Template:FMM130 firmware errata

Contents

- <u>1 Introduction</u>
- <u>2 Evaluation firmware branches</u>
- <u>3 Firmware versioning</u>
- <u>4 Firmware versions</u>

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 **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	FMC1YX, FMU1YX, FMM1YX
	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
VERSIONHARDWARE03.29.00.Rev.458FMC880, FMM880, FMC800,
FMM800, FMM80A

03.29.00.Rev.157	FMB150, FMC150, FMM150, FMC250, FMM250
03.27.10.Rev.482	FMB930
03.29.00.Rev.931	FMB965
03.29.00.Rev.554	FMP100, FMB020
03.29.00.Rev.601	FMC234
03.29.00.Rev.263	FMB209

Firmware versioning

• Structure

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

- Syntax description
 - XX major FW version.
 - $\circ\,$ YY branch number, shows major changes in firmware, i.e. new module support added or new major feature added.
 - $\circ\,$ ZZ major changes like bigger fixes, improvements and new features addition.
 - $\circ\,$ ## 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.21 (recommended for FMB122, FMB125, FMM125, FMC125 (SLM320-LA, SLM320-E2, EC21- EC), FMM130, FMC225, FMC920, FMM920)	2024.08.07	 Optimized the startup process of the network modules to improve pass-rate during manufacturing testing. Dual SIM switching enhancements to improve pass-rate during manufacturing testing. Return real SIM slot for factory testing commands.

(recommended for FMT100, FMB900, FMB910, FMB920, FMC920, FMM920, FMB110, FMB120, FMB122, FMB130, FMC130 (SLM320- LA, SLM320-E2, EC21-EC, EC21-AU), FMC13A, FMM130 (BG95-M3, BG96), EMM12A EMP202
FMB910, FMB920, FMC920, FMM920, FMB110, FMB120, FMB122, FMB130, FMC130 (SLM320- LA, SLM320-E2, EC21-EC, EC21-AU), FMC13A, FMM130 (BG95-M3, BG96),
FMC920, FMM920, FMB110, FMB120, FMB122, FMB130, FMC130 (SLM320- LA, SLM320-E2, EC21-EC, EC21-AU), FMC13A, FMM130 (BG95-M3, BG96),
FMB110, FMB120, FMB122, FMB130, FMC130 (SLM320- LA, SLM320-E2, EC21-EC, EC21-AU), FMC13A, FMM130 (BG95-M3, BG96),
FMB122, FMB130, FMC130 (SLM320- LA, SLM320-E2, EC21-EC, EC21-AU), FMC13A, FMM130 (BG95-M3, BG96),
FMC130 (SLM320- LA, SLM320-E2, EC21-EC, EC21-AU), FMC13A, FMM130 (BG95-M3, BG96),
LA, SLM320-E2, EC21-EC, EC21-AU), FMC13A, FMM130 (BG95-M3, BG96),
EC21-EC, EC21-AU), FMC13A, FMM130 (BG95-M3, BG96),
FMC13A, FMM130 (BG95-M3, BG96),
(BG95-M3, BG96),
FMM13A, FMB202,
FMB204, FMB206,
FMB230, FMC230,
FMM230, FMB140,
FMB240, FMB125,
FMC125 (SLM320-
LA, SLM320-E2,
EC21-EC), FMM125
(BG95-M3),
FMB225, FMC225)

• Fixed pro-longed reconnection to new operator due to record tasks interrupting operator search

• Fixed network session closing when current operator is added to blacklist

- Improved module initialization time for devices with Quectel
- Fixed Digital Output state restore after firmware update
- RS232 interface stability improvements
- GNSS status element state improvements
- Time synchronization improvements
- Manufacture testing improvements

03.29.00.Rev.14 (recommended for FMM130 with BG95-M3, FMM230, FMC125 with MeiG SLM320, FMC225, FMC13A)

- NEW! <u>TELTONIKA EYE Beacon and EYE Sensor easy</u> <u>configuration</u> functionalities added
 - NEW! <u>TELTONIKA EYE Beacon Lost & Found and</u> <u>Proximity Event</u> functionalities added
 - NEW! <u>SECO</u> functionality added
 - NEW! <u>Back-Up Tracker</u> 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! <u>RS485 Buffered</u> functionality added
 - NEW! <u>RS232 Delimiter mode</u> functionality added
 - NEW! <u>1-Wire interface control in sleep modes</u> 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 "lvcanhorn" support added
- NEW! Added support for FMC13A and FMM13A
- NEW! Added support for FMC00A and FMM00A
- NEW! Added support for <u>FMC920</u> and <u>FMM920</u>
- NEW! Added support for <u>FMC003</u> and <u>FMM003</u>
- 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

 \bullet NEW! New I/O elements for each CAN adapter state flag added

• **NEW!** New I/O Digital Input 2 for FMX920, FMB910 and FMB900 devices

- CHANGED! Reworked recalibration logic
- CHANGED! <u>Default parameter values</u>
- CHANGED! <u>SMS Event</u> logic reworked
- CHANGED! LLS address count expanded to 16
- CHANGED! Black list functionality reworked

• **CHANGED!** SMS/GPRS command <u>"cpureset"</u> protection functionality

- CHANGED! <u>Pulse Counter</u> 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

03.27.13.Rev.03 (recommended for FMT100, FMB1XY, FMB0XY, FMB2XY, FMB9XY, FMM130, FMC001)	2022.08.01	• Improved system stability and fixed general bugs
03.27.12.Rev.00 (recommended for FMM130 with BG95)	2022.02.17	 Added FMM230, FMC230, FMC225, FMB230, FMB225, FMB240 support Fixed manual frequency bands configuration for FMMx30 devices Improved system stability and fixed general bugs
03.27.10.Rev.02	2021.11.11	 New Accelerometers support added Static navigation improvements GNSS performance improvements BG95-M3 modem support AutoAPN improvements Limit max FOTA connection period to 12 hours Improved system stability and fixed general bugs
03.27.07.Rev.252 (recommended for FMC130 with SLM320)	2021.10.15	 SLM320 modem support Improved system stability and fixed general bugs
03.27.07.Rev.00 (recommended FMU130, FMU125 FMC130, FMC125, FMM125)	2021.08.02	 New Flash memory component support added Inverted DOUT functionality added Universal Beacons functionality added Beacons list expanded to support 50 beacon ID's BLE AES128 encryption added Enabled SBAS support Improved system stability and fixed general bugs
03.27.04.Rev.01	2021.03.16	 Quectel modem reset procedure improvements Optimization of faster network selection Optimization of internal flash usage Fix of GNSS version initialization Added <u>Beacon On Change.</u> functionality Improved system stability and fixed general bugs
03.27.03.Rev.02	2021.01.28	 Fix odometer calculation when source selected LVCAN or GNSS DNS fixes and improvements Improved system stability and fixed general bugs
03.27.03.Rev.00	2020.12.16	 Improved high priority records sending Quectel modem configuration rework Improved system stability and fixed general bugs
03.27.02.Rev.03	2020.10.28	 Command "setdigout" fixes when GNSS is not available Periodic BLE scan improvements when using eventual beacon records Improved system stability and fixed general bugs
03.27.02.Rev.01	2020.10.25	 Disable NTP TSYNC in Deep-sleep mode TLS fixes and improvements

03.27.02.Rev.00	2020.09.14	Added LV-CAN200+DTC functionality
		• <u>BLE beacons</u> and <u>BLE sensors</u> support for FMU1YX,
		FMM1YX, FMC1YX, FMM001, FMC001 BLE whitelist (scan stability improvements)
		Added time synchronization improvement
		 iButton list extended to 4000 iButtons.
		 Implemented <u>Magnetic card reader</u> functionality for FMU126
		• Implemented <u>Towing detection</u> DOUT control
		• <u>EGTS</u> protocol support added
		Added configurable <u>ACK type (TCP/AVL)</u> source feature
		Added <u>BLE Efento sensor</u> support
		Codec12/13 packet merge functionality added
		• Added <u>encrypted record</u> support (TLS)
		Added <u>Ban list control</u> functionality
		Advanced eco driving for all hardware
		Battery protection improvements
		• <u>Auto APN</u> support for FMU1YX, FMM1YX, FMC1YX,
		FMM001, FMC001
		CAN Adapter improvements
		 Added FOTA WEB connection period randomizer
		 Added <u>Ignition On Counter</u> functionality
		Added new <u>UMTS/LTE Cell ID 636</u>
		 Improved system stability and fixed general bugs
03.25.10.Rev.175	2019.12.23	Stability improvements
05.25.10.10.1175	2013.12.25	Added Geo bands selection
		Improved network scan sequence and AT commands
		Added preferred operator connection
		Added network settings configuration capability for FMM1YX
		devices
		Improved dual sim switching
		• Added FMM1YX support
		Added FMC1YX support
		Added FMU1YX support
		Initial release