TAT240 GPRS settings

Contents

GPRS Settings

• **APN** - Access point name, mandatory parameter which is used connect to internet (GPRS).
• **APN Username** - Access point username (optional – depending on operator).
• **APN password** - Access point password (optional – depending on operator).

Some operators use specific type of authentication for GPRS session – CHAP or PAP. If any of these is used, APN should be entered as "chap:<APN>" or "pap:<APN>" respectively e.g. if operator is using APN "internet" with CHAP authentication, it should be entered as "chap:internet".
Information about APN and authentication type should be provided by your GSM operator.

SMS Record Sending

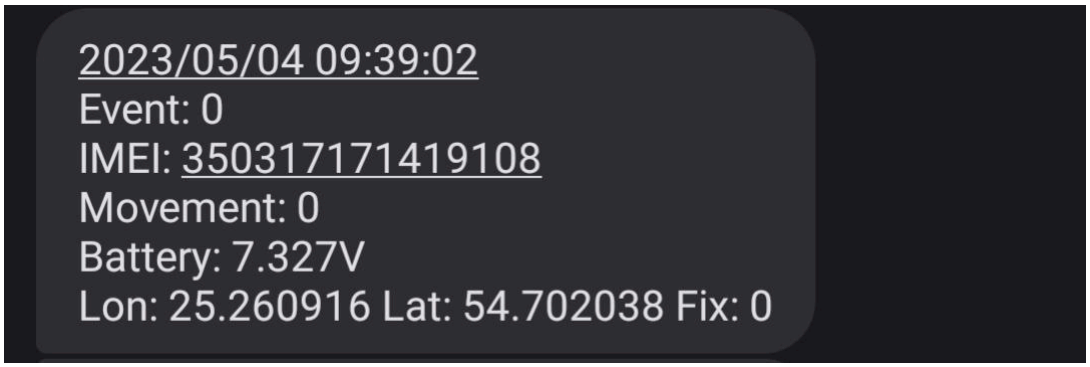
Please note:
• This feature is implemented since firmware version 1.0.0.Rev.00

SMS Record sending feature allows the user to send records via SMS **instead of sending them to the server**. When enabled, device will not open GPRS context, it will not connect to the server resulting in smaller power consumption.
GPRS context will still be opened for connection to Fota or to sync time over NTP if needed.

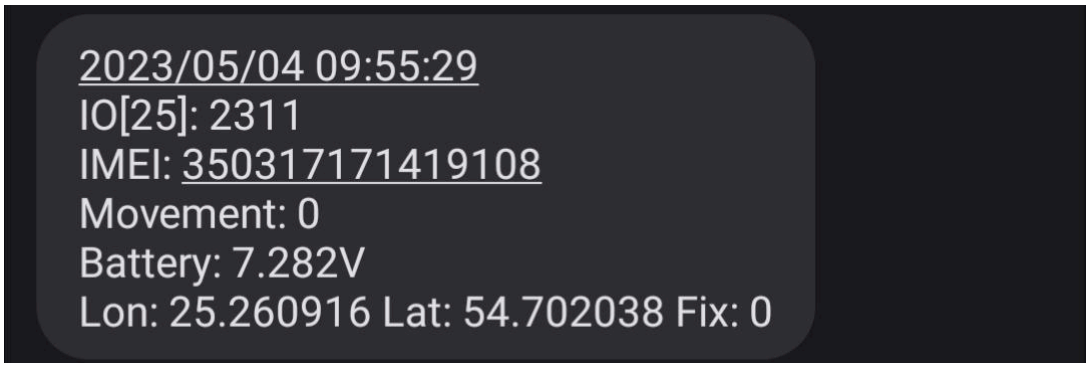
Each SMS record has a fixed set of information depending the record type.

Record type	Information in SMS	Example

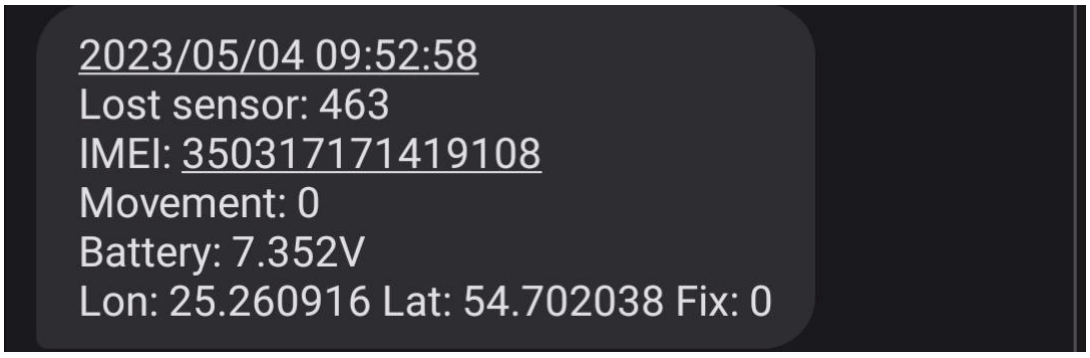
Periodic Scheduled On Move Event On Stop Event Backup Tracker Recovery Lost Beacon	* Record date and time * Record Event AVL ID * IMEI * Movement status * Battery voltage * Location information (LBS or GNSS)



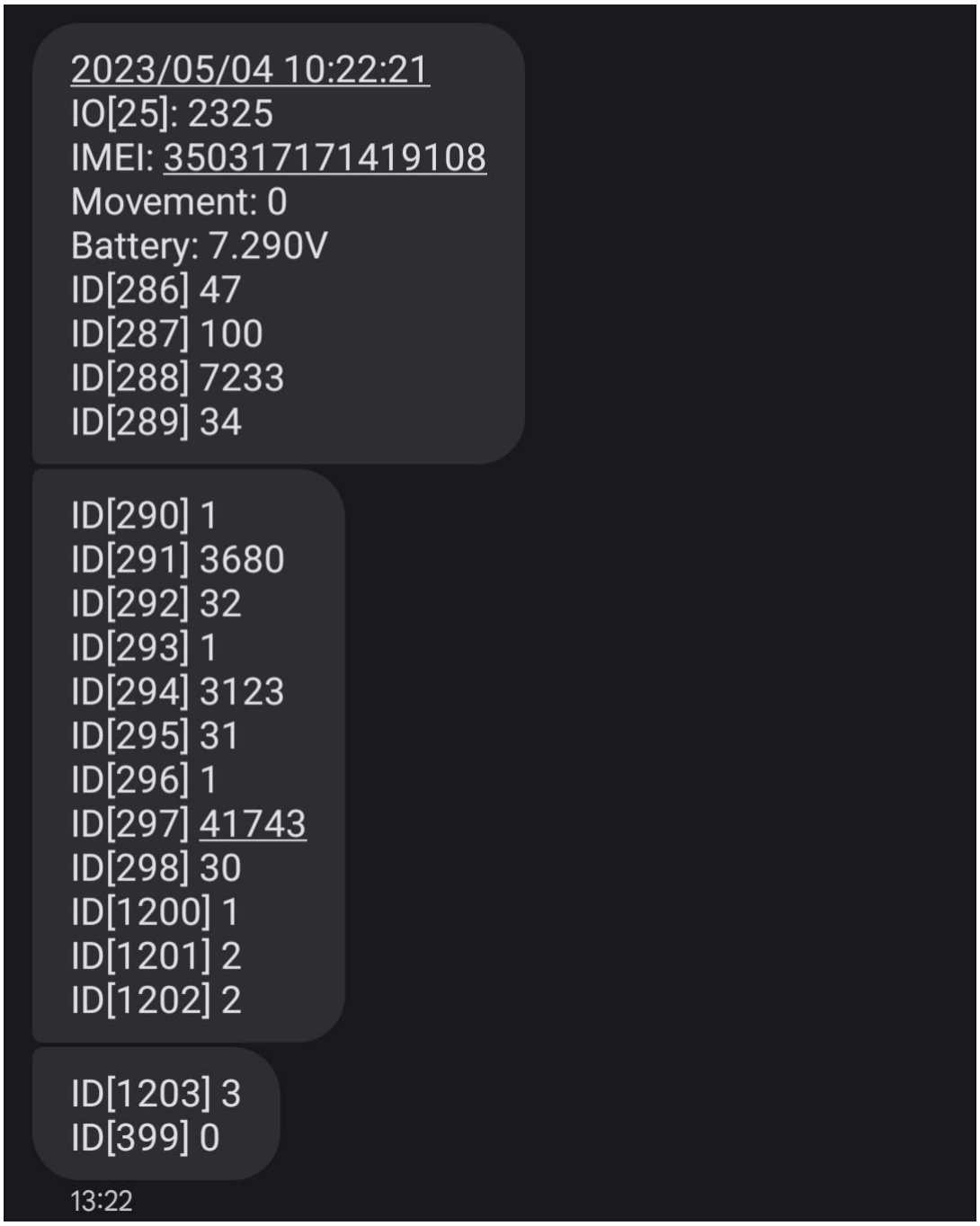
Sensor or other high priority IO record	* Record date and time * IO that triggered record AVL ID and value * IMEI * Battery voltage * Location information (LBS or GNSS)

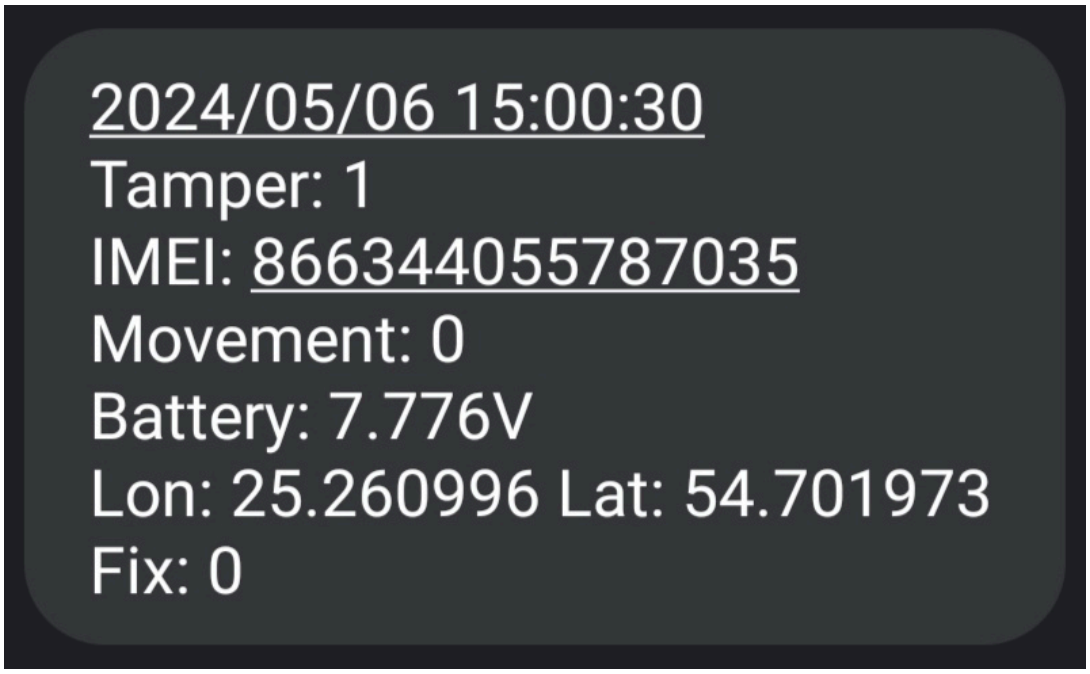


Lost Sensor	* Record date and time * Lost sensor AVL ID * IMEI * Battery voltage * Location information (LBS or GNSS)



Record with LBS location	All other information as per above



Tamper events	All other information as per above	

Server Settings

• **Domain** - Server IP or DNS address.
• **Port** - Server port.
• **Protocol** - Protocol used for data transfer.
• **Encryption** - Instructions cover how to generate an encryption certificate and how the device should be configured in order to send encrypted records into the client-server can be downloaded **HERE**.
Server configuration and encryption certificate implementation is mandatory from the client-server side. Test Connection will generate one high-priority test record and initiates connection to the configured server.

NOTE: configuration must be saved to the device before testing the connection to the server.

Records Settings

• **Sort by** - Here TAT100 device will send the newest records first when **Newest** is selected, which is useful in cases when the most important parameter set is the most recent one, as a result other records will be sent right after the newest records are received by AVL application.
• **ACK Type** - Possible to choose TCP/IP or AVL type
• **First Power On record** - first Power On record is a feature that when enabled sends first record on first manual power-up by switch. It can be turned on/off also by SMS/GPRS command.

More about First Power On record feature:
This parameter has an ID 199.
When enabled, the device on first power on will perform standard operations like in period record sending - time synchronization, getting GNSS fix, getting LBS data and etc. The time period of time from the moment of switching on the device and record sending strongly depends on configuration and time for fix searching. For example:
• When the tracking source is GNSS, in good conditions (clear sky, antenna pointing upwards) the first record will be sent approximately after 2 minutes from the time the device is turned on.
• If the location source is LBS only, the record can be received even more quickly - after about 90 seconds.
Depending on how bad the conditions are, the time to send a record can be significantly longer (a few additional minutes).

Note

Some things that should be taken in consideration:

1. Static navigation logic will be ingored for this record.
2. When working with Recovery mode scenario, this first record **will** be an alarm record if *Update frequency* parameter is sufficiently short to generate an alarm before sending a record.
3. When setting *First Power On* record parameter with SMS/GPRS command, it is recommended to send this command **before** turning the device on. Doing it with initial delay after turning on the device may cause unstable behavior.

FOTA WEB Settings

These settings are used to configure FOTA WEB server connection parameters.
• **Status** enables or disables FOTA WEB functionality.
• **Domain** - Address of FOTA website.
• **Port** - Port number of FOTA website.
TAT240 device does not connect to FOTA WEB periodically to preserve battery power.
• Device will automatically connect to FOTA WEB only on initial startup (when the switch is flipped from OFF to ON position).
• Connection to FOTA WEB can also be initiated via the 'web_connect' SMS/GPRS command.

Note

TAT devices do not follow the same logic when connecting to Fota platform. A more detailed description of Fota connection can be found HERE.