# Template:FMB140 firmware errata

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#### Introduction

We are always improving our devices performance, stability and reliability. That's why Teltonika is one of the leading GNSS trackers manufacturers in the world.

This document describes **FMBXXX**, **FMCXXX**, **FMUXXX**, **FMMXXX** platform devices firmware improvements, changes, new features implementations as well as current firmware release version.

	FIRMWARE VERSION	SUPPORTED HARDWARE	
	03.25.XX	FMB0YX, FMB9X0, FMB96X, FMB1YX, FM30XY, FMB2YX, FM30XY, FMT100	
	03.27.XX	FMB0YX, FMB9X0, FMB96X, FMB1YX, FMU1YX, FMM1YX, FMC1YX, FMM001, FMC001, FM30XY, FMB2YX, FMT100	
	03.29.XX	FMB010, FMB020, FMT100, FMB900, FMB910, FMB920, FMC920, FMM920, FMB110, FMB120, FMB122, FMB125, FMB130, FMC125, FMC130, FMC13A, FMM125, FMM130, FMM13A, FMB202, FMB204, FMB225, FMB230, FMC225, FMC230, FMM230, FMB001, FMB003, FMC001, FMC003, FMC00A, FMM001, FMM003, FMM00A, FMB140, FMB240	

#### **Evaluation firmware branches**

Newly introduced Teltonika Telematics products start their lifecycle and mass production running evaluation branch firmware versions, which may be based on older BASE firmware version or seperate firmware branch, therefore may have different features. Such products do not immediately receive identical improvements as products in BASE firmware until their support is added. Currently such products are:

FIRMWARE VERSION

**HARDWARE** 

03.28.07.Rev.353	FMC880, FMM880, FMC800, FMM800, FMM00A
03.28.07.Rev.152	FMB150, FMC150, FMM150
03.27.10.Rev.482	FMB930
03.27.10.Rev.464	FMB965
03.28.04.Rev.273	FMP100

## Firmware versioning

• Structure

FMB(T).VER.[XX].[YY].[ZZ].Rev.[##] \_[ID###]

- Syntax description
  - ∘ XX major FW version.
  - YY branch number, shows major changes in firmware, i.e. new module support added or new major feature added.
  - ZZ major changes like bigger fixes, improvements and new features addition.
  - ## minor changes like small fixes and improvements.
  - ID[###] Spec ID KEY Specific clients FW changes.

### **Firmware versions**

FIRMWARE VERSION

RELEASE DATE CHANGES

03.29.00.Rev.14 (recommended for FMB120, FMB130, FMB140, FMB125, FMM130 with BG95-M3, FMM230, FMB920, FMT100, FMB910, FMB204, FMC125 with MeiG SLM320, FMC225, FMC13A) 2023.12.13

- NEW! <u>TELTONIKA EYE Beacon and EYE Sensor easy</u> <u>configuration</u> functionalities added
- NEW! <u>TELTONIKA EYE Beacon Lost & Found and Proximity Event</u> functionalities added
- NEW! SECO functionality added
- NEW! Back-Up Tracker functionality added
- NEW! GNSS jamming functionality added
- NEW! Low Power Mode functionality added
- NEW! MQTT support for <u>AWS IoT Shadow/Custom</u> and <u>Azure IoT</u> added
- NEW! RS485 Buffered functionality added
- NEW! RS232 Delimiter mode functionality added
- NEW! 1-Wire interface control in sleep modes functionality added
- NEW! <u>BT/BLE interface control in sleep modes</u> functionality added
- NEW! NBL-2 Bluetooth RFID reader support added
- NEW! SMS/GPRS command "Ivcanhorn" support added
- NEW! Added support for FMC13A and FMM13A
- NEW! Added support for FMC00A and FMM00A
- NEW! Added support for FMC920 and FMM920
- NEW! Added support for FMC003 and FMM003
- NEW! Added support for small OBD devices <u>FMB003</u> and <u>FMB020</u>
- **NEW!** Added support for FMC1XY/FMC2XY devices with MeiG modems
- NEW! SMS/GPRS command "setigndigout" added
- **NEW!** Jamming feature support added for FMC1XY/FMC2XY devices with MeiG modems
- **NEW!** Support of new electric vehicle <u>**OEM parameters**</u> for FMX00X devices
- NEW! CAN service and LPG I/O elements added
- NEW! New I/O elements for each CAN adapter state flag added
- $\bullet$  NEW! New I/O Digital Input 2 for FMX920, FMB910 and FMB900 devices
- CHANGED! Reworked recalibration logic
- CHANGED! Default parameter values
- CHANGED! SMS Event logic reworked
- CHANGED! LLS address count expanded to 16
- CHANGED! Black list functionality reworked
- **CHANGED!** SMS/GPRS command "cpureset" protection functionality
- CHANGED! Pulse Counter reworked
- 1-Wire Temperature sensor stability improvements
- Operator search procedure functionality improvements
- Record saving and sending improvements
- DOUT state saving improvements
- GPRS Session and PDP Context Activation logic improvements
- Trip state saving improvements
- CAN data reading improvements
- BLE data reading stability improvements
- TimeSync, SMS handling and connection stability improvements for FMC1XY/FMC2XY devices with MeiG modems
- AutoAPN multiple block file improvement for larger database capacity
- Manufacture testing improvements
- · Improved system stability and fixed general bugs

<b>03.27.13.Rev.03</b> (recommended for FMT100, FMB1XY, FMB0XY, FMB2XY, FMB9XY, FMM130)	2022.08.01	<ul> <li>Preferred Operator functionality improvements</li> <li>SLM320 modem support added</li> <li>BLE advanced beacon improvements</li> <li>Static navigation improvements</li> <li>GNSS improvements</li> <li>New OBD Data MCU support added</li> <li>Improved system stability and fixed general bugs</li> <li>Manufacture testing improvements</li> </ul>
03.27.07.Rev.00 (recommended for FMB001, FMC001, FMB9X0, FMB1YX, FMT100, FMB202, FMB204, MTB100, FMB0X0)	2021.08.02	<ul> <li>New Flash memory component support added</li> <li>Inverted DOUT functionality added</li> <li>Universal Beacons functionality added</li> <li>Added Beacon On Change functionality</li> <li>Beacons list expanded to support 50 beacon ID's</li> <li>BLE AES128 encryption added</li> <li>Added Ignition On Counter functionality</li> <li>Added BLE Ffento sensor support</li> <li>Added encrypted record support (TLS)</li> <li>Added Ban list control functionality</li> <li>EGTS protocol support added</li> <li>Added configurable ACK type (TCP/AVL) source feature</li> <li>Advanced eco driving for all hardware</li> <li>Matrix3 RFID support added</li> <li>iButton list extended to 4000 iButtons</li> <li>Device records saving/sending improvements</li> <li>Towing scenario improvements</li> <li>SMS Data Sending improvements on events generation</li> <li>SMS commands setdigout and readio sending improvements</li> <li>Time synch from NTP/NITZ improvements</li> <li>Device wake up from sleep modes improvements</li> <li>HW with eSIM feature general working improvements</li> <li>Can adapters data reading on ignition off/on improvements</li> <li>Can adapters settings over SMS commands improved</li> <li>General device debug logs capture improvements</li> <li>BLE whitelist (scan stability improvements)</li> <li>Battery protection improvements</li> <li>Improved system stability and fixed general bugs</li> </ul>
03.25.16.Rev.410	2020.12.11	• Odometer calculation from CAN data improvements Newest production base firmware version for FMB140 devices in factory is 03.25.16.Rev.410. The update was made to improve odometer calculations when LVCAN is set as odometer source. We highly recommend to update firmware to make sure that the received odometer data is as accurate as possible. New orders of FMB140 are manufactured with the latest firmware.
03.25.16.Rev.281	2020.09.16	<ul> <li>Added <u>LNG IO</u> elements</li> <li><u>lvcangetinfo</u> structure changed</li> <li>CAN firmware update algorithm improvements</li> <li>Added SMS/GPRS commands: <u>lvcancheck</u>, <u>lvcanreset</u>, <u>lvcanrefresh</u></li> </ul>
03.25.16.Rev.102	2020.07.22	<ul> <li>lvcansetting SMS command can be set only in DEC format</li> <li>CAN module sleep algorithm improvement</li> </ul>
03.25.15.Rev.145	2020.04.06	<ul> <li>Improved RPM ignition detection</li> <li>Improved CAN IO priorities</li> <li>Added <u>lvcansetting</u> SMS command (HEX)</li> </ul>

03.25.15.Rev.143	2020.02.20	<ul> <li>Base update to <u>03.25.15.Rev.01</u></li> <li>Added Control State Flags IO</li> <li>Added Program Number <u>Autoscan</u> feature</li> <li><u>CAN chip update over FOTA WEB</u></li> </ul>
03.25.11.Rev.144	2019.11.22	<ul> <li>Stability improvements</li> <li>General Fixes</li> <li>Added FMB140 support</li> <li>Added FOTA WEB/Status transfer for FMB140 CAN chip firmware download.</li> <li>Initial release</li> </ul>