



EverMore GM-R800 series is a high sensitivity GPS receiver , This product is based on Atmel chipset in 16 channel GPS receivers solution. The GPS module receiver will track up to 16 satellites at a time while providing fast time-to-first-fix and 1Hz navigation updates. It is far reaching capability meets the sensitivity & accuracy requirements of car navigation as well as other location-based applications, such as AVL system. PDA, Notebook operated navigation system.

The GM-R800 design utilizes the latest surface mount technology and high level circuit integration to achieve superior performance while minimizing dimension and power consumption. This hardware capability combined with software intelligence makes the board easy to be integrated and used in all kinds of navigation applications or products. The module communicates with application system via RS-232 level with NMEA-0183 protocol.

### Features:

- **Atmel Chipset 16 Channels all in view tracking**
- **High Sensitivity -158dBm**
- **Reacquisition Time: 0.1 second**
- **Support Standard NMEA-0183 at 9600 bps baud rate**
- **DGPS : WAAS/EGNOS**
- **On-board rechargeable battery sustained real-time clock and memory for fast satellite acquisition during power-up**
- **Dimension/Weight: 56mmx53mmx22.5mm/96g**

**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: 34sec average Warm start: 33sec average Hot start : 3.5sec average
Dynamics	Altitude : 18,000m Max Velocity: 515m/s Acceleration: 4g Max
Reacquisition Time	0.1 second
Datum	WGS-84
Protocol	NMEA-0183 V2.2 , Baud rate: 9600 , 8-None-1
NMEA Message	Default : GGA, GSA, GSV, RMC ,GLL,ZDA,VTG
Primary Power	5VDC ± 0.5Vp-p ripple
DC Current	50 mA
Operation Temperature	-40°C to +80°C
Storg Temperature	-45°C to +85°C
Operating Humidity	5% to 90% non-condensing
Antenna	Built-in Patch Antenna
Interface Connector	Standard : PS/2 Female Optional :USB Cable or Car Charger for PDA
Dimension/ Weight	56 mm x 53 mm x 22.5mm / 96g

\* Preliminary Specification, Subject To Change without Notice