



# FMVR300

Powerful and versatile  
Vehicle Tracking Device

- Wide Operating Voltage Range 8 to 32V DC
- Multiple and Smart Inputs/Outputs
- GARMIN FMI / Multiple Sensors/Voice Support



# FMVR300

## Powerful and versatile Vehicle Tracking Device

FMVR300 is a powerful GPS tracker designed for vehicle tracking applications. With superior receiving sensitivity, fast TTFF (Time to First Fix) and Quad band GSM frequencies 850/900/1800/1900MHz, its location can be monitored in real time or periodically tracked by a backend server or other specified terminals. The FMVR300 has multiple input/output interfaces that can be used for monitoring or controlling external devices. Based on the integrated @Track protocol, the FMVR300 can communicate with a backend server through the GPRS/GSM network to transfer reports of emergency, Geo-Fence boundary crossings, low battery, GSM cell ID, or scheduled GPS position as well as many other useful functions. System integrators can easily setup their tracking systems based on the full-featured @Track protocol.



### ADVANTAGES

- Wide operating voltage range 8 to 32V DC
- Built in uBlox chipset with -162dBm tracking sensitivity, -148dBm autonomous sensitivity for fast TTFF and high accuracy
- Low power consumption, long standby time with internal battery
- Quad band GSM/GPRS frequencies 850/900/1800/1900MHz
- Embedded full-featured @Track protocol
- Multiple input/output interfaces for monitoring and controlling
- Built in 3D motion sensor for power saving and motion detection
- Built in GSM antenna
- Built in GPS antenna and optional external GPS antenna
- CE/FCC/PTCRB/Anatel certified





## GSM Specifications

Frequency	Quad band: 850/900/1800/1900MHz Compliant to GSM phase 2/2+ -Class 4 (2W @850/900MHz) -Class 1 (1WQ 1800/1000MHz)
GPRS	GPRS multi-slot class 12 GPRS mobile station class 8
RMS Phase Error	5 deg
Mix Out RF Power	33.0dBm±2dBm
Dynamic Input Ring	-15~-108dBm
Receiving sensitivity	Class RBER2%(-102dBm)
Stability Of Frequency	<2.5ppm
Mix Frequency Error	±0.1ppm

## GPS Specifications

GPS Chipset	uBlox All-in-One GPS receiver sensitive Fast and accurate
Sensitivity	Autonomous: -148dBm Hot start: -160dBm Tracking: -162dBm
Position Accuracy	Autonomous: <2.5 m SBAS 2.0m
TTFF (Open Sky)	Cold start 30s Warm start <30s Hot start <1.2s

## General Specifications

Dimension	80mm*49mm*20mm
Dimension	71g
Backup Battery	Li-Polymer 250mAh
Standby Time	Without reporting: 58 Hours 5 minutes reporting: 33 Hours 10 minutes reporting: 45 Hours
Operation Voltage	8 to 32V DC
Operation Temperature	-30°C ~+80°C(Without battery) -40°C ~+85°C for storage (Without battery)

## Interfaces

Digital Input	Two digital inputs One positive trigger for ignition detection One negative trigger input for normal use
Configurable Input	One special input can be configured to negative trigger digital input or analog input (0-16V)
Analog Input	One analog input (0.3-16V)
Digital Output	Two digital output. open drain. 180mA driver current max.
Latched Digital Output	One digital output with internal latch circuit, open drain. 150mA driver current max
Two-way Audio	Two differential outputs: one single end input
GSM Antenna	Internal only
GPS Antenna	Built in or optional external GPS antenna
Indicator LED	GSM, GPS and power
Mini USB port	Mini USB port for upgrading and debugging

## Air Interface Protocol

Transmit Protocol	TCP, UDP, SMS
Scheduled Timing Report	Report position follow the pre-set fix interval and report interval
Geo-Fence	Geo-Fence alarm and parking alarm
Low Power Alarm	Alarm when backup battery is low
Power On Report	Report when the device is powered on
Tow Alarm	With built in 3D motion sensor
Antenna Disconnect Alarm	Alarm when the external GPS antenna is disconnected
Special Alarm	Special alarm based on the digital/analog inputs
Remote Control	Control the digital outputs through air interface protocol



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