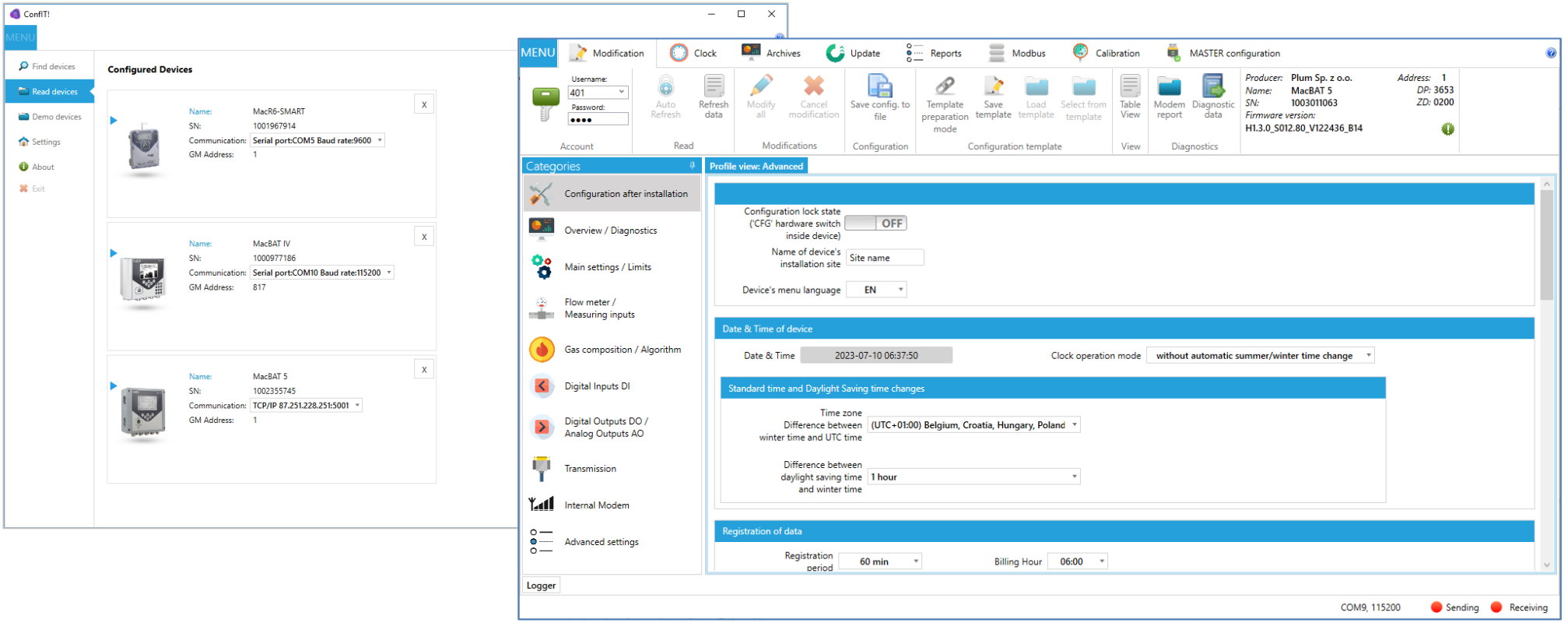
ConfIT!

Application for configuration and diagnostics of devices



USER MANUAL

PROGRAM VERSION: 1.2.39.278

DOCUMENT EDITION: 1.4

MAIN MENU

TECHNICAL DATA (A)

TRANSMISSION (D)

CONSERVATION (G)

INSTALLATION (B)

CONFIGURATION (E)

ACCESSORIES (H)

SETTINGS (C)

DATA COLLECTION (F)

TABLE OF CONTENTS

A- TECHNICAL DATA A-1

APPLICATION DESCRIPTION A-2
APPLICATION REQUIREMENTS A-3

B- INSTALLATION B-1

INSTALLATION OF APPLICATION B-2
FIRST START OF APPLICATION B-3

C- SETTINGS C-1

APPLICATION SETTINGS C-2
USER PREFERENCES C-3
PREDEFINED ACCOUNTS C-3

D- TRANSMISSION D-1

COMMUNICATION WITH DEVICES D-2
LOCAL CONNECTION (SERIAL PORT) D-3
REMOTE CONNECTION (NETWORK CONNECTION) D-5
DEVICE SEARCH D-6

E- CONFIGURATION E-1

MODIFICATION TAB E-2
MODIFICATION TAB – PROFILE VIEW E-6
MODIFICATION TAB – TABLE VIEW E-10
CLOCK TAB E-13

ARCHIVES TAB E-15
UPDATE TAB E-16
REPORTS TAB E-18
MODBUS TAB E-19
CALIBRATION TAB E-20
MASTER CONFIGURATION TAB E-22
STEP-BY-STEP CONFIGURATION E-23

F- DATA COLLECTION F-1

LOGGED DATA AND EVENTS READOUT F-2

G- CONSERVATION G-1

UPDATE OF APPLICATION G-2

H- ACCESSORIES H-1

OPTICAL TRANSMISSION INTERFACE, OPTO-BLUETOOTH H-2

MAIN MENU

A- TECHNICAL DATA

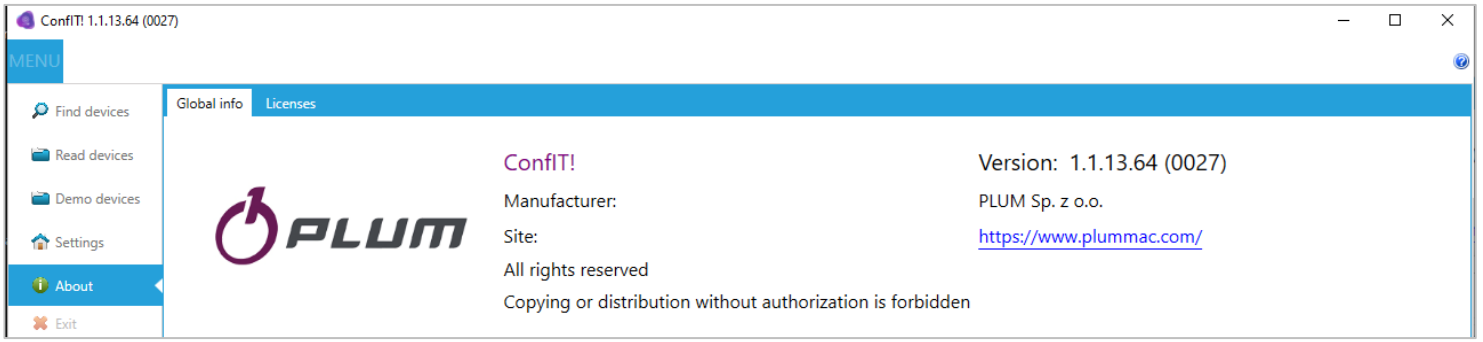
APPLICATION DESCRIPTION

ConfIT! is a software designed for local and remote configuration and diagnostic of PLUM devices. The user-friendly graphic interface allows basic and extended configuration. Interface based on device's profiles can be adapted to customer requirements. Every modified value is highlighted so the end user is aware of every unsaved configuration. ConfIT! supports local firmware upgrade of PLUM devices. It also stores a list of previously connected devices and allows for quick navigation between them. ConfIT! supports communication with devices via Serial port and via Network connection (TCP/IP, UDP/IP).

Due to security issues in many companies, ConfIT! application doesn't have functionality of automatic checking or downloading new version of application. The only TCP/IP or UDP/IP communication of application is related to communication with devices, forced by user.

Application *.zip file name and header of application (e.g. 1.1.13.64(0027)) contains:

- version of application compilation, e.g. 1.1.13.64
- version of data base of devices profiles (in brackets), e.g. (0027)



APPLICATION REQUIREMENTS

ConfIT! can be used on Personal Computers which meets below requirements:

- Operating system: Microsoft Windows Vista/7/8/8.1/10
- Software:
  - Microsoft NET.Framework 4.5.2 or higher
- Hardware (one of below):
  - for wireless communication: internal or external Bluetooth 2.1 + EDR Class 2 standard (required for OptoBTEx interface)
  - for cable communication: USB or RS232 or RS485 or Ethernet communication port (type of required communication port depends on type of converter used for cable connection between computer and PLUM device).

MAIN MENU

B- INSTALLATION

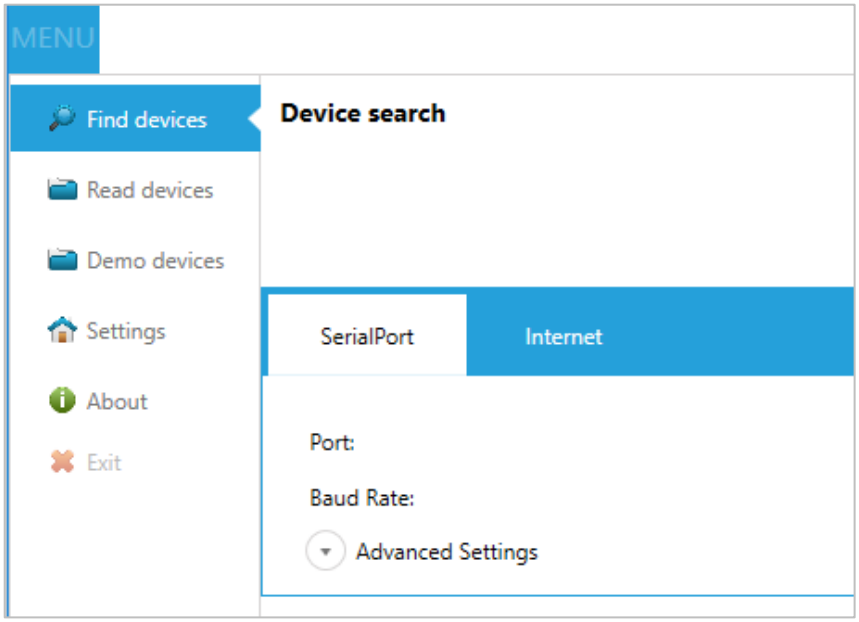
INSTALLATION OF APPLICATION

ConfIT! is shared as a compressed ***.zip** type file. It must be unpacked before use.

Application doesn't require any installation. To open application it is sufficient to start **ConfIT!.exe** file.

FIRST START OF APPLICATION

After first start of application it opens on **Find devices** menu.

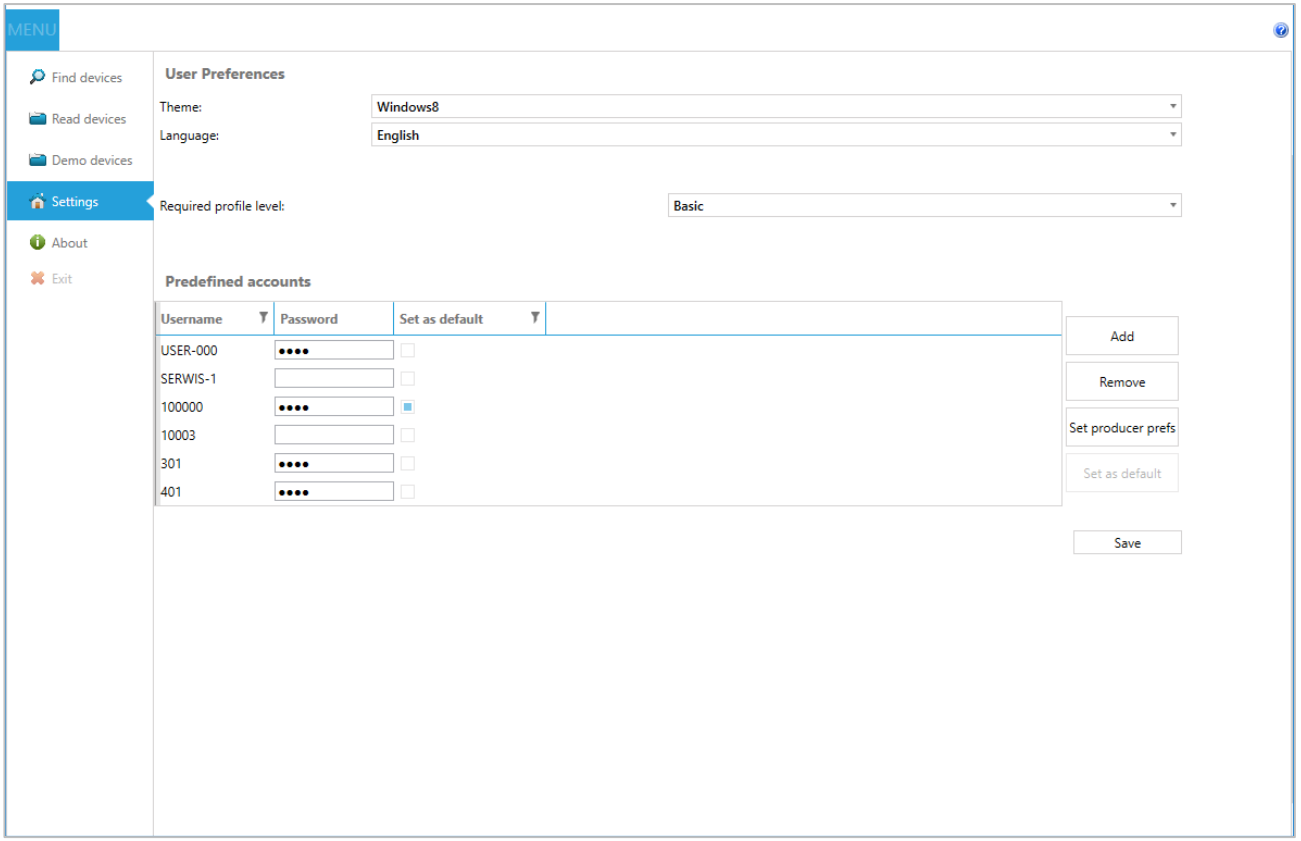


MAIN MENU

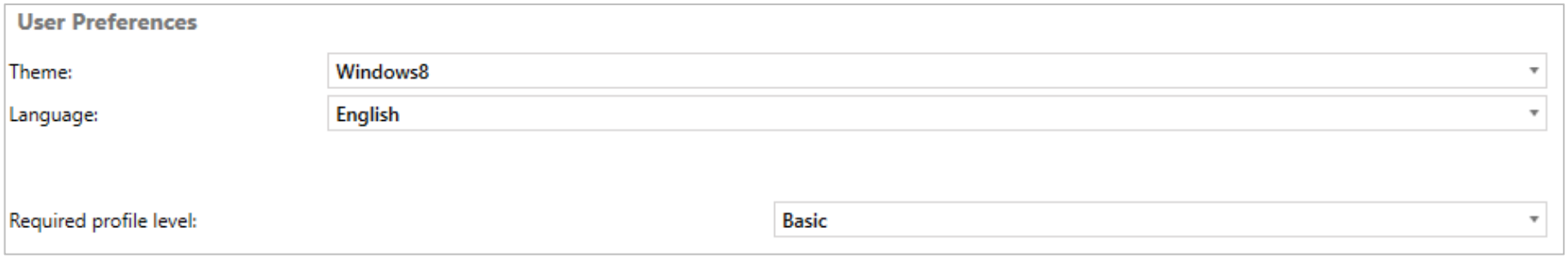
C- SETTINGS

APPLICATION SETTINGS

ConfIT! makes it possible to set up some common settings for application.



USER PREFERENCES



It is possible to set:

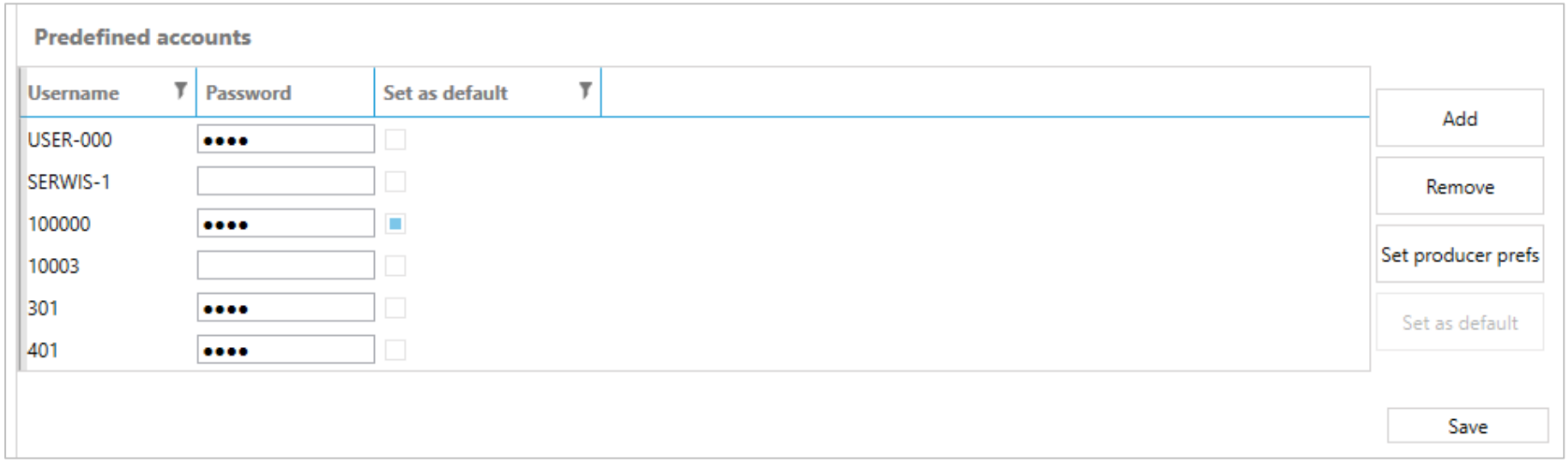
- Theme of application
- Languages of application:
  - German
  - English
  - Spanish
  - French
  - Hungarian
  - Polish
  - Portuguese
  - Slovak
  - Turkish
  - Russian
  - Chinese

  Other languages can be added on request.
- Level of profile for devices, which should be used by application:
  - Basic (less device's functionalities are visible for user)
  - Advanced (more device's functionalities are visible for user – recommended for advanced users)

⚠ After change of profile's level, it is required to communicate with device once again.

It should be remembered that translation of application's graphics interface it is a different thing than translation of profile of exact type of supported device. For example, it means that when device's profile supports only English language, ConfIT! can be opened in Hungarian but device profile will be visible in English.
If operation system's language is supported by application, ConfIT! can start operation in the same language (default setting). Otherwise it opens in English or the other language which previously was set manually.

PREDEFINED ACCOUNTS



It is possible to set predefined accounts which are needed to configure devices. Every PLUM device requires user name and password to make configuration possible. So this setting makes possible to set user password for his devices to avoid necessity of set password during configuration of every device. It is also possible to set default account which will be used for every next readout device. Since version 1.2.33.219 application automatically choose proper user account to the device type.

Passwords set by default in application for default predefined accounts, are typical, factory passwords for that user names in PLUM devices.

Sample account names (user names) used in PLUM devices					
Type or user	**Type of password**	**Device names and user accounts (user names)**			
		MacBAT 5 MacREJ 5 MacREJ 5 R MacREJ 5 W	MacBAT IV MacMAT IV	MacBAT III	MacR6 MacBATe
Typical	fixed (set by user)	301 - customer 401 - administrator	100000	USER-000	USER-000
Service	generated by PLUM	*(not available)*	10003	10003	SERWIS-1

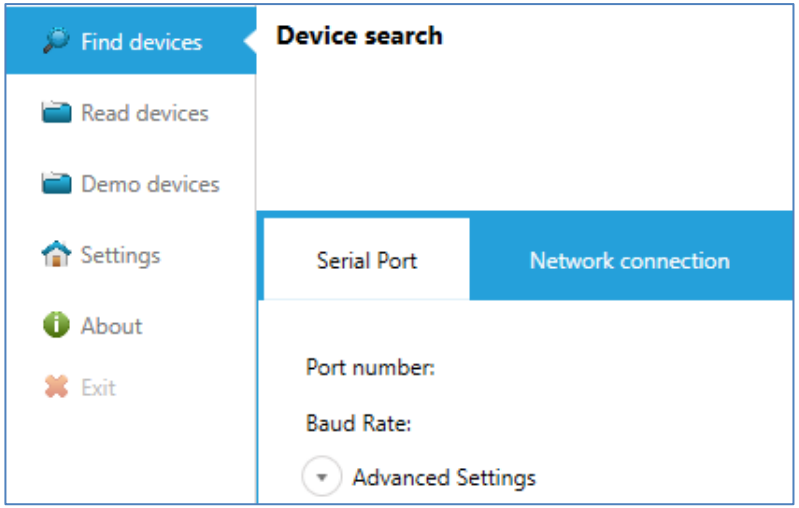
MAIN MENU

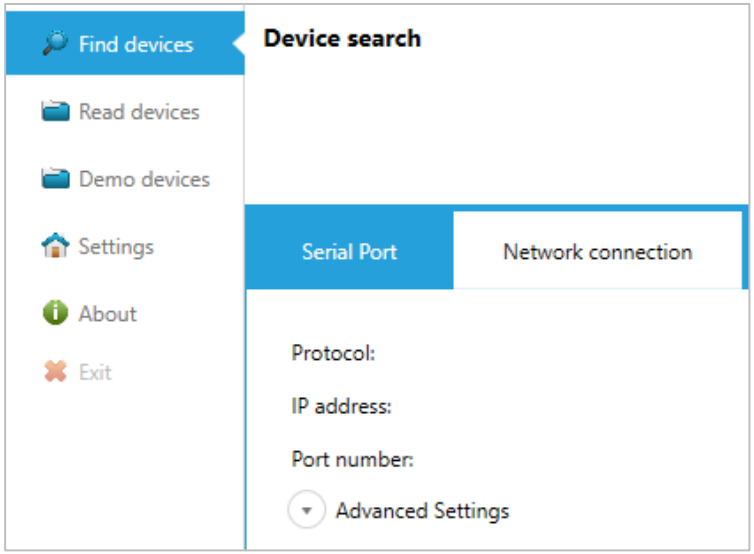
D- TRANSMISSION

COMMUNICATION WITH DEVICES

ConfIT! supports local and remote communication with devices.

Local connection (via **Find devices/Serial Port** menu) can be done by using communication interface connected to the computer. Interface has to be visible in operating system as COM port. For RS232 communication interface, application automatically enables DTR signal.

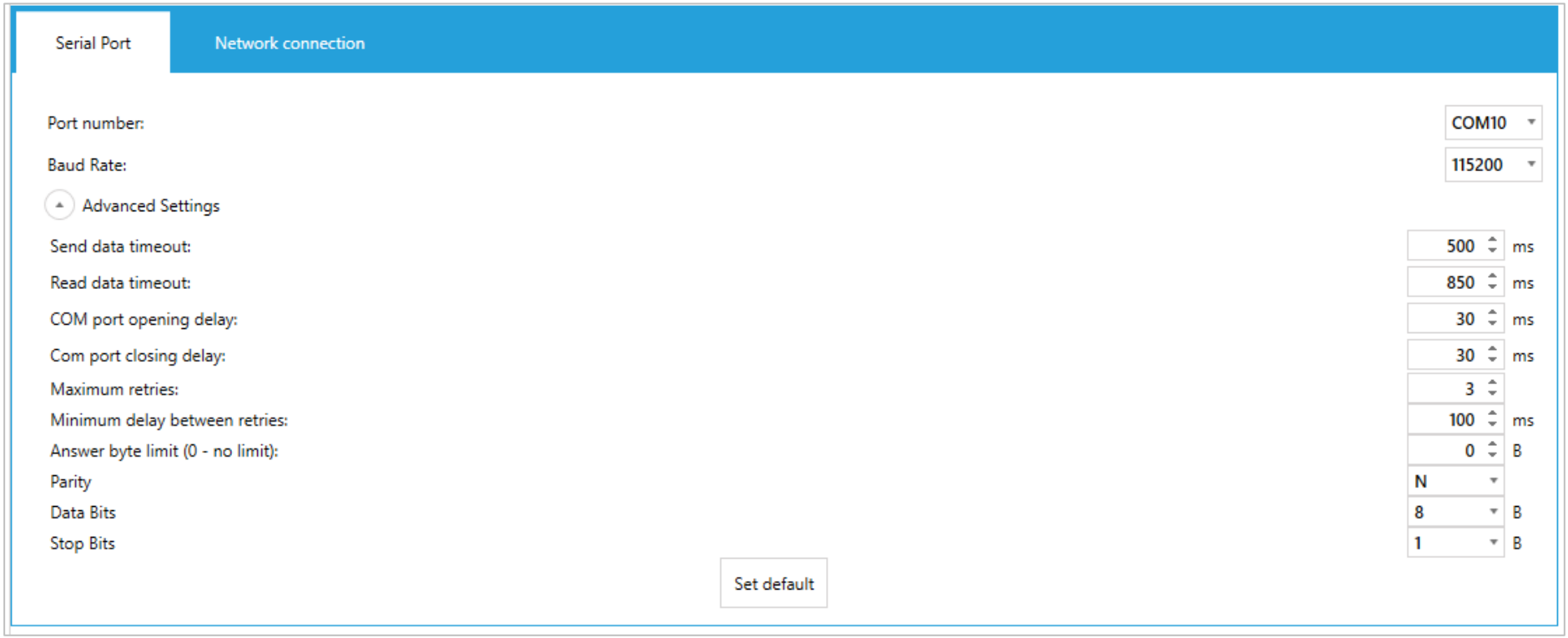




Remote connection (via **Find devices/Network connection** menu) can be done by using TCP/IP or UDP/IP communication protocol. This type of communication requires this functionality in devices or in external modems connected to devices. ConfIT! operates only as a master so it can communicate only with devices which operates in Call Windows Server mode (slave mode, PULL mode).

TRANSMISSION

LOCAL CONNECTION (SERIAL PORT)

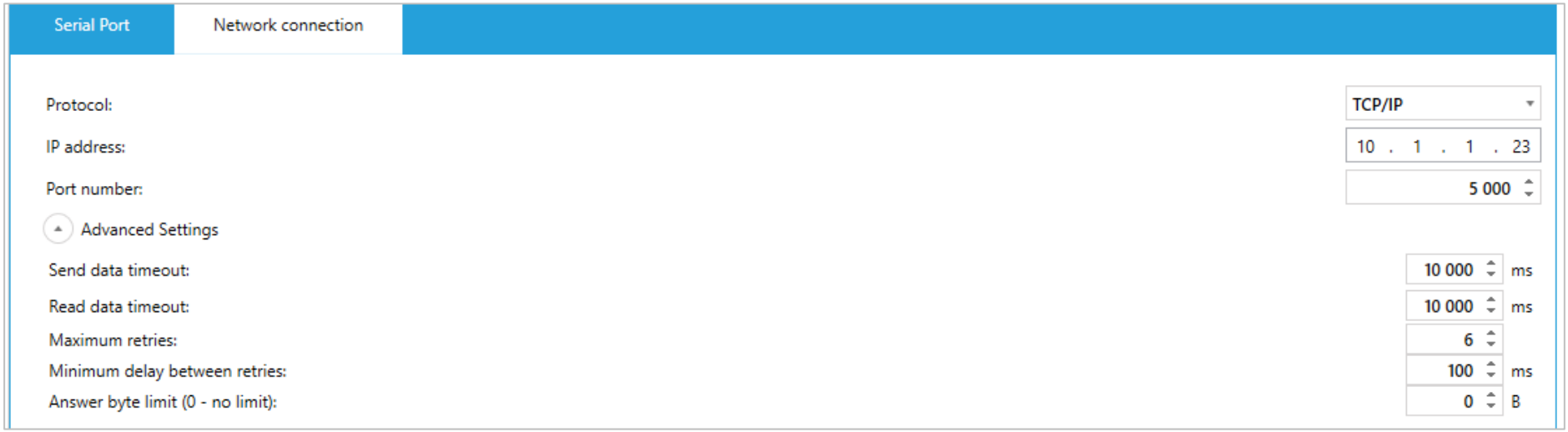


To communicate with device via Serial Port it is needed to:

- Connect communication interface to the computer and the device.
- Set COM **Port** number assigned by operating system for interface.
- Set **Baud Rate** of communication (the same as set in device).
  Value of Baud Rate can be restricted by interface and device features.

- Set **Advanced Settings** of communication.
  Default values of Advanced Settings (the unit is milliseconds) should provide proper communication but it depends on used communication interface.
- Search the device (see **DEVICE SEARCH** chapter).

REMOTE CONNECTION (NETWORK CONNECTION)



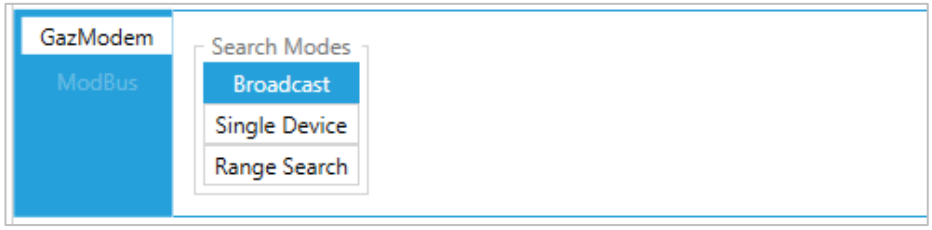
To communicate with device via Network connection it is needed to:

- Be sure that computer and device operates in the same network (like public or private APN etc.)
- Set type of communication **Protocol**: **TCP/IP** or **UDP/IP**
- Set **IP address** of device.
- Set **Port number** of device.
- Set **Advanced Settings** of communication.
  Default values of Advanced Settings (the unit is milliseconds) should provide proper communication but it depends on network quality (e.g. GSM range in device location).
- Search the device (see **DEVICE SEARCH** chapter).

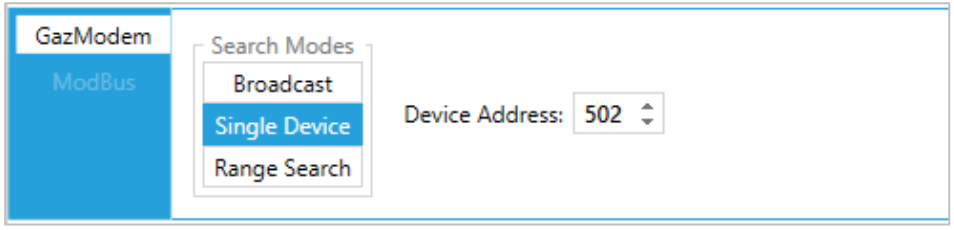
DEVICE SEARCH

ConfIT! supports communication with devices in GazModem communication protocol. Every device has its communication address (it can be the same in many devices). Due to possibility that on one type of connection (local or remote) can be available many devices with different addresses it is required to choose **Search Mode**.

- **Broadcast**.
  This mode should be used when **only one device** is available on connection. Otherwise communication will be possible only with device which will response for searching as first. This mode is helpful when we don't know device's address.

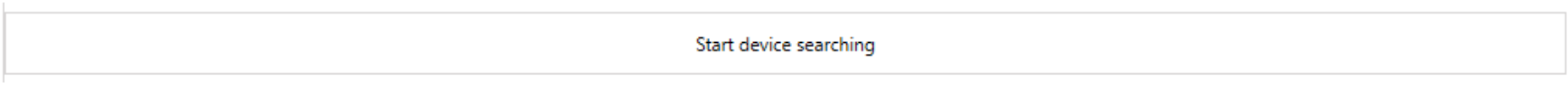


- **Single Device**.
  This mode makes possible connection with the device when we know its address. This mode is helpful when there are many devices on one connection.



- **Range Search**.
  This mode makes possible connection with the device when we don't know exact address of device but it probably lies in some range of addresses. In this mode communication will be possible only with device which will response for searching as first.

When **Search Mode** is chosen it's possible to find the device by clicking on **Start device searching** button.



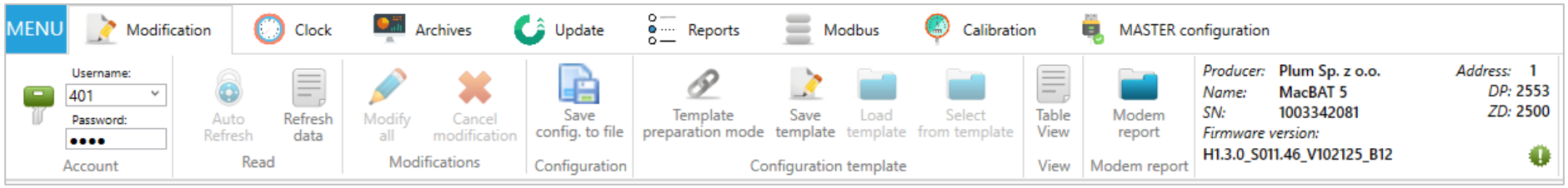
When device is found, to connect to device, just click on it. Application automatically readout device configuration and swich to **Modification** view (see CONFIGURATION section).

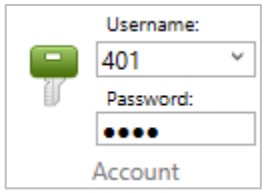
MAIN MENU

E- CONFIGURATION

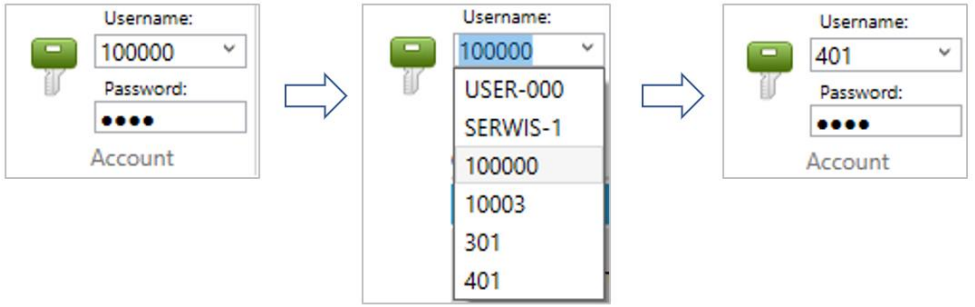
MODIFICATION TAB

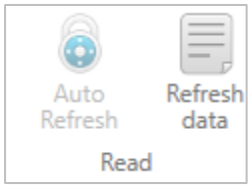
Modification tab is related to device configuration.



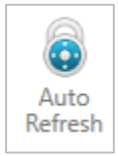


Account section makes possible to set authentication parameters for configuration because every PLUM device needs **User name** and **Password** to make configuration possible. Choose **User name** from list or write it manually. User name list is set in **Predefined accounts** in ConfIT! **Settings** (see **SETTINGS** section). Application automatically choose proper User name for device type. Chosen User name automatically sets **Password** which was previously defined in Predefined accounts. Otherwise it is needed to set password for user.

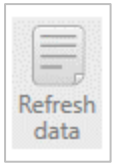




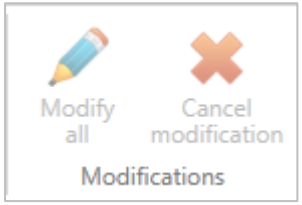
Read section is related to re-readout (refresh) of device configuration.



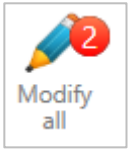
Auto Refresh button makes possible automatic re-readout of device configuration. Application starts new readout instantly after the end of previous readout. This functionality is available not for all PLUM devices and not for every view.



Refresh data button makes possible readout of device configuration on demand.

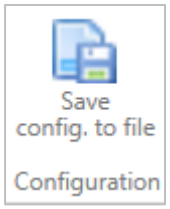


Modifications section is related to changes of configuration of device.

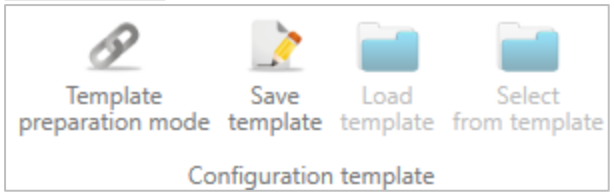


Modify all button is being enabled when some device configuration was set to be changed in device. It is required to click this button to save new configuration in device. The number in red circle shows amount of parameters to be modified. If clicking **Modify all** button doesn't cause any change, it means that authentication parameters was wrong (user name or password).

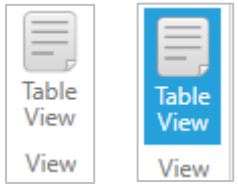
Cancel modification button is being enabled when some device configuration was set to be changed in device. It is required to click this button to cancel intention of configuration change.



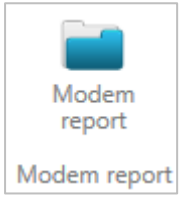
Save config. to file button in **Configuration** section allows to save configuration of device to CSV file. The header of this file incudes also information about version of profile used for device readout and main information about read device. Below hearer there is DP table of device – table of configuration and current data (measured and calculated) of device.



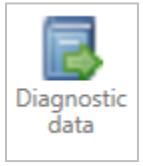
Configuration template section is related to preparing, saving to file template of configuration of device and uploading this configuration to other device.



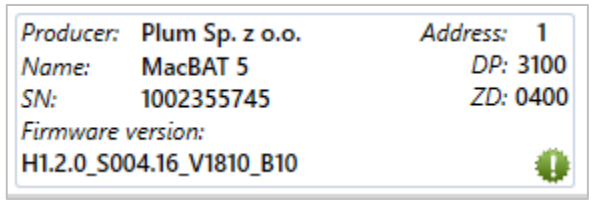
View section with **Table View** button makes possible to change view of device configuration between *Profile view* (button disabled, see **MODIFICATION TAB – PROFILE VIEW** chapter) and *Table view* (button enabled - marked by blue, see **MODIFICATION TAB – TABLE VIEW** chapter).



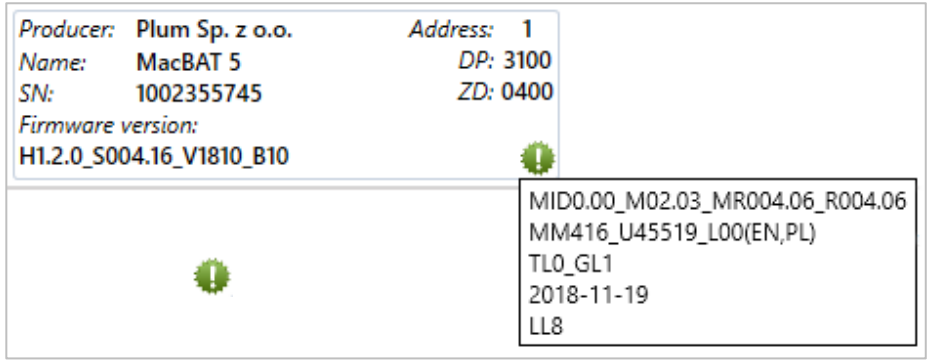
Modem report button in **Diagnostic** section allows to readout of communication log from internal modem of connected device (if device supports such a functionality).



Diagnostic data button in **Diagnostic** section allows to readout and save by one button to files all data from device which is typically needed for diagnostics of device (like configuration, alarms, modem report, periodic archives etc.)



This section shows device's identifier, like **Name**, serial number (**SN**), communication **Address**, **Firmware version** etc.

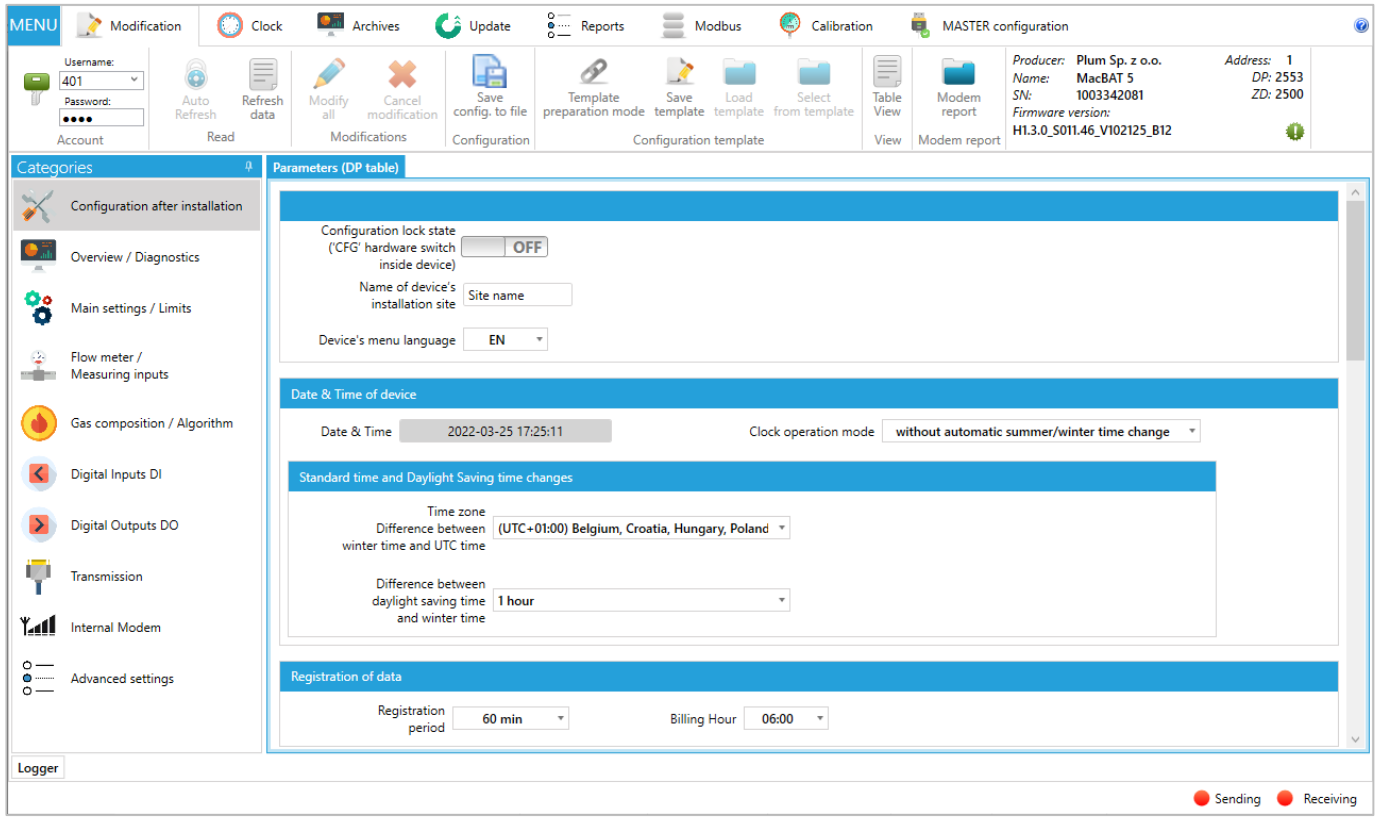


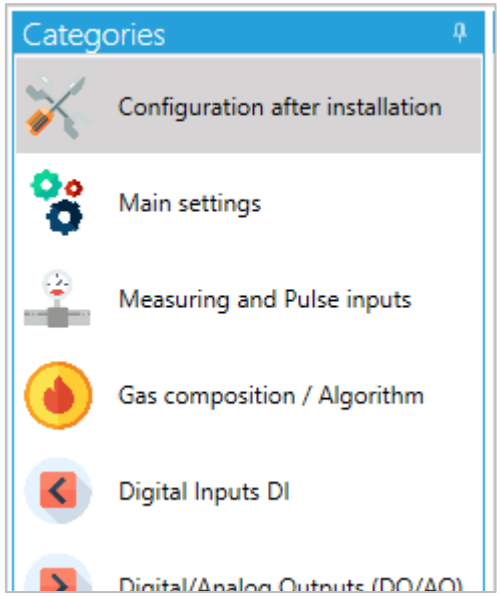
Green exclamation mark icon shows additional information of device's identifier.

MODIFICATION TAB – PROFILE VIEW

It should be remembered that this user manual describes functionalities available in profiles for devices configuration. It means that it describes the way how some types of parameters of devices can be set. This manual doesn't describe the way how devices works or how they can be configured.

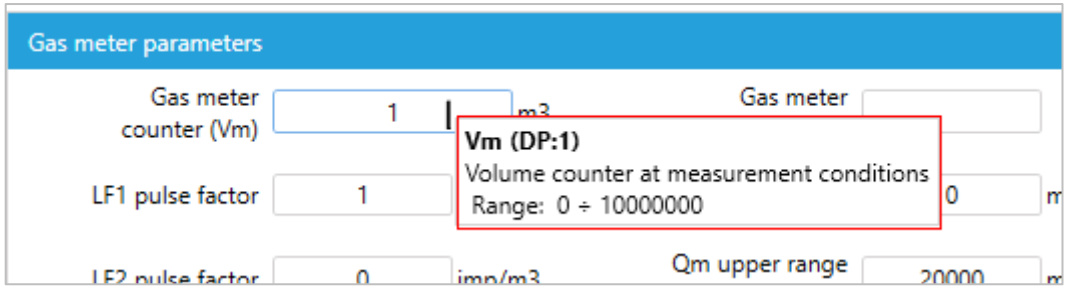
Sample view of device profile:





Categories section it is a list of groups of device's parameters which are related by their functionalities. It makes easier to find parameter to change it.

The way how Categories section looks like depends on device functionalities.



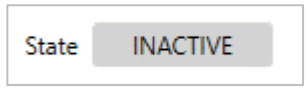
When mouse cursor is put on some parameter, application shows its **description** (marked in red on the picture), name of this parameter (e.g. Vm) and position in DP table (e.g. DP:1) (see **MODIFICATION TAB – TABLE VIEW chapter**)

Editable **Text box** contains short name of the parameter (e.g. LF1 pulse factor), value of parameter (e.g. 0,1) and its unit (if parameter has units, e.g. imp/m3).

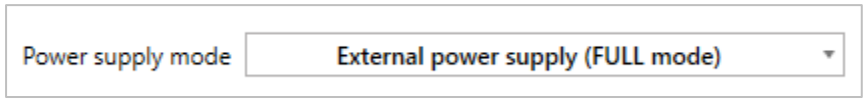
If value of parameter was changed (but before modification in device) value box changes its colour to orange. After modification (see **Modify all** button in **MODIFICATION TAB** chapter) it backs to white with new value.

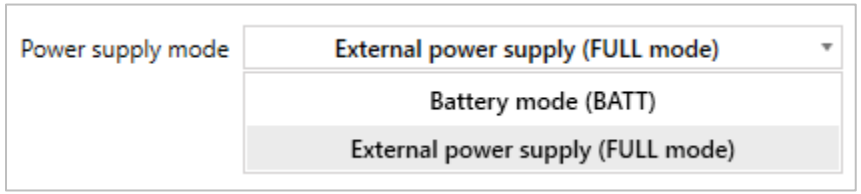
If value of parameter was changed but this value is out of permissible range for this parameter, the border of parameter box changes its colour to red, and **Modify all** button stays inactive.

Non-editable **Text box** shows value of parameter which is read only. This box occurs also in version where value is converted to text.

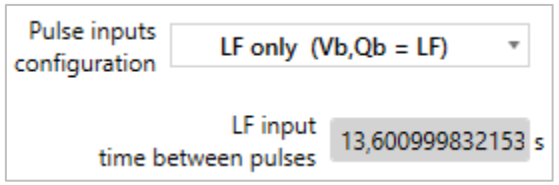


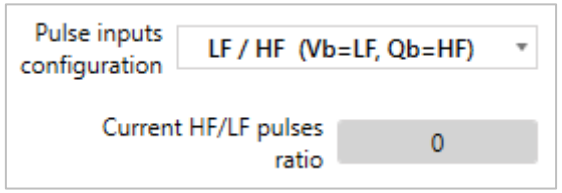
ON/OFF switch box makes possible to enable (ON) or disable (OFF) some device functionality.





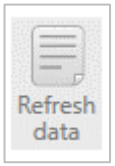
Dropdown list box contains short name of parameter and list of possible settings of this parameters.





Dropdown list box also makes possible to show other boxes depending on setting chosen from the list.

On some views, after the change of parameter via dropdown list, to see additional parameters boxes, it is required to **Refresh data** once again.



MODIFICATION TAB – TABLE VIEW

It should be remembered that this user manual describes functionalities available in table view for devices configuration. This manual doesn't describe the way how devices works or how they can be configured.

Table View of device configuration shows all **DP table** (configuration/current data table) of device. It's a list of all **D**evice **P**arameters for configuration and current data of device. This view also supports device configuration modification but unlike Profile view, it requires knowledge about how parameters can be changed (meaning of values).

Table View is a default view for devices which are not supported as Profile view.

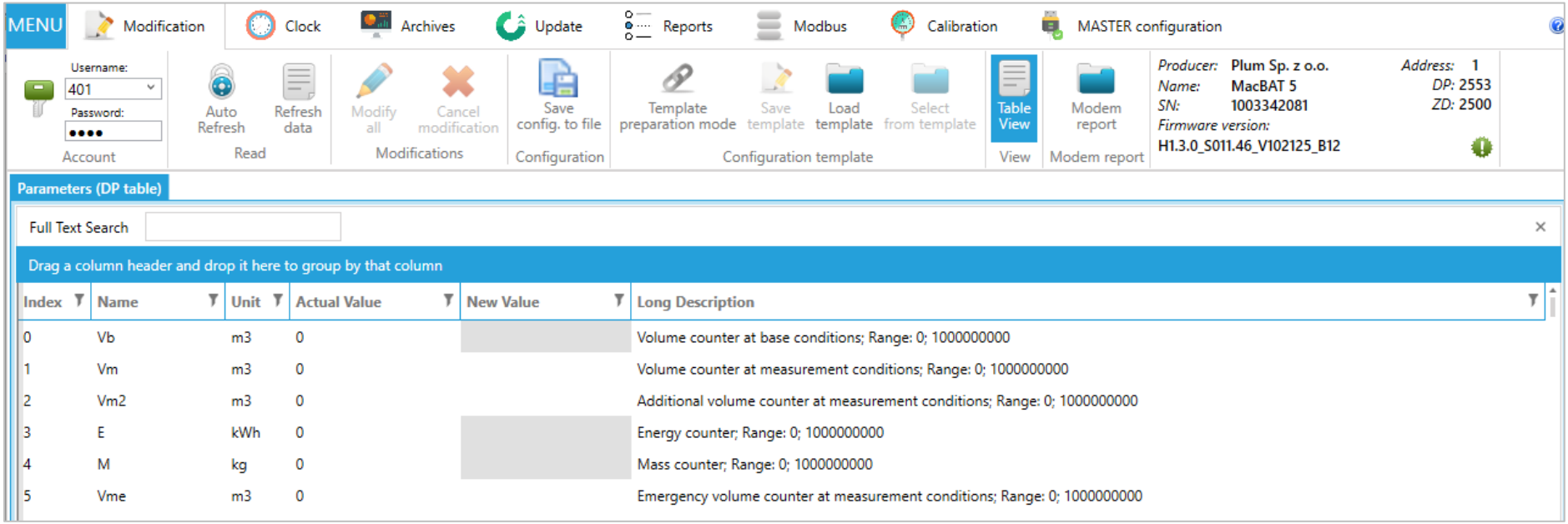
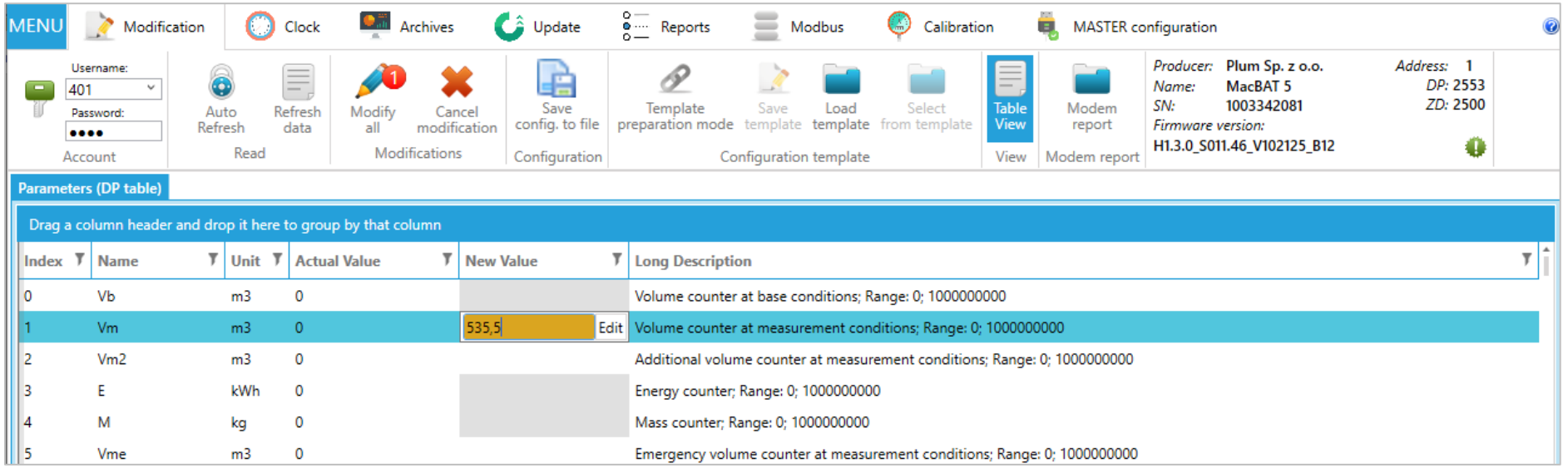
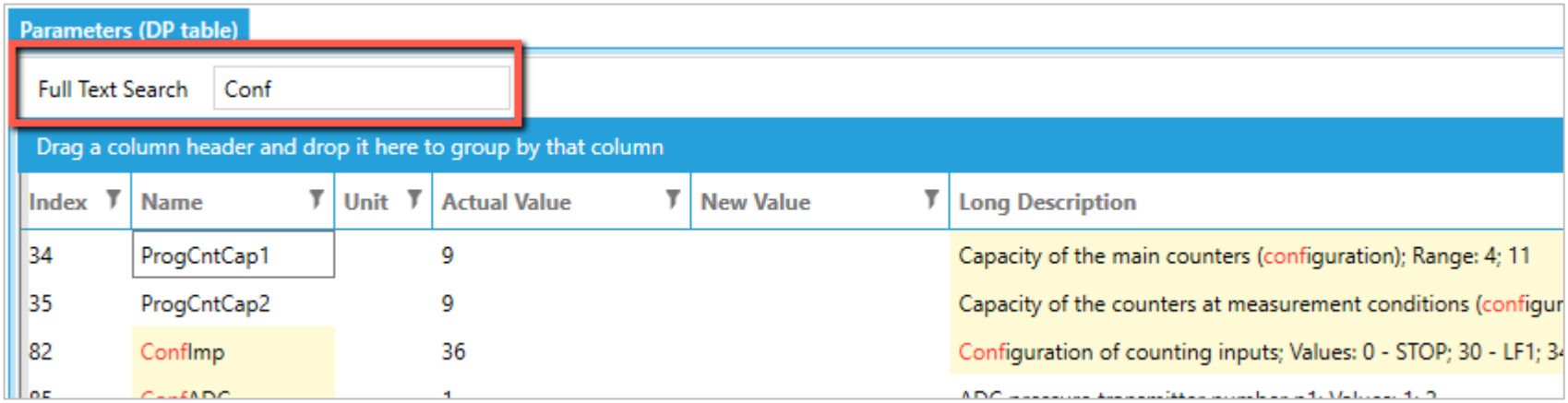


Table View also supports modification of configuration. Editable parameters has white fields in New Value column (instead of non-editable parameters which are grey). New value of parameter has to be set in **New Value** column. Saving new configuration is possible by **Modify all** button or **Edit** button which appears next to new value. **Edit** button supports modification of one parameter only.

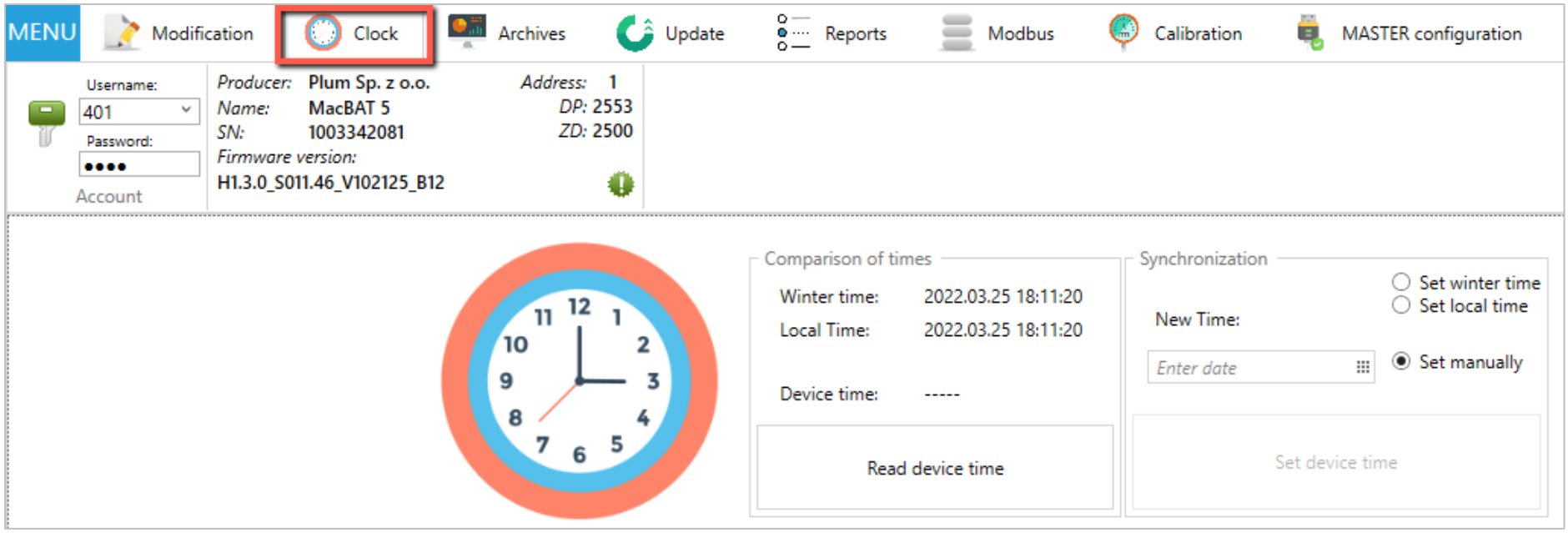


After pressing any parameter of DP table and using Ctrl+F on keyboard of computer, Searching section will appear, which allows to search parameters of device.



CLOCK TAB

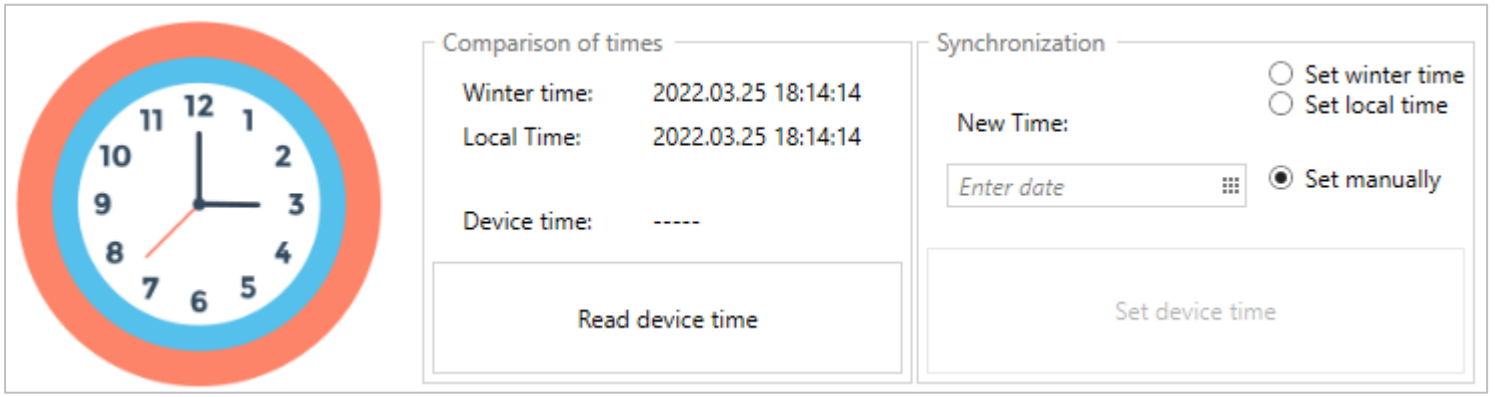
In **Clock** tab it is possible to set device clock. Every clock modification requires to set proper authentication parameters (Account – User name / Password).



It is needed readout clock of device first by **Read device time** button, to check difference between computer time (**Local time**) or **Winter time** and **Device time**.

New device clock can be synchronised automatically to **winter time**, **local time** or **set manually**. It can be set with accuracy of 1 second.

After choosing of these options, new time must be send to device by clicking on **Set device time**.

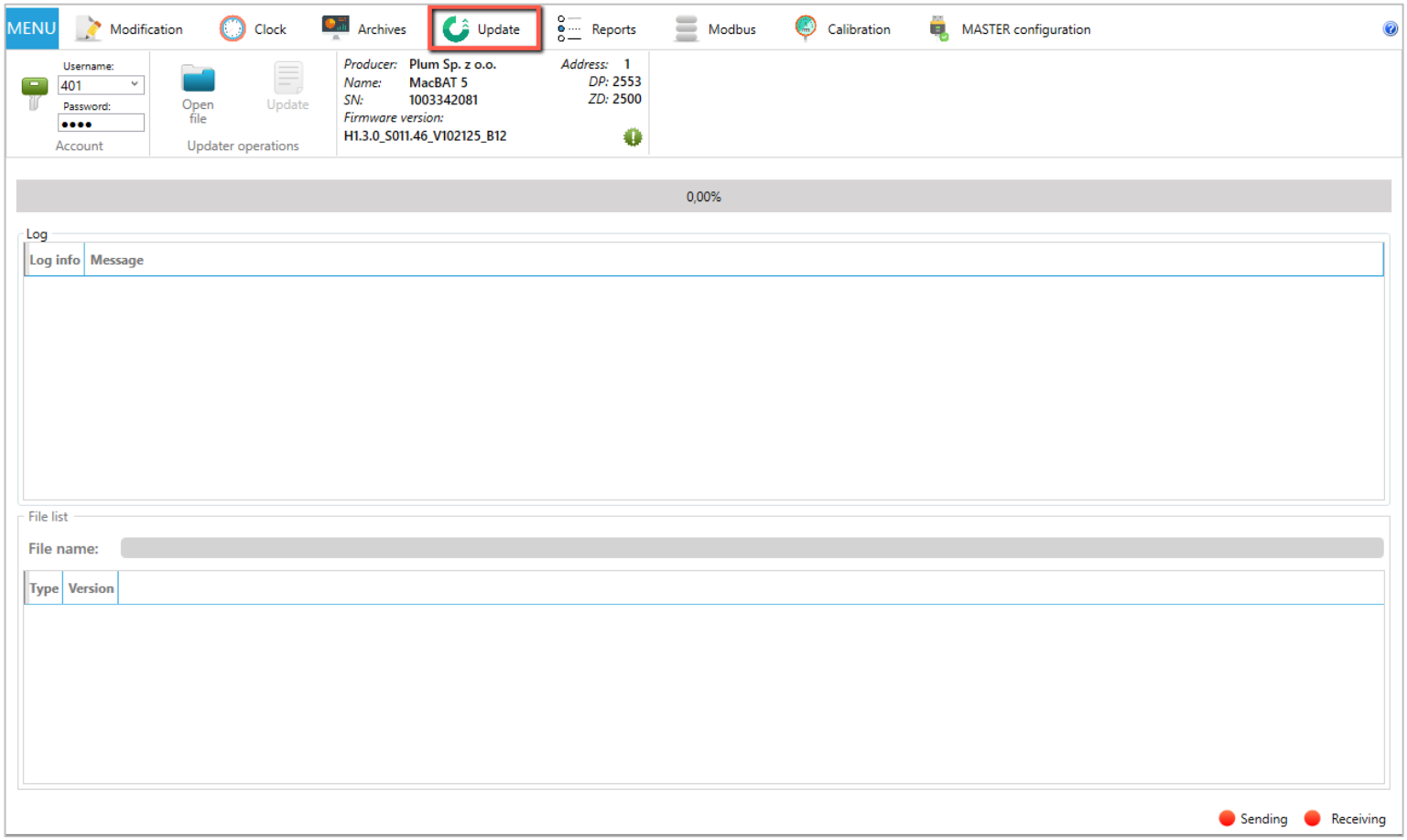


ARCHIVES TAB

For details see **DATA COLLECTION** section.

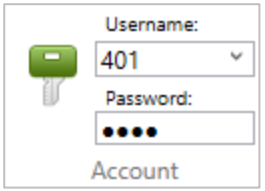
UPDATE TAB

ConfIT! supports firmware update of devices (**Update** tab). For now, this functionality is available only for a few types of PLUM devices.

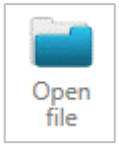


Firmware update procedure:

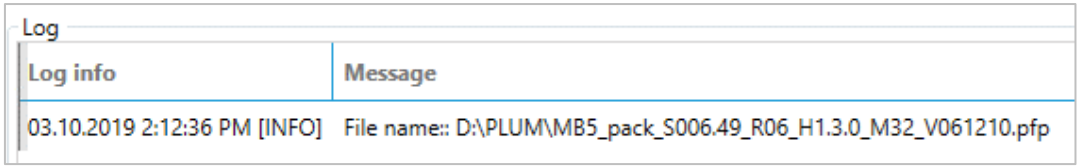
1. Choose account **User name** and **password** allowed for updating the device



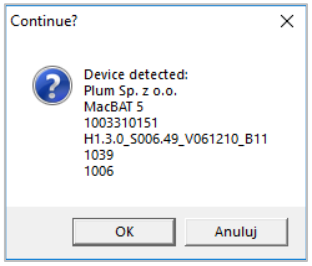
2. Click **Open file** button



3. Choose firmware file (*.pfp extension), e.g.: *MB5_pack_S006.49_R06_H1.3.0_M32_V061210.pfp*
4. Chosen file will appear in **Log** section



5. Click **Update** button

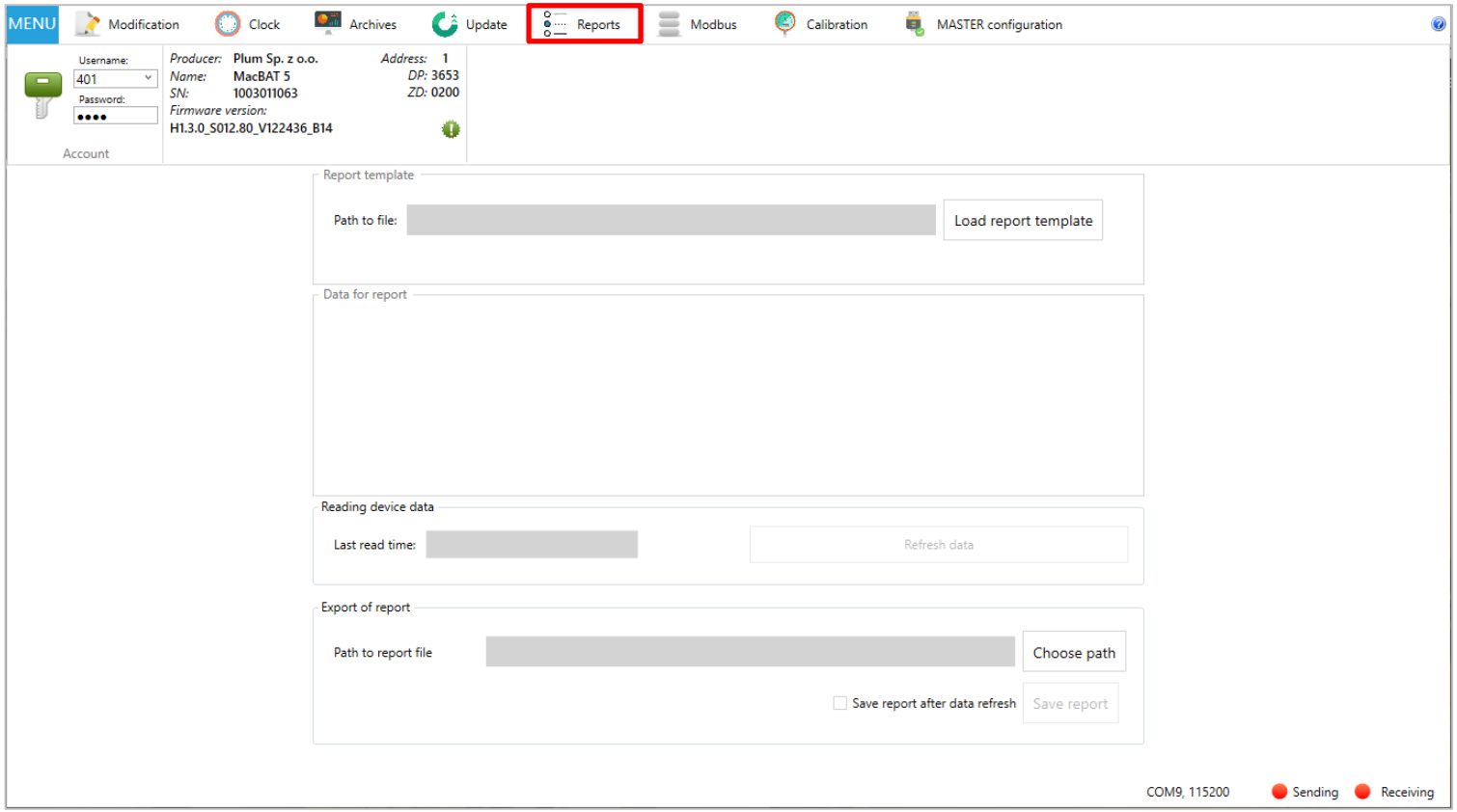


6. Follow the instructions on screen
7. Firmware update must be finished successfully. If any ERROR appear in LOG list, start firmware update once again.
8. After successful update go to

menu and search device once again

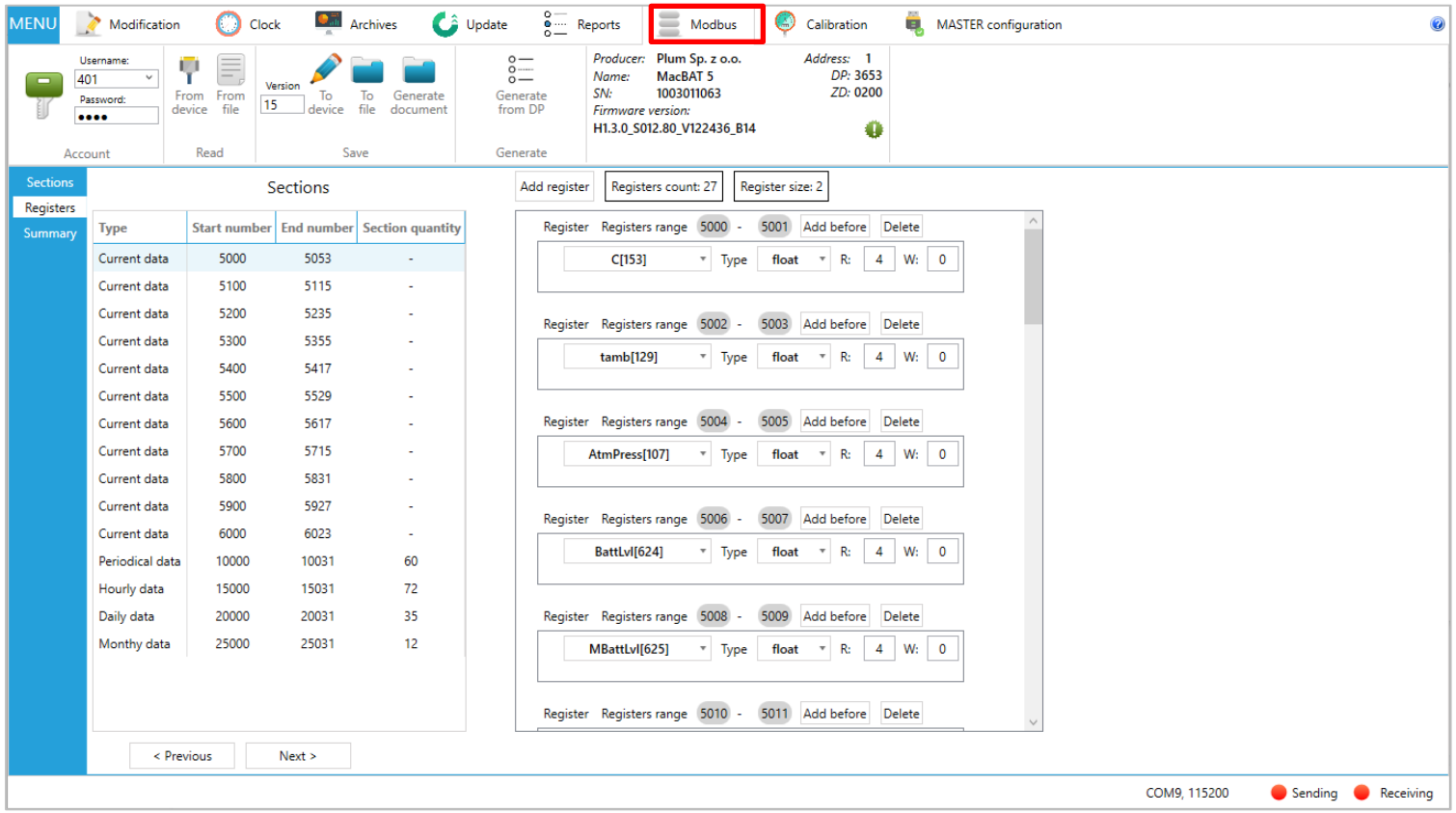
REPORTS TAB

ConfIT! supports creation of reports from devices (**Reports** tab). Reports are PDF documents prepared on the basics of configuration and current data of device. Template of report is being prepared as XML file. Sample XML report templates (Configuration report, Audit trail report) are placed in **ReportTemplates** folder which is in main ConfIT! application folder.



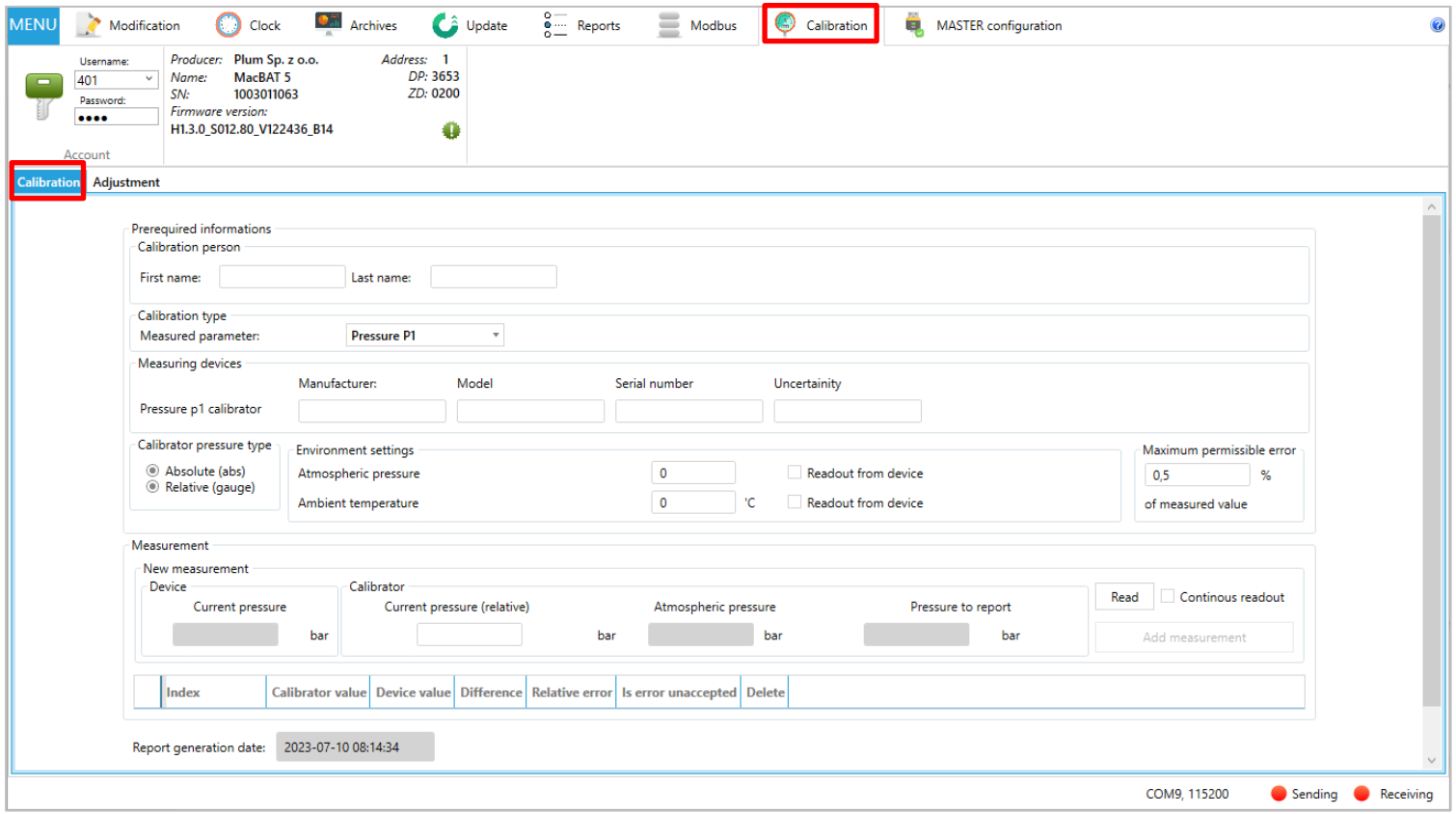
MODBUS TAB

ConfIT! supports creation and edition of Modbus Maps of device (**Modbus** tab). This functionality is available only for devices which supports edition of Modbus Maps. It allows to prepare document with description of Map.

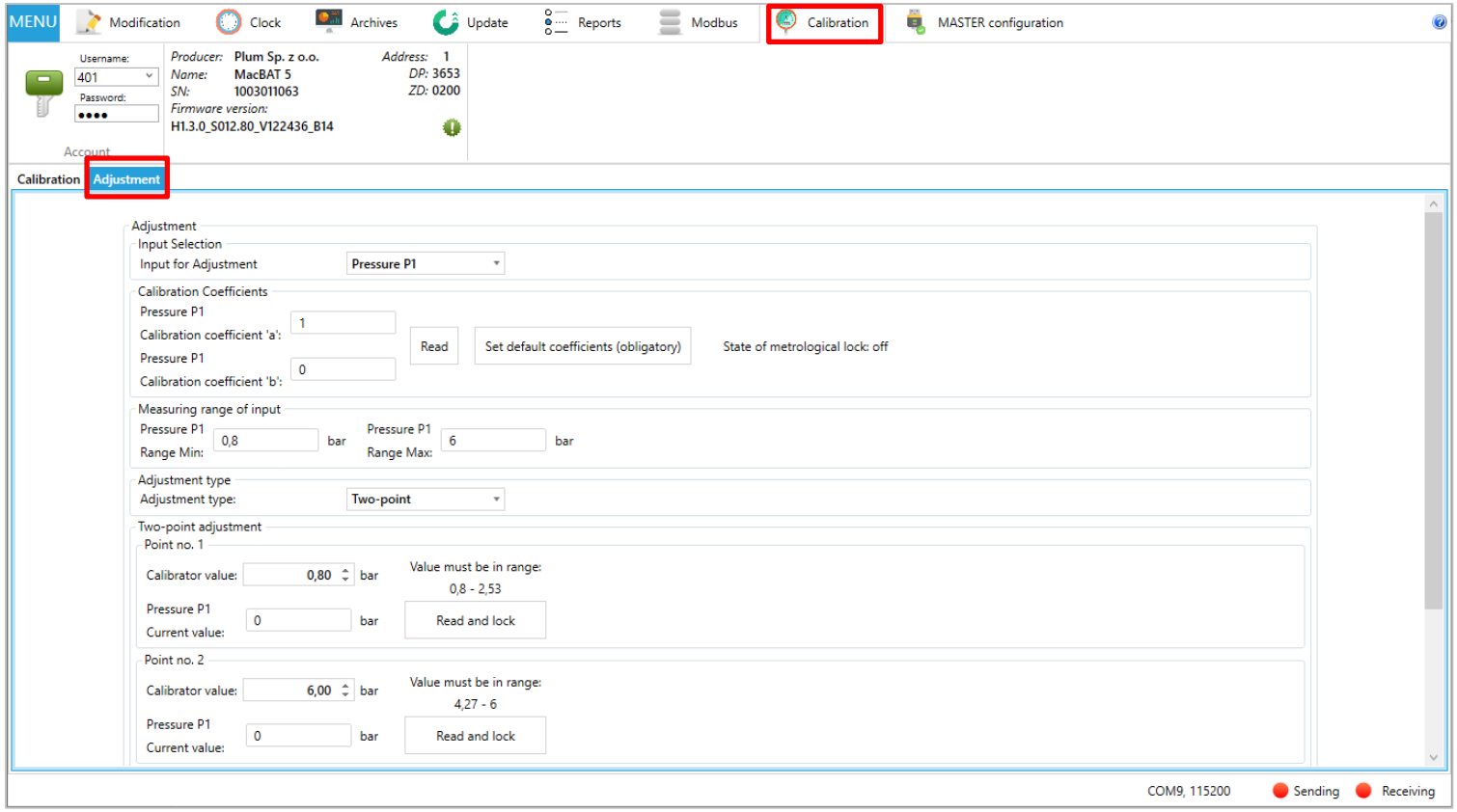


CALIBRATION TAB

ConfIT! supports creation of calibration report of device's measuring inputs, like pressure and temperature (**Calibration** tab). To prepare calibration report it is needed to use calibrator for such a type of measuring input. This functionality is available only for a part of types of devices.

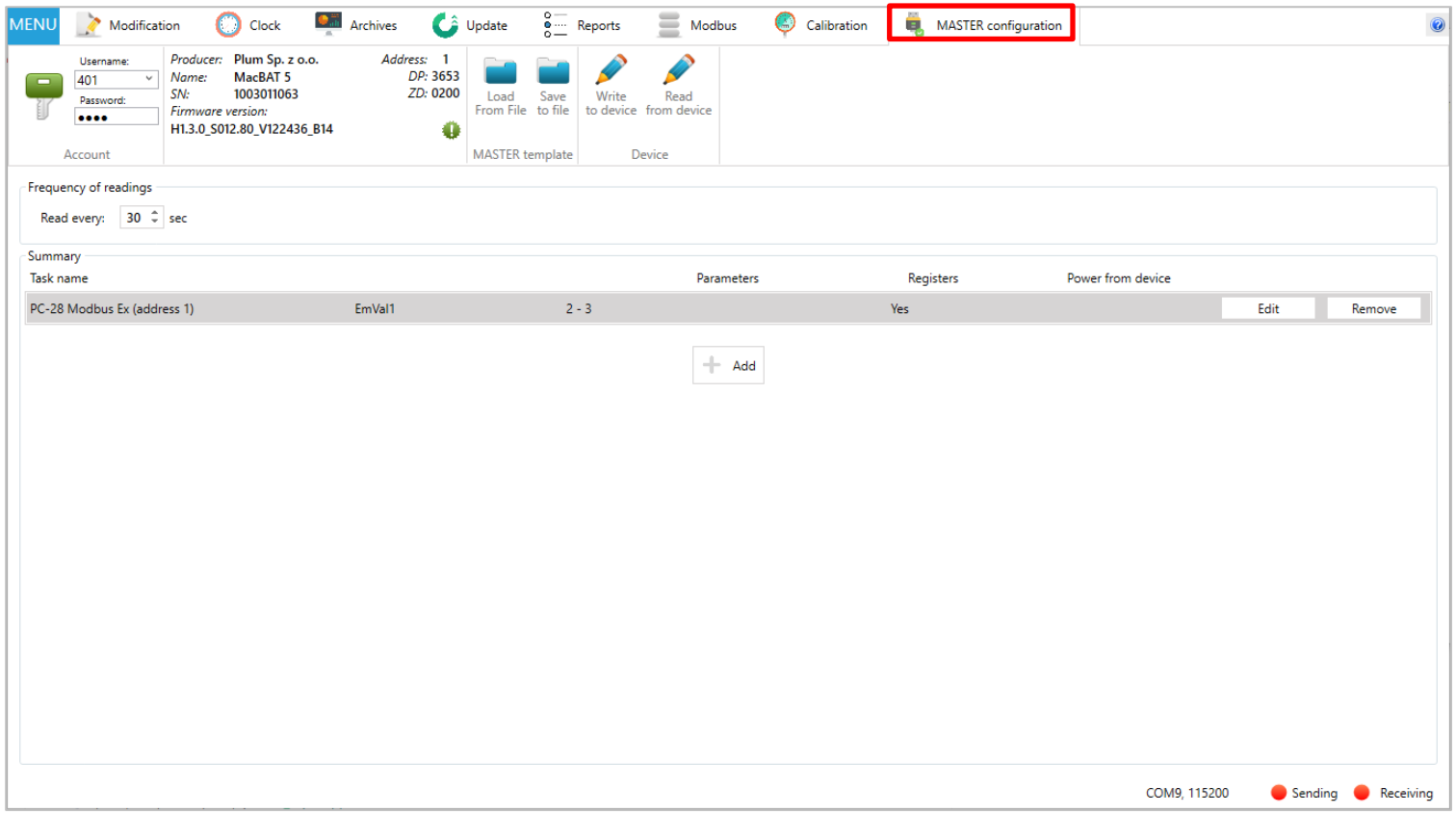


This **Calibration** module supports also **Adjustment** of measuring inputs, if measurement accuracy is out of acceptable range. To make adjustment of input it is needed to use calibrator for such a type of measuring input. This functionality is available only for a part of types of devices.



MASTER CONFIGURATION TAB

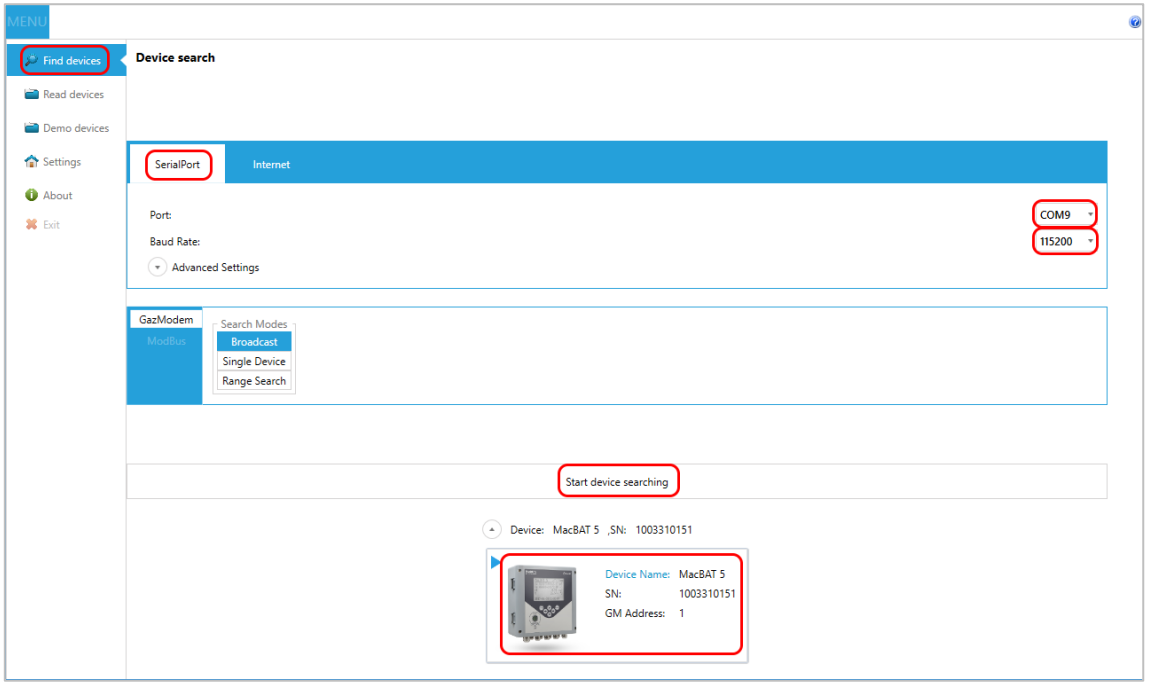
MASTER configuration tab in ConfIT! allows to configure how device should communicate with third party devices via Modbus RTU protocol in Master mode. This functionality is available only for devices which supports MASTER communication. Sample configurations for third party devices are placed in **MASTERmodeSamples** folder which is in main ConfIT! application folder.

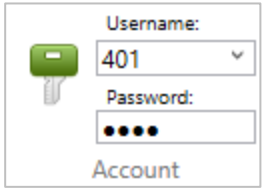


STEP-BY-STEP CONFIGURATION

Sample of connecting to the device and change of its configuration.

1. Connect device to computer via communication interface.
2. Start ConfIT! and go to Find devices menu.
3. Choose SerialPort communication channel.
4. Set Port number COM5 assigned to communication interface.
5. Set Baud Rate 9600 of communication.
6. Start searching of Start device searching device.
7. When device is found, click on it to connect.





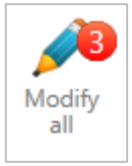
8. Application automatically readouts device configuration and opens Profile view.

   If Profile view is not supported, application opens Table view.

9. Set or choose authentication parameters (user name and password) in Account section, which allows device configuration.

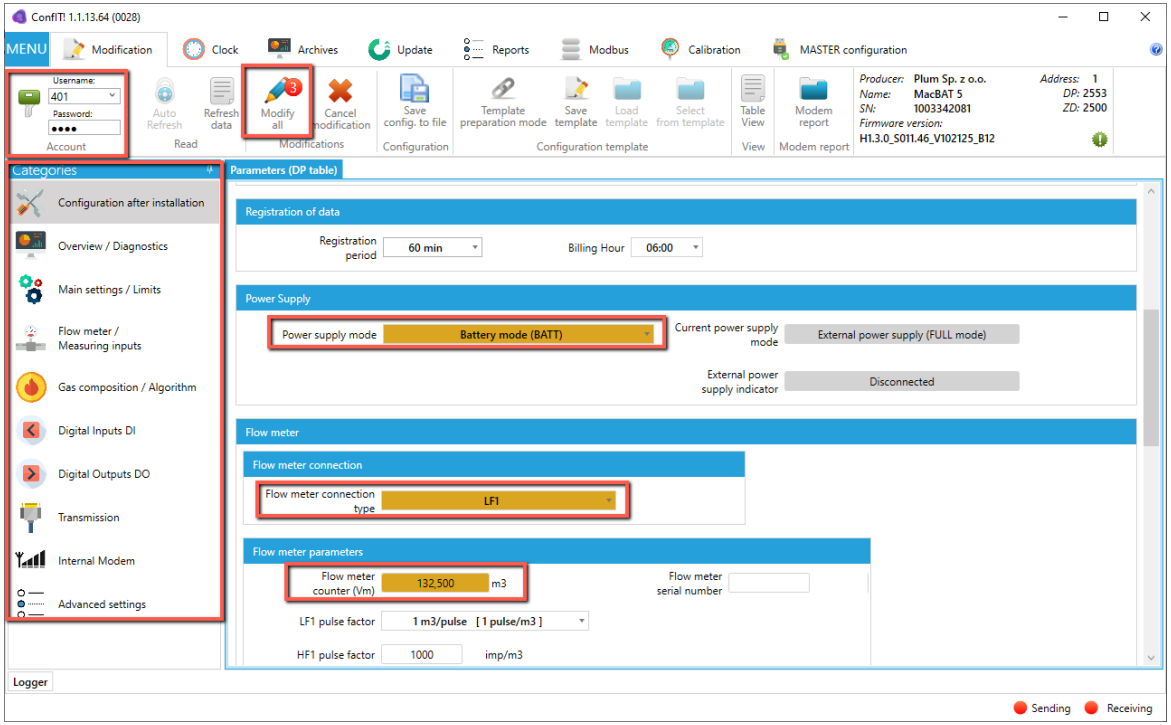
10. Choose categories and set parameters which should be modified in the device.

11. Confirm modification by clicking on **Modify all** button.

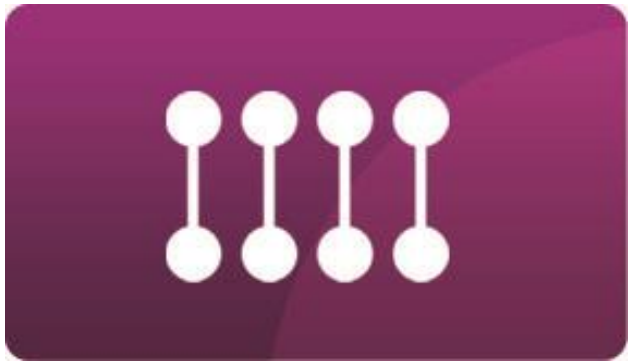


12. After modification, changed parameters will back from orange mark to white and Modify all button back to disabled.

13. If clicking **Modify all** button doesn't cause any change, it means that authentication parameters (user name or password) was wrong.



MAIN MENU

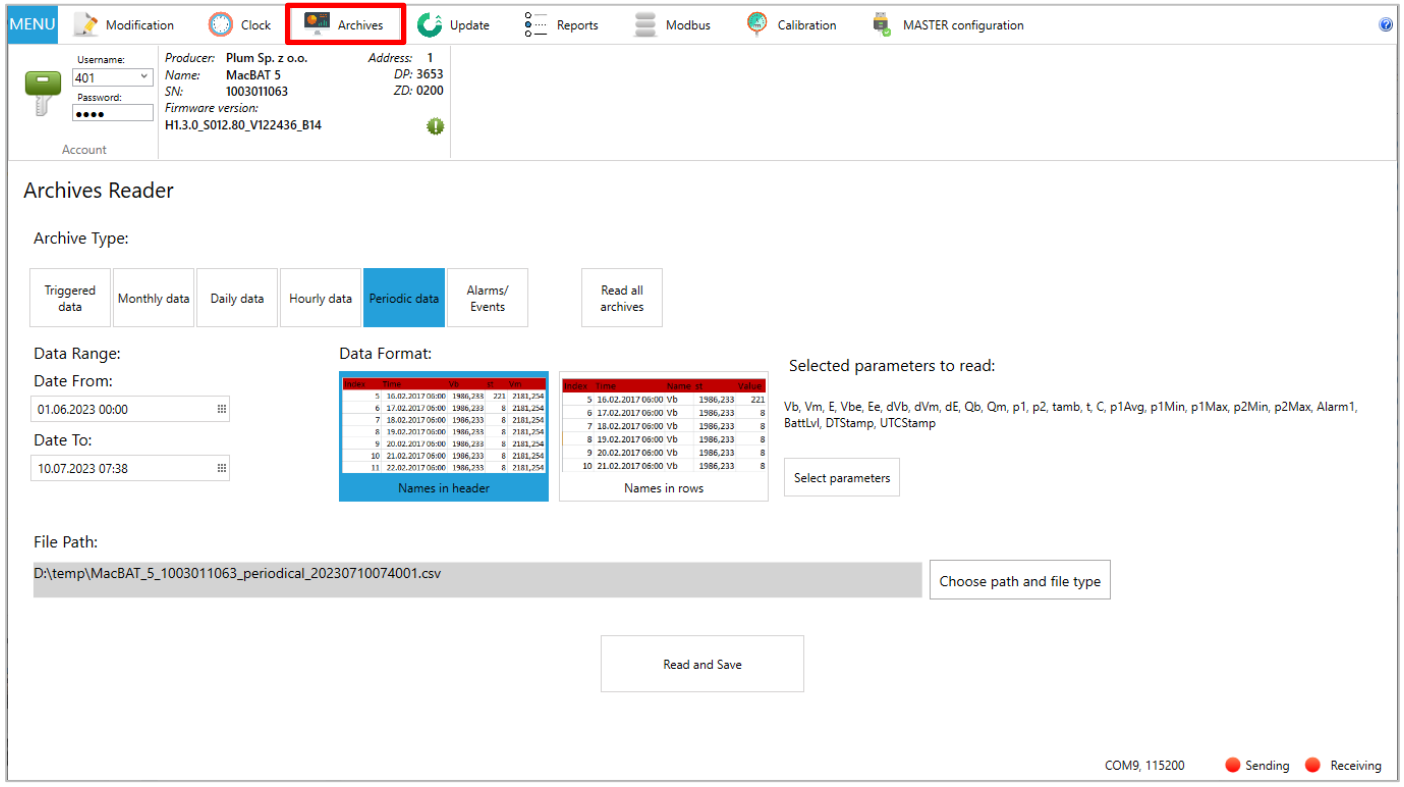


F- DATA COLLECTION

LOGGED DATA AND EVENTS READOUT

ConfIT! supports readout of logged data and Alarms/Events from devices (**Archives** tab). For now, this functionality is available only for a few types of PLUM devices.

There is a possibility to readout different types of archives (Periodic, Hourly, Daily, Monthly, Triggered data – if device support it) and select which parameters from archives should be read. Read data are saved to CSV file.



MAIN MENU

G- CONSERVATION

UPDATE OF APPLICATION

Due to security issues in many companies, ConfIT! application doesn’t have functionality of automatic checking or downloading new version of application.

The newest version of ConfIT! is always available on PLUM website: **gas.plummac.com/en**

Application is shared as a compressed ***.zip** type file. It must be unpacked before use.

Change log of application is placed in **!! READ ME.txt** file which is in main ConfIT! application folder.

Technical support: **support@plummac.com**

MAINMENU

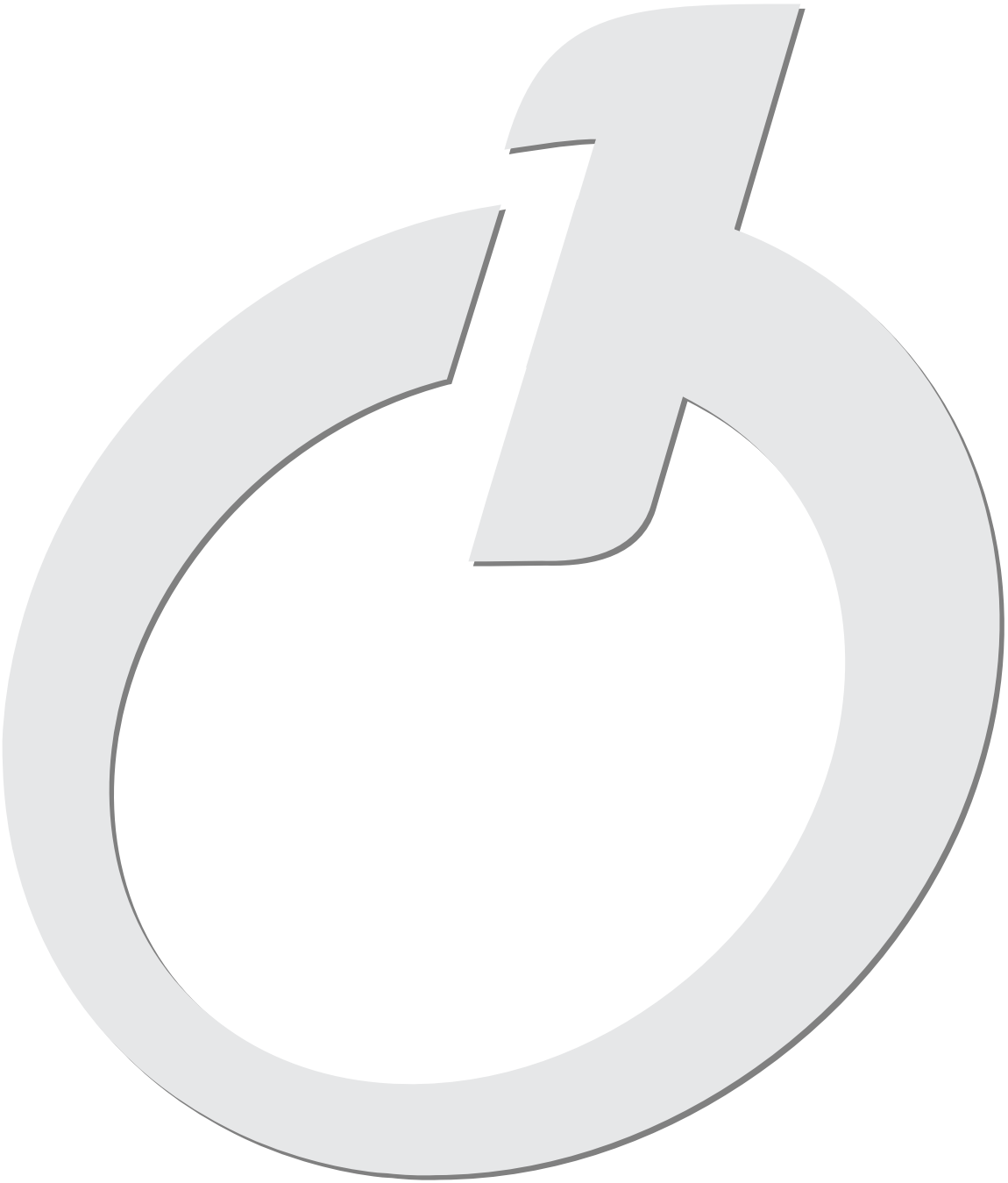
H- ACCESSORIES

OPTICAL TRANSMISSION INTERFACE, OPTO-BLUETOOTH

The transmission interface **OptoBTEx** is used to read data from the data loggers or battery powered conversion devices equipped with wireless transmission connection, compatible with standard IEC 62056-21 (OPTO). Data readout can be realized using portable computer (such as laptop) or other device equipped with Bluetooth communication port.

Hardware version of this interface starting from 1.2 (**HW:1.2** mark on name plate) supports also cable connection to the computer (via microUSB-USB cable). OptoBTEx allows for data readout from devices in explosion-hazard-zone (only via Bluetooth connection).

Specifications about this transmission interface are described in „OptoBTEx user manual”.



ul. Wspólna 19, Ignatki
16-001 Kleosin, Poland
tel. +48 85 749-70-00
fax +48 85 749-70-14

gas@plummac.com
www.plummac.com

National Waste Database no.: 000009381