

# FOX LITE<sup>®</sup>

- Real-time locating, tracking and mapping using PC or mobile phone
- Automatic monitoring and reporting of important events and vehicle status
- History of vehicle routes

Fox Lite is AVL (Automatic Vehicle Location) device enabling satellite vehicle monitoring and supervision of its status, defined parameters, measurement and detection of important events. Vehicle data are transferred through mobile telecommunication network (GSM/GPRS) and Internet enabling the user to track and control his vehicles at any moment. It is designed for private or professional use, for monitoring of only one vehicle or the whole fleet of vehicles. Monitoring is performed by computer or mobile phone connected to Internet. Device configuration can be done remotely through SMS messages and GPRS service, or locally using serial port. Expense optimization of GPRS traffic is achieved by double set of parameters for device operation in local network and roaming.



- FUEL
- RPM
- CAN/FMS
- Garmin
- iButton
- RFID
- SMS ALERT
- CAR security
- CRASH DETECT.
- SOS
- OBD II
- GEO FENCE

## Main functions

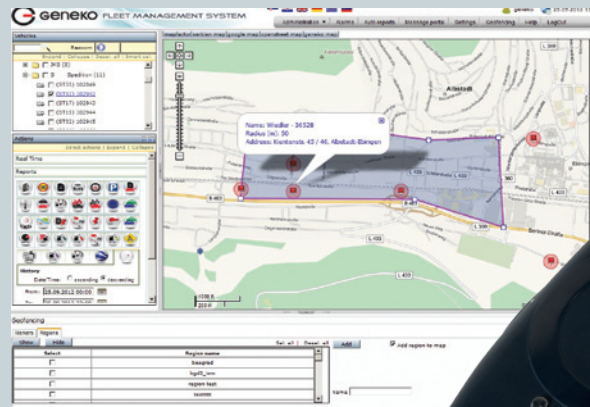
- Satellite vehicle locating, tracking and mapping in real-time
- Automatic monitoring of vehicle statuses and important events, and reporting by GPRS and SMS
- Immediate alarming about critical status and emergency

## Functional characteristics

- Satellite vehicle monitoring using GPS/GLONASS
- Configurable smart algorithm for position data sending
- Sending events caused by digital inputs or changes in statuses of the vehicle
- Instant data transfer on vehicle position and statuses on user request
- Sending events in real time, or logging and sending data at predefined time period or at predefined time of the day
- Logger capacity more than 60.000 records
- SMS alert
- XML, binary, auth+ack binary and encrypted sending formats
- Backup server IP address
- Calculation of distance traveled by vehicle and sending this information together with position data
- Calculation of vehicle maximum speed
- Driver identification using iButton
- Driver identification using RFID card
- C-Drive information
- Shock/acceleration sensor. In power save mode shock/acceleration sensor detects mechanical shock and wakes up device from power save mode. In normal operation mode it detects vehicle crash event and obtain C-Drive information
- Vehicle engine RPM measurement
- Vehicle fuel level control using analog and digital sensors
- Vehicle fuel consumption control using fuel flow meter
- Temperature measurement using additional Geneko temperature sensors
- Connecting to vehicle CAN or FMS bus (using additional interface device)
- OBD II connectivity using Geneko OBD II interface
- Connecting external GARMIN navigation and communication device
- Geofence. Device can store up to 70 rectangular or round zones
- Smart phonebook with special functions of some numbers
- Remote device parameters setup, device management, debug and firmware update ability (OTA)
- Parameter (device configuration) backup in SIM card memory
- Engine/ignition blocking with remote command – immobilizer
- Panic taster (panic event sending by GPRS and SMS)
- Private/Business drive switch
- Test sequence on debug port
- Device parameters configuration via serial port
- Navigation option by external PC, Laptop or PDA
- XML, binary and encrypted sending formats
- Advanced power save function
- Internal battery for operation without external power supply
- Vehicle battery monitoring and over-discharge protection

**QMS**  
ISO 9001:2008

**CE** certified



## Technical specification

<b>Processor</b>	ARM Cortex-M3
<b>Operating system</b>	Real time operating system
<b>GSM/GPRS module</b>	Quad Band - GSM 850/900/1800/1900 MHz, GPRS Multi-slot class 10
<b>SIM Slot</b>	Mini-SIM (2FF)
<b>GPS/GLONASS module</b>	Sierra Wireless
<b>Channels</b>	52
<b>Hot start</b>	1second
<b>Cold start (open sky)</b>	34.3 seconds
<b>Tracking sensitivity</b>	GPS: -161 dBm, GLONASS: -158 dBm
<b>Position/speed accuracy</b>	2.5 m CEP
<b>Augmentation</b>	GPS: SBAS
<b>External Power supply</b>	9 - 36VDC
<b>Input protection</b>	Over-current, reverse polarity, over-voltage, under-voltage, transients, EMI
<b>Integrated battery</b>	Li-Ion, 4.2 V / 950 mAh; over-discharging, over-current, over-voltage protection
<b>Charging temperature range</b>	0°C to +50°C
<b>Operating temperature</b>	-40°C to +85°C
<b>Dimensions (WxDxH)</b>	86 x 76 x 24 mm
<b>Weight</b>	92 g

### 7 Multifunctional inputs/outputs

- Up to 6 digital inputs (one is reserved for ignition detection)
- Up to 2 digital outputs
- Up to 3 analog inputs (one is reserved for vehicle accumulator measuring and monitoring)
- One 1-Wire Bus port
- One serial port RS-232, 3.3V CMOS levels
- One USB port 2.0

### Low power consumption

- Average power consumption < 40 mA (@12VDC)

### Serial port

- Connecting external devices
- Device parameters set up
- System log read
- Debug information read
- Firmware update
- Position data (NMEA) output for external device (PC, PDA...)