

# Template:FMB964 Features settings



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## Green Driving

**Green Driving**

Scenario settings

|               |                |
|---------------|----------------|
| Disable       | Low Priority   |
| High Priority | Panic Priority |

Max Acceleration(m/s<sup>2</sup>)

2.2

Max Braking(m/s<sup>2</sup>)

2.5

Max Cornering(m/s<sup>2</sup>)

2.1

Source

|     |               |
|-----|---------------|
| GPS | Accelerometer |
|-----|---------------|

Output Control

|        |        |
|--------|--------|
| None   | DOUT 1 |
| DOUT 2 |        |

DOUT ON Duration(ms)

200

DOUT OFF Duration(ms)

200

Send SMS To

SMS text

Green Driving

When vehicle parameters exceed the values of *Max Acceleration*, *Max Braking* or *Max Cornering* parameters, the scenario is activated: a record is generated and digital output status is changed to 1 when configured. You can configure all three parameters in m/s<sup>2</sup> units. Scenario is activated until current Acceleration, Braking or Cornering value decreases below the set parameter value. Parameters used with *Green Driving* functionality are given in a table below.

| Parameter name           | Description                                 |
|--------------------------|---|
| <b>Scenario Settings</b> | Enable/Disable Green driving functionality. |

|                                   |  |
|-----------------------------------|--|
| <b>Max Acceleration</b>           | Value which can be reached while accelerating without triggering harsh acceleration event. |
| <b>Max Braking Acceleration</b>   | Value which can be reached while braking without triggering harsh braking event.           |
| <b>Max Cornering Acceleration</b> | Value which can be reached while cornering without triggering harsh cornering event.       |
| <b>Source</b>                     | Which source (GPS or accelerometer) data will be collected from.                           |

## Data output

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Data from accelerometer/GPS are continuously monitored and processed and are used to decide whether a harsh event has occurred. If either of three cases is satisfied, an event is generated and a record is saved and sent to the server (FMB1YX must be properly configured in order to send the record). Event value is multiplied by 10 before sending/saving record to get more precision when displaying data.

Digital output 1 or digital output 2 can be activated for a period of time to warn the driver. Output on-time is configured separately for each feature case.

## Auto calibration

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The auto-calibration process is following:

1. The vehicle is stopped.
2. There is a straight road ahead.
3. Send SMS "*auto\_calibrate:set*" to the FMB device.
4. Accelerate to >30 km/h for 5 sec.
5. FMB will send a response when calibration is completed successfully.

Calibration is saved to internal flash memory, which means it will stay after a reset. To check auto-calibration status send a following short text message to the FMB device: "*auto\_calibrate:get*".

## Over Speeding



When vehicle speed exceeds configured maximum speed value the scenario is activated, an event record is generated and digital output status is changed to 1 when configured.

Scenario is active until detected speed decreases below the set parameter value.

# Jamming



When jamming is detected the scenario is activated, an event record is generated and digital output status is changed to 1 when configured once *Jamming* timeout runs out. If jamming ends during timeout countdown no event will be generated and output will not be controlled.

*Eventual Records* parameter can be configured: when it is disabled scenario status value will appear in each AVL record, otherwise it will be appended only to eventual records.

## GNSS Fuel Counter



1. To configure *Fuel Counter* parameters use fuel consumption norms which are presented in technical documentation of the vehicle. By default speeds for these fuel consumption norms are: City - 30 km/h, Average - 60 km/h, Highway - 90 km/h. These values can be changed.
2. When speed is higher than the highway fuel consumption speed, x% of highway fuel consumption is added every extra y km/h, by default FMB1YX adds 20% every 50 km/h of extra speed. For example, the fuel consumption is  $(1.2 * (\text{Highway Fuel Consumption}))$  at 140 km/h and  $(1.4 * (\text{Highway Fuel Consumption}))$  at 190 km/h.
3. *Correction coefficient* is used to correct every value of fuel consumption which is sent to the server through an expression of  $((\text{Used Fuel}) * \text{Correction coefficient})$ . By default it is 1, with minimum and maximum values of accordingly 0.01 and 2. For example, when correction coefficient is 1 and FMB1YX calculates that the amount of used fuel over 35 m distance is 20 ml, the value of 20 ml will be sent to the server, and if correction coefficient is 1.2, the value of  $20 * 1.2 = 24$  ml will be sent to the server.
4. *Fuel Consumption on Idling* is used to calculate fuel consumption when ignition is on, but the vehicle is stationary. The consumption value is 1 l/h by default, with minimum and maximum of accordingly 0 and 5 l/h. This parameter is less than 1.0 l/h for almost all diesel cars and is equal to about 1.5 - 2.0 l/h for gasoline cars.

## DOUT controls

Please refer to [DOUT controls](#).