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1. Overview

The LoRa Mipot modules will be controlled by a PC software connecting via the serial port. The devices will be configured to form a network and some messages will be exchanged between them.

The software LoRaMiP GUI can be downloaded directly from the official Mipot website, link below.

<https://mipot.com/en/>

After logging in, in the product category, search for the product 32001505xxx (where xxx corresponds to the same version of the DevKit you have). Here, in the documents section, there are two versions (32 and 64 bit) of the software.

As regards the hardware setup of the DevKit, refer to the document AN_HWS001.

For details about the commands, please see the 3200150xAxx command reference.

2. Software setup

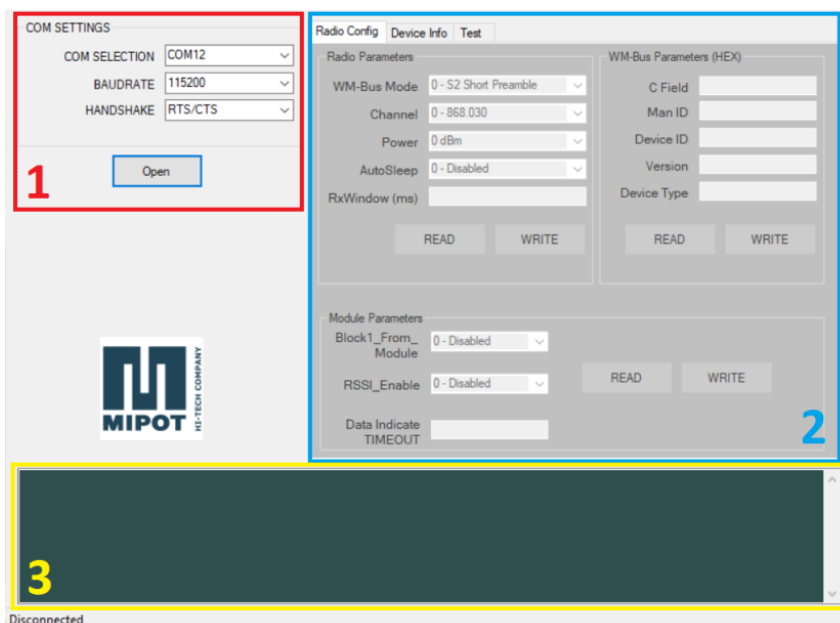
2.1. Starting the GUI

Once all connections are made and the module are powered, start the LoRaMiP GUI. At startup, it will scan available serial ports looking for connected devices. It is possible to connect multiple devices to the same PC.



Once the scan is finished, the serial ports with the module connected will be highlighted in green. To use one of the module, double click on the appropriate COM port. For this HowTo, open the interface on both modules.

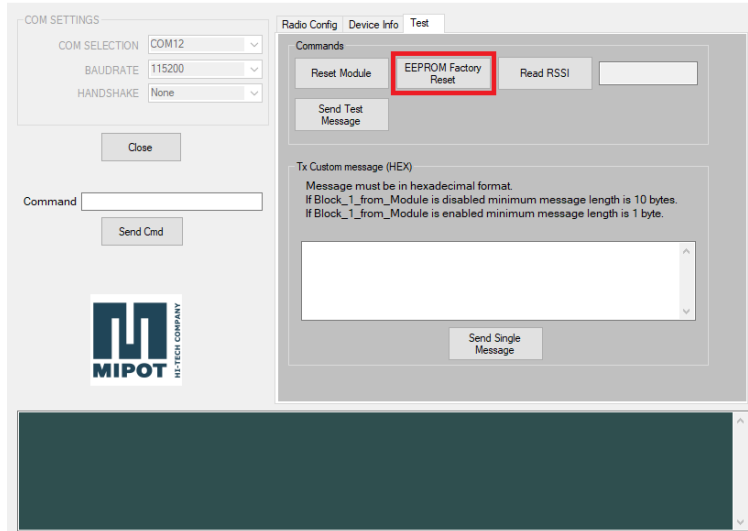
The view that will open is divided in 3 main zones:



1. Serial port control
2. Module control
3. Log of the messages exchanged on the serial port.

2.2. Module factory reset

To start with a known configuration reset the module using the “EEPROM Factory Reset” button in the “Test” tab of the GUI.



This will configure the module with the default parameters as shown in the next table.

Radio Parameters	
Parameter	Value
wM-Bus Mode	0 - S2 – Short Preamble
Channel	0 - 868.030 MHz
TX Power	13 dBm
AutoSleep	0 - Disabled
RX Window	0 ms
wM – Bus Parameters	
Parameter	Value
C Field	44
Man ID	0000
Device ID	00000000
Version	00
Device Type	00
Module Parameters	
Parameter	Value
Block1 From Module	0 - Disabled
RSSI Enable	0 - Disabled
Data Indicate Timeout	5 ms

Before writing a parameter, read them with the appropriate button so all the fields are filled with the values configured in the module.

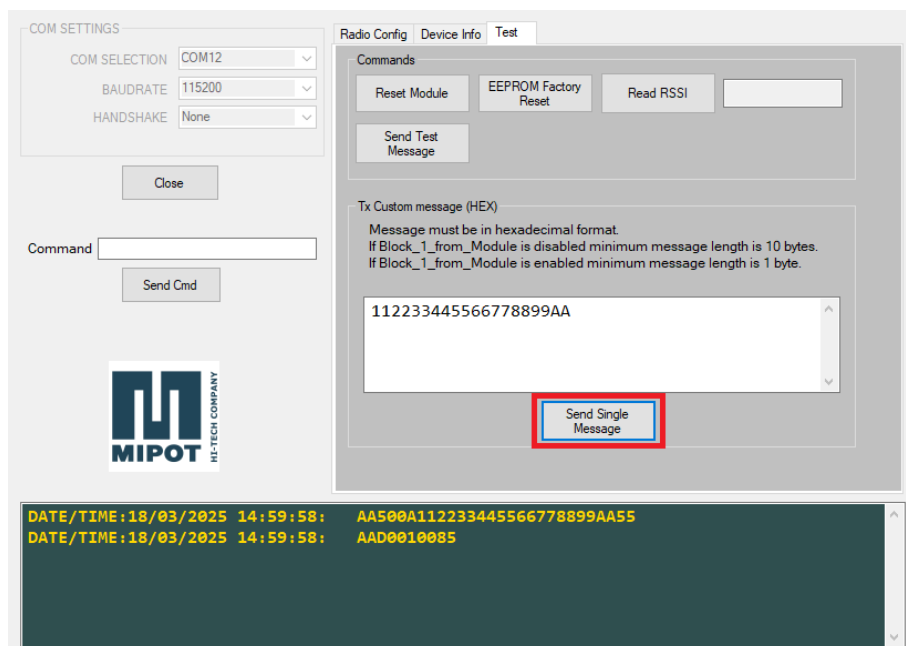
Command example

Reset the module to start with a known configuration of the module with the command `FACTORY_RESET_CMD (0x31)`:

Host: 0xAA, 0x31, 0x00, 0x25

Device: 0xAA, 0xB1, 0x01, 0x00, 0xA4

3. Sending and receiving a message



Command example

To send a confirmed message use the `TX_MSG_CMD (0x50)`. For example, to send the payload `“0x11, 0x22, 0x33, 0x44, 0x55, 0x66, 0x77, 0x88, 0x99, 0xAA”`:

Host: 0xAA, 0x50, 0x0A, 0x11, 0x22, 0x33, 0x44, 0x55, 0x66, 0x77, 0x88, 0x99, 0xAA, 0x55

Device: 0xAA, 0xD0, 0x01, 0x00, 0x85

On the receiver side, the `RX_MSG_IND (0x53)` will indicate the reception of a radio message:

Host: 0xAA, 0x53, 0x0A, 0x11, 0x22, 0x33, 0x44, 0x55, 0x66, 0x77, 0x88, 0x99, 0xAA, 0x52

4. Revision History

Revision	Date	Description
0.1	19.03.2025	First version