



PRODUCT SPECIFICATION RS232 GPS RECEIVER BR-304

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Product Feature

- “SiRF Star 7 /LP” high performance and low power consumption chipset
- 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
- Build-in SuperCap to reserve system data for rapid satellite acquisition.
- Supported NMEA 0183 command: GGA, GSA, GSV, RMC, GLL, VTG
- 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

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 |
| 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 (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 (Continuous mode) |
| 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 |



RS232 GPS Receiver

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