by time up to one week with a single battery charge. It works with all bluetooth enabled smart phones, lap-top and PDA, regardless of brand, in an operating range of more than 10 meters. High performance and high sensitivity BT-22 is an ideal receiver for any strict environments.

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: 14 hours continuous use to stand-by time up to one week by 1100

mAh battery

- Time to full recharge: within 4 hours
- 3 LEDS display all GPS, bluetooth and power status
- Size: 81.0 (L) X 43.0 (W) X 17.6 (H) mm
- Weight: 60g (battery included)
- Non-slip back pad for 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

Datum

WGS-84

Dynamic Conditions

Altitude	<18,000m
Velocity	<515m/s
Acceleration	<4G
Motional Jerk	4m/sec

Sensitivity

To – 159dBm Tracking, Superior Urban Canyon Communication Protocol: Communicate with host 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.)

Interface

via Bluetooth (class 2) serial port profile
 Bluetooth communication distance 10meters (Typical)
 GPS Protocol: Default: NMEA-0183 - GGA, GSA, GSV, GLL, RMC, VTG
 Data bit: 8, stop bit: 1(Default)

Accuracy

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

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
60g (battery included)

Power

Built-in rechargeable 1100mAh Li-Ion battery and 5V DC input
 Operation Current <75mA (Typical)

Accessories

Car charger (12V in, 5V output)
 AC adaptor (5.3V output, 500mA)

Operation Time 14hrs, fully charged, in continuous mode

Charging time 4.0hrs. (Typical)

Environmental Characteristics

Operating Temperature - 10°C to + 60°C

Storage Temperature - 20°C to + 85°C



Accessories



Package