

## GV-GPS Receiver



The GV-GPS Receiver can work with GV-System, GV-DSP LPR, GV-Video Server and GV-Compact DVR to perform GPS vehicle tracking. It comes with three types of models: UART, RS-232, and USB. Each model can only work with appropriate Hardware and Firmware version as described below:

| Model       | Interface      | Baud Rate | Compatible IP Device                                       |
|-------------|----------------|-----------|--|
| GV-GPS UART | UART           | 9600      | GV-Video Server (GV-VS02A)                                 |
|             |                |           | GV-Video Server (GV-VS04A)                                 |
|             |                |           | GV-Video Server (GV-VS14)                                  |
|             |                |           | GV-Video Server (GV-VS04H)                                 |
| GV-GPS 232  | RS-232 Wires   | 9600      | GV-DSP LPR V2 / V3   |
|             |                |           | GV-Video Server (GV-VS12)                                  |
|             |                |           | GV-Compact DVR V1  |
|             | PS/2 Connector | 9600      | GV-Compact DVR V2  |
|             |                |           | Standard Model (GV-LX4C2)                                  |
|             |                |           | Anti-Vibration Model (GV-LX4C2V)                           |
| GV-GPS USB  | USB Connector  | 4800      | Anti-Vibration ACC Model (GV-LX4C2V)                       |
|             |                |           | GV-Compact DVR V3  |
|             |                |           | Anti-Vibration ACC Model (GV-LX4C3V, GV-LX8CV1, GV-LX8CV2) |
|             |                |           | GV-System  |

## Specifications

|                                   |  |
|-----------------------------------|--|
| <b>Chipset</b>                    |  |
| Chipset                           | SiRF Start III   |
| <b>Electrical Characteristics</b> |  |
| Frequency                         | L1, 1575.42 MHz  |
| C/A Code                          | 1.023 MHz chip rate  |
| Channels                          | 20 channel all-in-view tracking  |
| Sensitivity                       | -159 dBm   |
| <b>Accuracy</b>                   |  |
| Position Horizontal               | Position Horizontal  |
| Velocity                          | Velocity   |
| Time                              | Time   |
| WAAS enabled                      | WAAS enabled   |
| <b>Datum</b>                      |  |
| Datum                             | WGS-84   |
| <b>Acquisition Rate</b>           |  |
| Hot Start                         | 1 sec. average (with ephemeris and almanac valid)  |
| Warm Start                        | 38 sec. average (with almanac but not ephemeris)   |
| Cold Start                        | 42 sec. average (neither almanac nor ephemeris)  |
| Reacquisition                     | 0.1 sec. average (interruption recovery time)  |
| <b>Protocol</b>                   |  |
| GPS Protocol                      | Default: NMEA 0183 (Secondary: SiRF binary)  |
| GPS Output Data                   | SiRF binary >> position, velocity, altitude, status and control ; NMEA 0183 protocol supports command: GGA, GSA, GSV, RMC, VTG, GLL (VTG and GLL are optional) |
| GPS Transfer Rate                 | Default : 9600,n,8,1 for NMEA<br>Default : 4800,n,8,1 for NMEA (for GV-GPS USB only)   |
| <b>Dynamic Condition</b>          |  |
| 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 x 3   |
| <b>Temperature</b>                |  |
| Operating                         | -40°C ~ 85°C / -40°F ~ 185°F   |
| Storage                           | -40°C ~ 85°C / -40°F ~ 185°F   |
| Humidity                          | Up to 95% non-condensing   |
| <b>Power</b>                      |  |
| Voltage                           | 4.5V ~ 6.5V  |
| Current                           | 80mA typical (Continuous mode)   |
| <b>Physical Characteristics</b>   |  |
| Dimensions (D x H)                | 53 x 19.2 mm / 2.09 x 0.76 in  |
| Cable Length                      | 2.7 m / 8.86 ft  |
| <b>Installation Guide</b>         | <a href="#">GV-GPS Receiver</a>  |

**Note:** All specifications are subject to change without notice.