

# High Sensitivity GPS Module

- Built-in SiRFstarIII chipsets receivers give unparalleled GPS performance and precision.
- Built-in WAAS/EGNOS Demodulator.
- 20 parallel satellite-tracking channels for fast acquisition and reacquisition.
- Low power consumption and ultra compact size-only 32x32x9mm.
- Allow the receiver to track up to 12-channel satellites.
- Built-in rechargeable battery for memory and RTC backup.
- Supports NMEA0183 v2.2 data protocol.
- Enhanced algorithms providing superior navigation performance in urban, canyon and foliage environments.
- Applications include Vehicular Navigation. Marine Navigation. Fleet management, AVL and Location-Based Services, Autopilot.

## SPECIFICATIONS

|                          |   |
|--------------------------|---|
| Receiver :               | Tracking up to 20 satellites L1,<br>1575.42 MHz, C/A code   |
| Accuracy :               | Position: 2DRMS approximately 5m,<br>WAAS support<br>Velocity: 0.1 m/s without SA imposed<br>Time: 1! sec |
| Acquisition Time :       | Cold Start: 42s (Average)<br>Warm Start: 38s (Average)<br>Hot Start: 1s (Minimum)                         |
| Sensitivity :            | Acquisition: -148dBm<br>Tracking: -159dBm   |
| Dynamics :               | Max Altitude: 18000m<br>Max Velocity: 515m/s<br>Max Acceleration: ! 4g                                    |
| Navigation Update Rate : | Once per second   |
| Serial Port :            | TTL, MMCX   |
| Baud Rate :              | 4800 bps (Optional 9600,19300,38400 bps)  |
| Output Message :         | NMEA0283 V2.2 GGA, GSV, GSA,<br>RMC (optional VTG, GLL)   |
| Datum :                  | WGS 84  |
| Power Supply :           | DC 3.3~5V   |
| Power Consumption :      | Typical 80mA @5V  |
| LED Indicator :          | Power On/Off<br>Navigation  |
| Operating Temperature :  | -40"~ +85" C  |
| Storage Temperature :    | -40 " ~ +100" C   |
| Humidity :               | 5%~95%  |
| Antenna Type :           | Built-in patch antenna  |

