

# Template:FM36 Sleep modes

There are three sleep modes: GPS sleep, Deep sleep and Online sleep mode.

## GPS Sleep mode

FM36YX is able to go to 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, device goes to sleep mode. While in GPS sleep mode, FM36YX sets GNSS receiver to sleep mode and it isn't making periodic records (only event records is being recorded with last known coordinate and sent to AVL server). As a result power usage decreases allowing saving vehicle battery.

FM36YX will enter GPS sleep mode if **ALL** of these conditions are met:

- FM36YX has to be configured to work in GPS Sleep mode and sleep timeout is reached;
- Device must have time synchronized with GNSS satellites and have GPS fix;
- No movement by configured movement source or movement sensor is detected;
- Ignition (configured ignition source) is off;
- Forced wakeup is not set;
- There are no SMS messages being received.

FM36YX exits GPS sleep mode if **ONE** of following conditions is true:

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

## Deep Sleep mode

While in deep sleep mode, FM36YX sets GNSS receiver to sleep mode and turns off GSM/GPRS/3G module (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/3G module is turned on to send data and after that it is turned off again), power usage is decreased to save vehicle's battery. Note, that power saving depends on two configurable parameters: send period and min. record saving period.

FM36YX can enter deep sleep mode if **ALL** of these conditions are met:

- FM36YX has to be configured to work in Deep Sleep mode and Sleep timeout set;
- Device must be synchronized time with GNSS satellites or via NTP;
- No movement by motion sensor is detected;
- Ignition (DIN1) is off;
- Min. Record Saving Period (Data Acquisition Mode settings) must be bigger than Active Data Link Timeout parameter, that FM36YX could close GPRS/3G link.
- Difference between send period (Data Acquisition Mode settings) and Active Data Link Timeout must be more than 90 sec., that FM36YX could close GPRS/3G link for at least 90 sec.
- USB cable is not connected.

FM36YX exits deep sleep mode if **ONE** of the following conditions is true:

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