made by SPETROTEC

iWATCHER®

AVL

Advanced Vehicle Tracking Device

iWatcher AVL is a versatile and cost-effective GSM/GPS cellular monitoring unit which provides Online tracking capabilities and driver behavior for cars, trucks and motorbikes.

Utilizes the Global Positioning System (GPS) to lock on vehicles coordinates and use the GSM cellular network for controlling and monitoring the vehicle status by SMS and GPRS communication channels. The unit also incorporates flexible I/O signal.

Provides essential features applicable for most Automated Vehicle Locating (AVL) solutions, such as tracking and retrieval of stolen vehicles, fleet management and other emergency and security applications.

Designed to meet strict automotive standards for durability, power consumption and working temperatures.

iWatcher AVL supports a wide variety of reports including emergency, geo-fence, speed, tilt, tow, low battery, battery cut-off, Ignition status (on/off), Vehicle status (driving, parking) and scheduled GPS position.

Benefits

- Real time vehicle tracking
- Offers Fleet Management and Control Application (MABAT On-Line)
- Provides alerts on driver behavior speeding, towing, tilt, low battery and battery cut-off
- Prevent ignition back in case of theft attempt (by control center request)
- Characterized by low power consumption, long standby time with internal battery
- Offers connection of temperature sensors or fuel sensors or driver identification by 1W
- Incorporates multiple I/O interfaces for monitoring and control
- Alerts sent up to 3 cellular phones
- FOTA (Firmware Over The Air) update
- Panic Alert feature

Outputs:
Buzzer/Siren
Prevent Ignition back
2 Analog input

Inputs:
Panic Button
Ignition Switch
1W interface

Technical Specifications

GSM

- 2G USA version: bands 850 / 1900 MHz
- 2G EUR version: bands 900 / 1800 MHz
- 3G USA version: bands 850 / 1900 MHz
- 3G EUR version: bands 900 / 1800 MHz
- GPRS multi-slot Class 10/8
- Internal antenna - 50 Ohm onboard
- Integrated SIM card holder

GNSS

- Internal GPS Module based on 56-channel (U-Blox) Max 7 Engine
- GPS/QZSS L1 C/A, GLONASS L1 FDMA
- SBAS: WAAS, EGNOS, MSAS
- Accuracy GPS / GLONASS Position of 2.5 m CEP / 4.0 m
- SBAS 2.0 m CEP
- Tracking: –162 dBm / –158 dBm
- GPS-GLONASS Internal antenna

Interfaces

- 4 digital inputs – Ignition on/off, panic button, alarm siren, alarm lights
- 4 digital outputs – (kill engine, Doors), 4 outputs open collector driven 12/24V 250mA - 2 outputs can be configured, as analog inputs (factory configuration)
- RS232 for programming and accessories communication

Features


Speeding alerts


Battery cut-off


Low battery level


Towing alerts


Fleet Management & Control Application

Panic Button - optional


Fuel sensor - optional


Temperature sensor - optional

Electrical characteristics

- Operating Voltage 12 – 24 V DC

Power Consumption:

- Sleep mode < 2 mA
- Backup battery - Li-ion 3.7 v/1000 mAh

Communication Modes

- SMS /GPRS/RS232 (on Stand By or full operation mode)
- Data logger backup

Communication redundancy

- SMS backup
- Data logger backup

Miscellaneous

- Onboard Status led
- Built in 3D G sensor – tow and tilt
- Jamming detection
- Over speed, Vehicle battery cut-off and low power level - alerts

Operating temperature

- (-30°C to +85°C)

Dimensions

- Length 83 mm | Width 71 mm | Height 29 mm

Weight

- 90 gr (without cable)

Enclosure

- Nonflammable PC-ABS

Accessories - optinal

- Panic Button
- Temperature sensor
- Fuel sensor
- Dallas for driver identification

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