



GV800 Series

Powerful and Versatile Vehicle Tracker



The GV800 Series are full featured GPS trackers designed for a wide variety of vehicle tracking applications. They have multiple I/O interfaces that can be used for monitoring or controlling external devices, including multiple digital I/Os, Serial Ports, CAN Support, Short Range Wireless and Bluetooth Low Energy along with a 1-wire interface for temperature monitoring. Their built-in GPS receiver has best in class sensitivity and fast time to first fix. Vehicle trackers within the series support Quad Band 2G GSM/GPRS and/or multiple 3G variants with Global Applicability. System integration is straightforward as complete documentation is provided for the full featured @Track protocol. The @Track protocol supports a wide variety of reports including emergency alarm, geo-fence boundary crossings, external power supply monitoring and position report.

Advantages

- Wide operating voltage range 8V to 32V DC
- GPS positioning (can support GPS, GLONASS and BD systems)
- CAN Bus and J1708 Bus communication
- RF 433.92 MHz wireless communication
- Internal Bluetooth 2.4 GHZ
- RPM detection for cars
- Molex 2*3 audio interface
- Internal and optional external cellular antenna(s)
- Internal and optional external GPS antenna(s)
- Multiple I/O interfaces for monitoring and controlling external accessories, including composite inputs, ignition detection and other peripheral interfaces (RS232 and RS485)



GV800 Product Series

Model No.	Region	Technology	Operating Band
GV800G	Worldwide	GPRS/GSM	GSM: 850/900/1800/1900 MHz
GV800WG	Worldwide	GPRS/GSM/WCDMA	GSM: 850/900/1800/1900 MHz WCDMA: 850/1900/2100 MHz

GSM Specifications

MODEL	GV800G	GV800WG
ITEM		
Operating Band	GSM850/900/1800/1900 MHz	
Data Transmission	PRS multi-slot class 12 EDGE multi-slot class 12	

WCDMA Specifications

ITEM	MODEL	GV800WG
Frequency		850/1900/2100 MHz
Data Transmission		HSPA (DL): 7.2Mbps HSPA (UL): 5.76Mbps
HSPA Data Rate		5.6Mbps upload/ 7.2Mbps download
HSPA Fallback		EDGE/GPRS/GSM quad band, EDGE MCS1-MCS9, 3GPP Release 6

GNSS Specifications

ITEM	MODEL	GV800G	GV800WG
GPS Type		u-blox All-In-One GNSS receiver	Qualcomm Gen 8C GNSS
Sensitivity		Cold start: -147 dBm Tracking: -162 dBm	Cold start: -148 dBm Tracking: -159 dBm
Position Accuracy (CEP)		Autonomous: < 2.5m	Autonomous: < 2.5m
TTFF (Open Sky)		Cold start: 30s average Hot start: 1s average	Cold start: 30s average Hot start: 1s average

RF Specifications (433.92 MHz)

Programmable Output Power	+12.5 dBm
Receiver Sensitivity	-104 dBm at 25Kbps in FSK, -110 dBm at 2Kbps in OOK
Programmable Data Rate	150Kbps
Supported Modulation Formats	FSK or OOK

Interfaces

Digital Inputs	Six digital inputs One positive trigger for ignition detection Five negative trigger inputs for normal use
Digital Outputs	Five open drain outputs 150 mA max drive current
Analog Inputs	Four analog inputs (0~30V)
RPM Input	One PWM interface for RPM detection
1-Wire Interface	Support 1-wire temperature sensor
Sensor Output	DC 5V voltage output interface for temperature sensor
Power Output	Three 5V voltage output interfaces for external accessories
Three Communication Ports	Two RS232 ports used for external accessories One RS485 port for external accessories
CAN and J1708 Bus Port	CAN and J1708 Bus communication with cars
CAN Bus Interface	CAN 2.0A/B, SAE J1939, FMS 3.0, D8 line, CAN Open, Single-wire CAN, J1708/J1587
Cellular Antenna	Internal and optional external cellular antenna(s)
GPS Antenna	Internal and optional external GPS antenna(s)
Indicator LED	CEL, GPS, Power, CAN
Connectors	10 pin (power supply and signal) and 16 pin (signal) connectors
	One Mini USB (10p) for debugging
	One Molex 6P (2*3) audio interface
Wireless Sensor	Three 4 pin connectors
	Optional wireless accessories: panic button, temperature sensor, temperature & humidity sensor, door sensor

Bluetooth Specifications

Frequency	2.4 GHz RF transceiver compatible with Bluetooth low energy (BLE)
Receiver Sensitivity	Excellent receiver sensitivity -88 dBm
Max out RF Power	Up to 10 dBm

General Specifications

Dimensions	123mm*80mm*21mm
Weight	136g
Operating Voltage	DC 8V to 32V
Backup Battery	Lithium-ion, 3.7V, 1100 mAh
Operating Temperature	-30°C ~ +80°C -40°C ~ +85°C for storage

Air Interface Protocol

Transmit Protocol	TCP, UDP, SMS
Scheduled Timing Report	Report position and status at preset intervals
Geo-fence	Geo-fence alarm and parking alarm, support up to 20 circular and 20 polygon geo-fence regions
Low Power Alarm	Alarm when backup battery is low
Power On Report	Report when the device is powered on
Tow Alarm	From internal 3-axis accelerometer
Antenna Disconnect Alarm	Alarm when the external GPS antenna is disconnected
Driving Behavior Monitoring	Aggressive driving behavior detection, e.g. harsh braking and acceleration
Crash Detection	Accident data collection for reconstruction and analysis
Special Alarm	Special alarm based on the digital/analog inputs, speed or G-sensor
Remote Control	OTA control of digital outputs



Queclink Wireless Solutions Co., Ltd.

Add: Office 501, Building 9, No. 99 Tianzhou Road, Shanghai, China 200233

Tel: +86 21 5108 2965

Fax: +86 21 5445 1990

Web: www.queclink.com

Email: sales@queclink.com