



# EQTrace V+



## *Short Documentation*



## Functionality

EQTrace V+ is used to record operating times and positions of a vehicle. The device is connected to the vehicle via an OBD connector and is supplied with power via this connection. The collected data will be sent to Obserwando periodically via the mobile network. If transmission of the data is not possible, the data will be temporarily stored. The device can be accessed via the server to retrieve its current status.

## Installation

The EQTrace V+ has an OBD connector. This allows you to connect the device to your vehicle. The prerequisite for this is that your vehicle has an OBD port. If the OBD port is behind a cover, you can store the EQTrace V+ behind the cover after connecting the device.

If there is no OBD port, the plug can be unscrewed from the connection cable and the cable can be connected directly to the battery. (red cable = VPP, black cable = GND)

## Commissioning

When delivered, the device is in battery mode. You need to connect the device to your vehicle via the OBD connector or the battery. Only when the device and vehicle are connected does the red LED start to flash.

## Recording of operating times via movement

The operating times are recorded via movement using an acceleration sensor. As soon as the factory-set threshold of the acceleration sensor is exceeded, the data is recorded and saved. Motion detection occurs via virtual input 2.

## Recording of operating times via the supply voltage

To record the operating times via the supply voltage, this is measured at intervals of 100 ms. In the Obserwando portal, you can enter a voltage threshold under "Set up machine" > "Automatic operation detection". If this value is exceeded or not reached, the operating times are detected and saved. The operating times are recorded via the supply voltage via input 1.



## Power saving mode

If no operation is detected for a period of 5 minutes, the device switches to energy saving mode. In energy saving mode, only motion detection and monitoring of the supply voltage take place. As soon as the vehicle is used again, the device returns to normal operation.

## LED - states

The installed LED's display the following states when operating voltage is supplied:

### Red LED

1. LED flashes every 2 seconds: The device is on.
2. LED flashes every 5 seconds: The device is in energy saving mode.
3. LED flashes two times every 5 seconds: The device is awake, i.e. sending data, in energy saving mode.

### Green LED

1. LED is off: The device is not connected to the GSM network and has no GPS signal.
2. LED flashes shortly every second: The device is connected to the GSM network, but has no GPS signal.
3. LED flashes long every second: The device is connected to the internet and server, but has no GPS signal.
4. LED flashes long and two times shortly every second: The device is connected to the internet and the server, and has GPS signal.

## Technical data

<b>Operating voltage:</b>	9VDC – 30VDC
<b>Inputs:</b>	2 virtual (operating voltage and vibration sensor)
<b>Data storage:</b>	1.9MB
<b>Vibration sensor:</b>	available
<b>Protection class:</b>	IP66
<b>Temperature range:</b>	-35°C - +65°C
<b>Housing dimensions:</b>	L*W*H (mm) = 105 * 72 * 34