



The BT-R820 is a GPS receiver with Wireless interface and built-in Patch antenna for high sensitivity to tracking signal.

The BT-R820 is well suited to system integration and users who use PDA, Smart phone, Tablet PC and Notebook PC with Wireless devices. It satisfies a wide variety of applications for car navigation, personal navigation or touring devices, tracking, and marine navigation purpose.

#### **Features:**

- **Atmel ANTARIS 4 Chipset 16 Channels all in view tracking**
- **High Sensitivity -158dBm**
- **Reacquisition Time: 0.1 second**
- **Support Standard NMEA-0183 Protocol**
- **Auto Adjustment Baud Rate 4800-115200 bps**
- **DGPS : WAAS/EGNOS**
- **After device disconnects 30 minutes, the GPS receiver Shall automatic turn off the power.**
- **Compatible with Wireless devices with Serial Port Profile(SPP)**
- **Alkaline 3 X AAA Battery lasts for more than 8 hours of use**

#### **Applications:**

- **Land/Marine Navigation**
- **Telematics**
- **Fleet Management**
- **Asset Tracking**
- **Timing Reference**

**Specification:**

Features	Description
General	L1 1575.42MHz, C/A code, 16 -channel all in view tracking
Sensitivity	-158 dBm (typical)
Update Rate	1 Hz
Accuracy	Position: <15m(95%) without S/A Velocity: 0.1 m/sec without S/A Time: ± 100ns synchronized to GPS time
Acquisition	Cold start: 34 sec average Warm start: 33 sec average Hot start : 3.5 sec average
Dynamics	Altitude : 18,000m Max Velocity: 500m/s Acceleration: 4g Max
Reacquisition Time	0.1 second
Datum	WGS-84
DGPS	WAAS/EGNOS
Protocol	NMEA-0183 V2.2 , 8-None-1 Baud rate: Auto Adjustment 4800 -115200 bps
NMEA Message	Default : GGA, GSA, GSV, RMC
Operation Temperature	-10°C to +60°C
Storg Temperature	-20°C to +85°C
Operating Humidity	5% to 90% non-condensing
Antenna	Built-in Patch Antenna
Interface connector	Wireless interface
Battery	Alkaline 3 x AAA
Operation Current	70 mA (Typical)
Operation Time	8 hrs, in continuous
Dimension/ Weight	73 mm x 45 mm x 25.4 mm / 80g

**\* Preliminary Specification, Subject To Change without Notice**