

# RS232 GPS RECEIVER

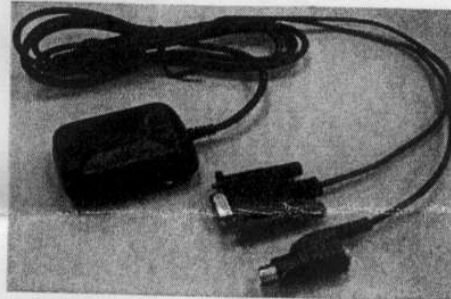
BR-304

## Product Feature

- "SiRF Star II/LP" high performance and low power consumption chipset
- Supported NMEA 0183 command: GGA, GSA, GSV, RMC, GLL, VTG
- Build-in SuperCap to reserve system data for rapid satellite acquisition.
- All-in-view 12-channel parallel processing
- Built-in active antenna
- High sensitivity to satellite signal
- Cold start under 45 seconds, average
- Superior urban canyon performance
- FoliageLock for weak signal tracking
- Super-cohesive magnetic for mounting on the car
- LED indicator for GPS fix or not fix

LED OFF: Receiver switch off  
LED ON: No Fixed, Signal searching  
LED Flashing: Position Fixed

- Non-slip on the bottom
- RS232 interface connection port



RS232 GPS Receiver

## System Specification

### Electrical Characteristics (Receiver)

Frequency	L1, 1575.42 MHz
C/A Code	1.023 MHz chip rate
Channels	12
Sensitivity	-170 dBW

### Accuracy

Position Horizontal	15m 2D RMS (SA off)
Velocity	0.1m/sec 95% (SA off),
Time	1 micro-second synchronized to GPS time
WAAS enabled	10m 2D RMS

### Datum

Datum	WGS-84
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### Acquisition Rate

Hot start	8 sec., average (with ephemeris and almanac valid)
Warm start	38 sec., average (with almanac but not ephemeris)
Cold start	45 sec., average (neither almanac nor ephemeris)
Reacquisition	0.1 sec. average (interruption recovery time)

### Protocol

GPS Protocol	Default: NMEA 0183 (Secondary: SiRF binary)
GPS Output Data	SiRF binary >> position, velocity, altitude, status and control NMEA 0183 protocol, and supports command: GGA, GSA, GSV, RMC, VTG, GLL v2.2 (VTG and GLL are optional)
GPS transfer rate	Software command setting (Default : 4800,n,8,1 for NMEA )

### Dynamic Condition

Acceleration Limit	Less than 4g
Altitude Limit	18,000 meters (60,000 feet) max.
Velocity Limit	515 meters/sec. (1,000 knots) max.
Jerk Limit	20 m/sec**3

### Temperature

Operating	-30°~ 80°C
Storage	-40°~ 85°C
Humidity	Up to 95% non-condensing

### Power

Voltage	5V ±5%
Current	90mA typical

### Physical Characteristics

Dimension	2.32" x 1.85" x 0.82" (59mm x 47mm x 21mm)
Cable Length	65"

### Low Noise Amp

Amplifier Gain w/out cable	27 dB Typical
Filtering	-25dB (+100 MHz)
Output VSWR	2.0 Max.
Voltage	DC 3 ~ 5.0V
Current	15mA max.@5VDC

Due to continuous product improvements, all specifications may be subject to change without notice.