FM6300 Sleep modes

Main Page > EOL Products > FM6300 > FM6300 Manual > FM6300 Sleep modes

There are two sleep modes: sleep and Deep sleep.

GPS Sleep mode

FM6300 is able to go into GPS sleep mode if such mode is enabled.

Sleep mode timeout starts counting when device is in STOP mode. After timeout is reached and all conditions for GPS sleep mode are met, the device goes into sleep mode. When in GPS sleep mode, FM6300 turns GPS module off and continues making new periodic records. As a result power usage decreases, in turn saving vehicle battery.

FM6300 will enter GPS sleep mode if ALL of these conditions are met:

- FM6300 is configured to work in GPS Sleep mode and sleep timeout is reached;
- Device time is synchronized with GNSS satellites and GPS fix is obtained;
- Movement is not detected by the accelerometer or configured movement source;
- Ignition (configured ignition source) is off;
- Forced wakeup is not set;
- There are no SMS messages being received.
- USB is not connected.

FM6300 exits GPS sleep mode if ONE of following conditions is true:

- Movement by accelerometer or configured movement source is detected;
- Ignition (configured ignition source) is turned on.

Deep Sleep mode

While in deep sleep mode, FM6300 sets the GNSS receiver to sleep mode and turns off GSM/GPRS module (hence it is not possible to wake up device via SMS). Despite records with last known coordinate being saved and sent to AVL server (GSM/GPRS module is turned on to send data and then it is turned off), power usage is decreased to save vehicle's battery. Please note that power saving depends on two configurable parameters: *Send Period* and *Minimum Record Saving Period* in "X on Stop Mode". When records are sent successfully in deep sleep mode, open link timeout counter will be skipped and FM6300 will enter deep sleep mode immediately.

Because a lot of functions are disabled in deep sleep mode following I/O elements are disabled from records that are generated in this mode: GSM Signal, GNSS Status, GNSS PDOP, GNSS HDOP, GSM CellID, GSM Area Code, Active GSM Operator, Trip Odometer, Total Odometer, Speed, Fuel Rate GPS, Fuel Used GPS and ICCID. FM6300 can enter deep sleep mode if ALL of these conditions are met:

- FM6300 is configured in Deep Sleep mode and sleep timeout is reached;
- Device time is synchronized with GNSS satellites and GPS fix is obtained;
- Ignition (configured ignition source) is off;
- Movement is not detected by the accelerometer or configured movement source;
- Min. Record Saving Period (Data Acquisition Mode settings) must be larger than Open Link

Timeout parameter, so that FM6300 could close GPRS link;

- The difference between *Send Period* (<u>Data Acquisition Mode settings</u>) and *Open Link Timeout* must be more than 90 seconds, so that FM6300 could close GPRS link within at least 90 seconds;
- Forced wakeup is not set;
- There are no SMS messages being received;
- Data socket(s) are closed;
- Data sending is not in progress;
- FOTA is not in progress.
- USB is not connected.

FM6300 exits deep sleep mode if ONE of following conditions is true:

- Movement by accelerometer or configured movement source is detected;
- Ignition (configured ignition source) is turned on.