

# Template:FMM001 System settings

System settings have following configurable parameters:

- *Sleep Settings*, where user can choose sleep mode;
- *Ignition Source*, where user can choose an ignition source from digital input 1, power voltage, engine RPM and accelerometer. More than one ignition source can be selected at the same moment. When there are 2 or more sources selected, at least one condition has to be met to change Ignition status. Example: DIN1 and Accelerometer are selected as Ignition source. When the device detects movement, Ignition status will change to 1, regardless that DIN1 value is 0. User can select movement start and movement stop delay time - those parameters are used when accelerometer is selected as an ignition source. Ignition status is used in power management and the following functionalities: eco driving, excessive idling, fuel consumption, over speeding, towing and trip;
- Object motion detection settings, where user can configure 4 ways how FMM001 detects movement and change its working mode (for more information refer to section [Template: Data acquisition settings](#)). Other functionalities that depend on movement source are: power manager, fuel consumption and trip;
- *Static Navigation Settings*, where user can turn static navigation on or off. Additionally, user can choose which source (movement or ignition) is used to activate/deactivate static navigation;
- Records settings, where user can enable or disable records when GPS is not available (no time synchronization);
- *GNSS Source* settings, where user can choose the necessary satellite system(s);
- *LED Indication*, where user can turn on or off the indication LEDs;
- *Battery Charge Mode*, where user can choose when battery will be charged: **On Need** (battery will be charged anytime when it needs to be charged) and **After Ignition ON** (battery will be charged only when ignition is on);
- *Data Protocol*, where user can choose which protocol version to use for data sending to server;
- *Analog Input Value Range*, where user can choose analog input range of 10 V or 30 V;
- *Time Synchronization* settings, where user can choose which source(s) to use for FMM001 time synchronization. User has a choice to: use only one synchronization source (**Disable (GPS only)**), allow synchronization from both the GNSS and NTP server (**NTP**), select synchronization through GNSS and GSM operator (**NITZ**) or from all three sources (when **NITZ+NTP** is selected). User can select which NTP server (it is possible to configure up to two servers) and what time period to use to resynchronize time.
- *Accelerometer Auto Calibration*, where user can disable or enable Accelerometer Auto Calibration and Gravity Filter features. Under Accelerometer Auto Calibration settings, user can choose: **Disable** - do not use auto calibration feature (sends AXES raw data), **Once** - calibrate one time only, **Every Trip** - launch auto calibration every trip (note: trip function must be enabled! ). **Important!** If Auto calibration is disabled, device should be mounted according User manual for EcoDriving feature to work properly. If enabled, AXES will be reoriented to VEHICLE axes according User manual (+X - Forward, +Y - Left, +Z - Down). Under Gravity Filter settings, user can choose: **Disabled** - do not remove GRAVITY component from AXL/Crash data, **Enabled** - remove GRAVITY component from AXL/Crash.

*Static Navigation* mode is a filter, which filters out track jumps when the object is stationary. If static navigation filter is disabled, it will apply no changes to GPS data. If static navigation filter is enabled, it will filter changes in GPS position if no movement (as defined by configured movement source) or ignition (as defined by configured ignition source) is detected. It allows filtering GPS jumps when the object is parked (not moving) and GPS position is still traced.



In *GNSS Source* settings user can configure which GNSS system(s) to use. User has a choice to use only one system between GPS, GLONASS, Galileo or Beidou and it is possible to choose two or three systems together. One exception is that you cannot combine BeiDou and GLONASS systems together. Examples of non-configurable GNSS source combinations are:

- GLONASS + BeiDou;
- Galileo + GLONASS + BeiDou;
- GPS + GLONASS + BeiDou;
- GPS + Galileo + GLONASS + BeiDou.

List of configurable GNSS sources:

<b>Selected source(s)</b>	<b>ID</b>
<b>BeiDou only</b>	01
<b>GLONASS only</b>	02
<b>Galileo only</b>	04
<b>Galileo + BeiDou</b>	05
<b>Galileo + GLONASS</b>	06
<b>GPS only</b>	08
<b>GPS + BeiDou</b>	09
<b>GPS + GLONASS</b>	10
<b>GPS + Galileo</b>	12
<b>GPS + Galileo + BeiDou</b>	13
<b>GPS + Galileo + GLONASS</b>	14