FMM230 Bluetooth® settings

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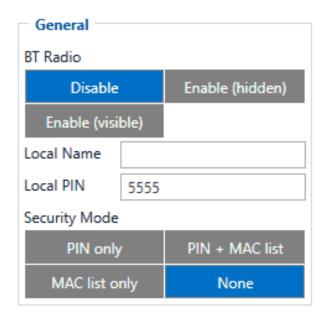
Disclaimer



If you are not using Bluetooth, **please consider turning it off** or **change Bluetooth PIN** to remove potential risks.

If you are using Bluetooth we strongly recommend **using AES encryption** for enhanced security.

General functionality



General functionality configures Bluetooth to work in slave mode. This mode allows any external device to connect to FMM230.

Parameter *BT Radio* allows enabling or disabling Bluetooth. There are three different settings:

- Disabled Bluetooth functionality will be disabled.
- Enable (hidden) Bluetooth functionality will be enabled, external devices will be able to connect to FMM230, but no devices will be able to detect it.

• Enable (visible) - Bluetooth functionality will be enabled and any external device will be able to detect and connect to FMM230.

It is possible to configure the Local name of the device, as well as the Local PIN, which will be used when trying to pair with the FMM230 device. There are two different parameters:

- Local Name parameter lets user declare a visible name of FMM230 to external devices.
- Local PIN parameter lets user configure Bluetooth PIN of FMM230 device.

The FMM230 supports composed Bluetooth Local names, which allows the user to have a predefined number of IMEI digits at the end of the device name. The format of the composed Bluetooth name looks like this:

Device name + %imeiX

X - how many digits will be taken from IMEI to show in Local name, digits will be taken from the end of IMEI. Minimum value of X is 1 and the maximum value is 15.

Example:

If the configured Local Name parameter is "FMB_120_%imei7" and the IMEI of the device is 352093089520901, the name will be displayed as **FMB_120_9520901** (whether "_LE" is added at the end depends on whether the device supports BLE or not. The full name of the device, which supports BLE would be **FMB 120 9520901 LE**).

If the Local Name is written incorrectly, the Bluetooth name of the device will be broadcasted as it is. An example can be seen below.

Example:

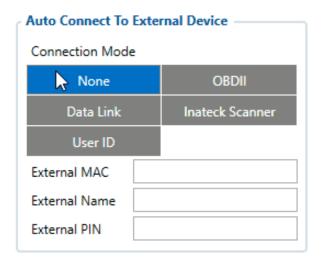
If the configured Local Name parameter is "FMB_120_%ime7" devices name will be broadcasted as **FMB_120_%ime7** or if wrong X will be configured, for example "FMB_120_%imei20" devices name will broadcasted as **FMB_120_%imei20**.

▼ The Composed Bluetooth name is supported from 03.25.05 firmware version.

FMM230 Bluetooth has several different Security Modes:

- PIN only only Local PIN will be reacquired to complete connection to FMM230.
- PIN + MAC list PIN and Authorized Devices MAC List will be checked against to allow connection to FMM230. If the external device MAC ID is in the list and correct *Local PIN* is entered then connection will be established, otherwise FMM230 will reject connection.
- MAC list only only *Authorized Devices MAC List* will be checked when trying to connect to FMM230. If external device MAC ID is in the list then connection will be established, otherwise FMM230 will reject connection.
- None neither Local PIN nor Authorized Device MAC List will be checked.

Auto Connect to External Device





Auto connection functionality configures FMM230 as master device, which allows connecting FMM230 to an external device. FMM230 currently supports these modes:

- None disables auto connection functionality.
- OBDII FMM230 starts searching for an external OBD II Dongle. If FMM230 finds a device which matches user defined *External MAC* or *External Name* then FMM230 will try to pair with that external device. If the external device asks for PIN then FMM230 will send user defined *External PIN*. After successfully pairing FMM230 will connect to paired device.
- Data Link BT Data link mode is enabled by Configurator *Data Link* parameter: when Data Link is configured and FMB has a link with the server, paired device can send messages via Bluetooth SPP profile directly to the server. Messages will be encoded by Codec12.
- Inateck Scanner FMM230 automatically connects to Inateck BT Barcode Scanner BCST-70 and will be ready to receive data (coded in barcode). Scanner must be configured for using "ENTER" as suffix. FMM230 supports online and inventory mode. A new record will be generated on every data portion received from scanner via SPP. Data will be stored with AVL ID 264, variable data length, max length is 32 bytes. Note: Added from FW version 03.16.00.Rev.00+
- User ID This mode makes FMM230 connect automatically to a device and stores its BT MAC address in I/O element *User ID* (I/O ID: 50520). This is used for driver authentication. If there's no connection, the I/O element value is set to 0.

FMM230 supports ONE connection at a time.

FMM230 can see up to 10 available devices. If there are more than 10 devices, the list may change with each new scan.

External Name parameter works as a substring, which allows users to enter a part of the full external device name. For example, if the external device name is "OBDDongle" and the user enters "OBD" in External Name parameter window, then FMM230 will be allowed to connect to an external device named "OBDDongle".

Bluetooth solutions

- How to connect OBD II Bluetooth Dongle to FMM230 device
- Logging the FMM230 device using your mobile phone