

## GV-GPS Receiver



The GV-GPS Receiver can work with GV-Video Server and GV-Compact DVR to perform GPS vehicle tracking. It comes with two types of models: UART and RS-232. 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-VS02)	Firmware Version 1.43 or later	
			GV-Video Server (GV-VS02A)	Firmware Version 1.00 or later	
			GV-Video Server (GV-VS04A)		
GV-GPS 232	RS-232 Wires	9600	GV-Video Server (GV-VS12)	Firmware Version 1.00 or later	
			GV-Compact DVR V1	Firmware Version 1.52 or later	
	PS/2 Connector	9600	GV-Compact DVR V2	Standard Model	Firmware Version 1.00 or later
				Anti-Vibration Model	
			GV-Compact DVR V2	Anti-Vibration Model of ACC Version	Firmware Version 1.05 or later

\* GV-GPS Receiver is NOT compatible with GV-Video Server (Hardware Version 1).

### Specifications

Chipset	
Chipset	SiRF Start III
Electrical Characteristics	
Frequency	L1, 1575.42 MHz
C/A Code	1.023 MHz chip rate
Channels	20 channel all-in-view tracking
Sensitivity	-159 dBm
Accuracy	
Position Horizontal	Position Horizontal
Velocity	Velocity
Time	Time
WAAS enabled	WAAS enabled
Datum	
Datum	WGS-84
Acquisition Rate	
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)
Protocol	
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
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 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>	GV-GPS Receiver