

## **GV-GPS** Receiver



The GV-GPS Receiver can work with GV-System, 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)		Firmware Version 1.00 or later
			GV-Video Server (GV-VS04A)		
			GV-Video Server (GV-VS04H		Firmware Version 1.04 or later
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
			GV-Compact DVR V2	Standard Model (GV-LX4C2)	Firmware Version 1.00 or later
				Anti-Vibration Model (GV-LX4C2V)	
	PS/2 Connector	9600		Anti-Vibration ACC Model (GV-LX4C2V)	Firmware Version 1.05 or later
			GV-Compact DVR V3	Anti-Vibration ACC Model (GV-LX4C3V, GV-LX8CV1, GV-LX8CV2))	Firmware Version 1.00 or later
GV-GPS USB	USB Connector	4800	GV-System		Firmware Version 8.3.2 or later

## **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  Default : 4800,n,8,1 for NMEA (for GV-GPS USB only)	

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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			
Temperature				
Operating	-40°C~ 85°C / -40°F ~ 185°F			
Storage	-40°C~ 85°C / -40°F ~ 185°F			
Humidity	Up to 95% non-condensing			
Power				
Voltage	4.5V ~ 6.5V			
Current	80mA typical (Continuous mode)			
Physical Characteristics				
Dimensions (D x H)	53 x 19.2 mm / 2.09 x 0.76 in			
Cable Length	2.7 m / 8.86 ft			
Installation Guide	GV-GPS Receiver			

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

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