iWATCCHER®
made by SPETROTEC

CAN GUARD

Vehicle Tracking and Diagnostic Device

The iWatcher CAN GUARD Is a fleet management solution that supports full FMS protocol for trucks and OBD protocol for private cars as well as capabilities in real-time detection, driver behavior and diagnostics.

Utilizes the Global Positioning System (GPS) to lock on vehicles coordinates, and uses the GSM cellular network for controlling and monitoring of the vehicle by SMS and GPRS.

The unit incorporates with wireless cut off unit (leech) which is enables to control the leech remotely in real time from the control center.

The wireless miniature Leech is unobtrusive electric engine cut unit that can be install in the vehicle in such a way that it looks like an original part of the vehicle.

The iWatcher provide a built-in CANBUS interface that enables accessibility to the CAN data of a vehicle for security and fleet management include tracking and retrieval of stolen vehicles.

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

The iWatcher CAN GUARD integration supports a wide variety of reports including emergency, geo-fence, tilt, tow, low battery, cut-off battery, Ignition status(on/off), vehicle status (driving, parking), scheduled GPS position in addition data from the vehicle, such as: speed, RPM, fuel level, temperature, and more.

Benefits

- Locate your vehicle on online Map in real time
- Using fleet management and control application (MABAT online)
- Works with ECU (Engine Cut-off Unit), remotely controlled, in real time, by control center command
- The ECU is designed in a unique shape and size, making it very difficult to locate
- Blocked engine immediately in case of theft attempt (by control center request or by lost communication with the iWatcher)
- Wide range of available service data from the vehicle (CAN), such as: speed, RPM, fuel level, temperature, and more
- Provide alerts on driver behavior speeding, towing, tilt, low battery and cut-off battery
- Low power consumption, long standby time with internal battery
- Multiple I/O interfaces for monitoring and control
- Alerts sent to 3 cellular phones
- FOTA upgrade (Firmware Over The Air)
- Panic alert feature

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 (U-Blox) Max 7
  56-channel u-blox 7 engine
- GPS/QZSS L1 C/A, GLONASS L1 FDMA
- GPS based on NMEA 0183 output format
- SBAS: WAAS, EGNOS, MSAS
- Accuracy GPS / GLONASS Position 2.5 m CEP / 4.0 m
- Hot start < 1 second
- SBAS 2.0 m CEP / n.a.
- Sensitivity GPS / GLONASS
- Tracking: –162 dBm / –158 dBm
- GPS-GLONASS external antenna

Protocols

- FMS - j 1939
- J 1708 - optional
- OBD - ISO J15765-4 and SAE J 2284

Interfaces

- CAN Bus connection through 2 wire I/O connector
- Basic data collection by CAN Bus (depend on vehicle type): speed, odometer, fuel level and Engine temperature
- 4 digital inputs - Ignition on/off, panic button, alarm siren, alarm lights
- 2 digital outputs – kill engine, doors
- RS232 for programming and accessories communication 2.4 GHz wireless communication

Electrical characteristics

- Operating voltage 9 - 28 V DC
- Normal - 50 mA
- 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)
- TCP/IP

Communication redundancy

- GPRS / SMS
- GPRS with data logger backup

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Miscellaneous

- Onboard status led
- Built in G sensor – tow and tilt
- Jamming detection
- Level of over speed, vehicle battery cut-off and low power level

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 - Optional

- RFID Proximity card for driver identification
- Panic button

Technical Specifications for the ECU (engine cut-off unit)

Electrical characteristics

- Operating voltage 9 – 28 V DC

Average Current consumption

- 9mA

Operating temperature

- (-30°C to +85°C)

Dimensions

- Length 55mm | Width 17mm | Height 9mm
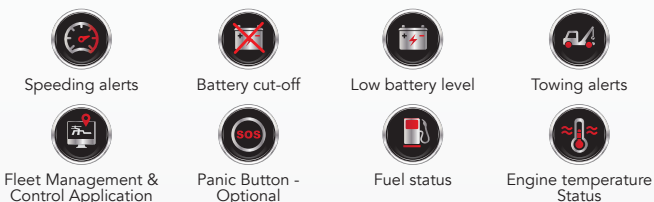
Weight

- 9 gr

Frequency

- 2.4MHz

Enclosure

- Nonflammable, waterproof shrink tubing

Features

| Speeding alerts | Battery cut-off | Low battery level | Towing alerts |
| Fleet Management & Control Application | Panic Button - Optional | Fuel status | Engine temperature Status |

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