



## Product Datasheet

Part Code: 10-230-000-01

## DVR GPS Receiver

### Key Features

- Ultra Compact size – Ideal for discrete / non invasive installations
- Built on hi-end SiRF Star III Chipset
- Embedded ARM 7TDMI CPU
- 20 Parallel satellite tracking channels - for ultra-fast acquisition and reacquisition
- 200,000 simultaneous effective correlation – for fast TTFF (Time-To-Fast-Fix)
- Extremely fast TTFF at low signal levels
- Built-in hardware based Tracking Loop detector – with WAAS / EGNOS demodulator support
- Built-in Lithium-ion battery for TTFF – rechargeable
- Full support of NMEA 0183 V2.2 data protocol
- Enhanced tracking algorithms – to provide superior navigation in urban / canyon and foliage environments
- LED indicates power on/off and Navigation update



### Specifications

Receiver Specification
Tracks up to 20 satellites
Receiver: L1, C/A code
Max update rate: 1 HZ
Acquisition times (averaged):
• Reacquisition: 0.1 Sec
• Hot Start: 1 Sec
• Warm Start: 38 Sec
• Cold Start: 42 Sec
Position Accuracy - Non DGPS (Differential GPS):
• Position: 5-25 m CEP without SA
• Velocity: 0.1 m/sec without SA
• Time: 1 µ sec sync GPS time
EGNOS / WAAS:
• Position: <2.2 m horizontal 95% of time
• Position: <5 m vertical 95% of time
Dynamic Conditions:
• Altitude: 18,000 meters (60,000 ft) max
• Velocity: 736 meters/sec (1000 knots) max
• Acceleration: 4G max
• Jerk: 20 meters/sec max

Receiver Specification...continued
Antenna Type: Built-in Patch Antenna
Environmental:
• Waterproof: P67
• Power: 3.5 ~ 5.5VDC @ 80mA
• Dimensions: 64.5 x 42 x 17.8 mm
• Weight: < 84g
• Operating Temp: -10°C to +60°C
Protocol & Interface:
• Output Protocol: NMEA V2.2
• Standard: 4800/8/N/1 (B/D/P/S)
• Interface: RS-232 +CMOS 3V (L) via PS2 9 SUB-D connector loom
• Protocol Format: GGA (1), GSA (5), GSV (5), RMC (1), VTG (1)
Certifications (When used with Vidistor DVR)
Rail EMC and EMI: EN50121-2-3:2006
Rail Environmental: EN50155:2007
Rail Vibration: EN61373