

# GEOFINDER

## GPS Tracker for Moving Vehicles

- Very sensitive GPS receiver based on the SiRFstarIII module
- GSM/GPRS quad-band module
- Powered by the vehicle battery
- Built-in emergency battery for use in the event of interference with the external battery
- Built-in or external antennas
- Customisable with inputs and outputs for external controls
- Accelerometer
- Memory for recording positions and events
- Configuration by means of SMS or from the PC using the GTrack Lite software supplied
- Power-saving function during inactivity



### General Features

GEOFINDER is a GPS satellite tracking device for monitoring moving vehicles.

To enable accurate tracking, GEOFINDER is equipped with a very sensitive SiRFstarIII GPS receiver and a GSM/GPRS quad-band module for communication.

The device is powered by the vehicle battery.

Moreover, there is a 1000 mAh backup battery to guarantee operation even in the event of loss of the main power supply.

The sending of calls is optimised by the built-in accelerometer, reducing running costs and energy consumption.

The device can have built-in antennas or, if it has to be installed in a shielded environment, it can be fitted with connections for external antennas.

Connection with the control centre can be established after a call by the operator or if the device detects events such as vehicle ignition or motion, or even automatically at programmed intervals.

GEOFINDER has an internal memory for data recording. It can be programmed to record approximately 15,000 positions detected by the GPS receiver and it automatically records about 1,900 events occurred by sensors or by other operating conditions.

A complete tracking system can be created using GTrack software and maps, supplied by request. GTrack software makes it possible to follow the moving target on the map displayed on the PC and to control all the functions of the GEOFINDER remote tracker.

### Advantages

- GEOFINDER is designed to offer maximum reliability even in extreme working conditions, such as extensive changes in temperature, condensation and vibrations.
- The considerable sensitivity of the GPS module used makes it possible to follow the target even in critical situations with indirect reflected signal reception.
- The quad-band module makes connection possible in all countries and area where the GSM network is available, ensuring the most extensive monitoring of the moving vehicle.
- The possibility to program the device using different methods (SMS, GPRS/modem connection) makes it easy to manage in any situation.
- The availability of an external I/O signal interface to customise the device ensures perfect compliance with application needs.
- The firmware can be updated using the GSM/GPRS remote connection, with the great advantage of being able to upgrade or add functions without having to recall the device.

### Applications

- Monitoring of moving vehicles
- Tracking of hire vehicles
- Real time fleet management
- Tracking of boats
- Prevention of theft and aid in recovering vehicles

## Main Features

### Functions

- Completely remote controlled operation statuses and device programming.
- Tracking coordinates can be sent via SMS text, GPRS or GSM data channel, according to need or convenience. They can be sent automatically or following a request from the control centre.
- 512kB of non-volatile memory for recording data, corresponding to approximately 15,000 positions detected and about 1,900 events determined by sensors or other operating situations.
- An internal battery ensures operation of the device for several hours in the event of loss of the external power supply.
- USB port for local communication with the PC.

### Sensors and Alarms

- The built-in accelerometer makes it possible to apply power-saving parameters when the vehicle is standing still and to optimise the amount of data sent and recorded, without losing useful information. The sensor has 10 levels of sensitivity which can be set using the remote control system. When the set value is exceeded, the device will automatically send an SMS text to the number programmed, signalling the event. The same happens when motion ceases.
- While motion is detected, the device can establish a continuous connection with the control centre to enable the tracking of the moving vehicle. All the sensor functions can be programmed to suit application needs.
- Detection of exit from the area (geofence). If the vehicle or object monitored leaves a rectangular area determined by programmed geographic coordinates, the event is detected immediately and an alarm is sent.

### Other

- Possibility to transfer the data recorded to the PC via GSM data connection, GPRS or local connection.
- Built-in RTC for time-scheduled operation.
- Customisable inputs and outputs according to the application.
- Firmware upgrades or the addition of functions, not only via the communication port connected directly to the PC, but also using the remote control system via GSM/GPRS connection. This exclusive function make it possible to carry out maintenance on the device without the need to recall it, saving considerable resources. The fact that the device is upgradeable increases its value even more, thanks to the possibility to keep the system constantly up to date.

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### Specifications

Power supply:	from 9 to 36 Vbc
GPS receiver:	20 channels -159dBm SiRFstarIII
GSM frequencies:	850 / 900 / 1800 / 1900 MHz
GPRS:	class 10
Antennas:	integrated or external on request
Data memory:	512 kBytes non-volatile FLASH 15,000 positions and 1,900 events
Communication port:	no.1 USB
Sensors:	accelerometer battery voltage
I/O signals:	no.2 DO + no.1 DI or no.1 DO + no.2 DI no.1 relè optional
Dimension / Weight:	93 x 120 x 35 mm / 250 gr approx.
Material:	ABS UL94-V0
Operating temperature:	from -20 °C to +70 °C
Certifications:	CE mark

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Subject to change without previous notice

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