

# Vetronics 870

Miniature unit with GPS receiver designed for online tracking truck or machinery location and status of connected peripheries. It brings advanced features and high reliability at a great price.

It is used to check driven mileage, fuel consumption and driving style, identifies the driver and creates an electronic logbook. It provides an instant overview of the current status of the vehicle, checks AETR compliance, generates statistical reports and reports on individual drivers, vehicles and equipment. Unit supports the connection of many peripheries including the car interface or digital tachograph.



#### **Basic functions**

#### **Current location and status**

The unit sends in real time the position and speed of the vehicle, identification of the registered driver or attached trailer.

#### Route record

In addition to online tracking the unit stores detailed route description so you can find out where and when your vehicle was.

#### **Connection via Bluetooth**

Integrated Bluetooth can be used for driver identification, the type and purpose of the ride. Or can be used to identify of a trailer connected to the vehicle.

#### **Business and private rides**

Using a switch or mobile app, the current ride can be marked as private. The place of the route is then displayed only the length of the ride and the amount of fuel consumed.

### Vehicle activity detection

Unit for activity detection vehicle can use not only for direct connection to a switching device box, but also the accelerometer, or the car interface.

#### **Technical Specifications**

Input voltage: 6 - 42V
Sleep power consumption: < 0.5 mA
Consum. during transmission: 40-100 mA
Memory: 4 MB, 200,000 records
Temperature range: -40°C to +85°C
Dimension: 90 x 56 x 17 mm
Certifications: e8, CE

# **Special functions**

#### **Alarm functions**

Motion detection, not logged in driver, battery disconnection, connection to other alarm sensors, ... Alarm can send SMS, make phone calls to specified numbers or switch on external devices.

# Driver's driving style: passenger cars

From speed, acceleration and overloading determines the style rating of the driver's ride. The unit recognizes aggressive and non-smooth driving and unsafe speed.

## **Backup batteries**

The unit supports operation from backup battery and charging. Thanks to the universal charger, it is possible to charge all types of batteries: NiMH, Li-Pol, Pb,...

#### Low power mode

When the ride is over, the unit switches to low-power mode. A power consumption is < 0.5 mA,thus protecting the vehicle against discharge the battery. In doing so, it responds to motion and alarm inputs.

# Remote tachograph download

The unit allows remote download the contents of drivers' cards and tachograph and thus fulfil the obligation to regular backups of these data.

#### GPS:

Code receiver, 90 channels, support: EGNOS, WAAS, Beidou, GALILEO Capture within 35s (cold start) Detection at min. -148dBm Navigation at min. -165dBm Accuracy 3.0m 2DRMS Almanac plus support

# **Car interface CAN**

#### **Odometer and fuel**

Unit reads data directly from the car interface. In the electronic logbook are thus available for accurate data on the odometer status and fuel.

### **Driver's driving style: trucks**

For trucks unit uploads detailed operating data from car interface. This can effectively evaluate style and economy driving with the help of the Perfect drive function.

#### Diagnostics from OBD-II

The unit works as a diagnostic device enabling read the status of the check engine light and error codes. It stores the data including the time of occurrence.

#### **Service inspections**

The unit will read out the vehicle an estimate data of the next service date and the number of remaining kilometers (only for vehicles VW and Skoda).

# Connection to the tachograph Identification and working mode of the driver and

passenger is read directly from the tachograph. It helps to warn of an approaching limit for driving and on his exceeding.

#### GSM:

2G/4G cat. 1b Internal SIM on Chip Internal antenna

#### Accelerometer and gyroscope:

3+3 axes, automatic orientation Towing and driving style detection Range +- 4G and 1000 st./s

# Inputs and peripheries

#### **Analog inputs**

The unit has 8 analog inputs with 16bit converters measuring in the range of 0-32V. Measurement can be sorted using various filters, measure frequency, count pulses, detect peaks ...

#### **Driver identification**

The driver can identify himself using a Dallas and RFID chip or the driver's card inserted in the digital tachograph or via Bluetooth. The dispatcher has real-time overview of who is driving the vehicle.

#### **Temperature measurement**

Temperature in the cargo area can be measured from up to six different sensors at the same time. After the ride, you can view detailed waveforms. It is also possible to connect cooling units.

# Peripheries via RS232

Up to two peripheries can be connected simultaneously. Supported are Barcode readers, fuel probes and other devices.

#### Digital outputs and power supply

The unit has 4 remotely controlled outputs with protection of overload and 2 digital inputs. It also has a 3.3V power supply and 5V for powering peripheries, which can also be programmed controllable.

#### Inputs and outputs:

- 8 x analogue input
- 2 x digital activation input
- 4 x digital output
- 4 x digital output 1 x Dallas 1wire or Wiegand
- 1 x tach output or LIN
- 3 x indicator LEDs
- 2 x RS 232 C line + 1x UART 3V
- 2 x CAN, FMS, or OBD II