

## M-bus configuration and readout software ACT531 User's guide

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# 0 About this document

## 0.1 Revision history

Version	Date	Changes	Section	Pages
1.0	13.07.2016	First draft		
1.1	30.06.2017	Additions for RF converter		
1.2	13.09.2018	Note on reading out meters	Software installation	7
1.3	20.02.2020	New search method (device search)	Connect the PC to the level converter, meter settings, meter scan, menu settings	11, 20, 22, 34
1.4	30.04.2020	New diagnostic functions	Diagnostics	26
1.5	11.12.2020	Repeater settings Smart FW update for PW 250 (WTX631)	Repeater settings M-bus interface	27 34

## 0.2 Referenced documents

Ref.	Document title	Document type	Document no.
[1]	M-bus level converter, RF converter, and web server	User's guide	A6V11157985
[2]	M-bus level converter WTV531	Data sheet	A6V10844290
[3]	M-bus level converter WTV531	Mounting instructions	A6V10844308
[4]	M-bus level converter WTX631	Data sheet	A6V11742346
[5]	M-bus level converter WTX631	Mounting instructions	A6V11751461
[6]	M-bus web server	Data sheet	A6V11157961
[7]	M-bus web server	Mounting instructions	A6V11157964
[8]	M-bus RF converter	Data sheet	A6V11135903
[9]	M-bus RF converter	Mounting instructions	A6V11135905

## 0.3 Before you start

### 0.3.1 Copyright

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- All necessary corrections are included in subsequent versions.
- Documents are automatically amended as a consequence of modifications and corrections to the products described.

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### 0.3.4 Acronyms

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M-bus	Meter Bus	USB	Universal Serial Bus
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# 1 Overview

## 1.1 About this document

### Purpose

The document provides information on configuring the level converters WTV531-GA5060 and WTX631-GA0090, the RF converter WTX660-E05060 as well as reading devices connected to the level converter.

## 1.2 Software functions

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The software enables commissioning, communication, and maintenance of the WTV531-GA5060 and WTX631-GA0090 level converters and configuring the RF converter WTX660-E05060. It further permits reading consumption data on up to 1,000 (logical) M-bus devices connected to the level converter.

### Function overview

The following functions are available:

- Reading of meter data and device status via primary or secondary addresses.
- Organize your plants with the most important information
- Generating reports with the readout and store them on a local PC.
- Permit the firmware update of the level converter
- Displaying of alarms in real time.
- Configuring the RF converter: Change the Mesh ID and channel ID
- Updating the RF converter firmware
- Device addressing (display and edit primary addresses)
- Diagnostic functions

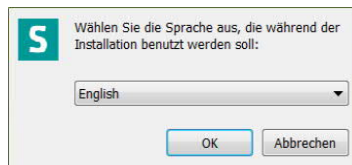
## 2 Connect and install

Note

Install the ACT531M-bus configuration and readout software, version  $\geq 2$ , before connecting devices to the PC with USB.  
The level converter and RF converter cannot be connected to the PC at the same time.

### 2.1 Software installation

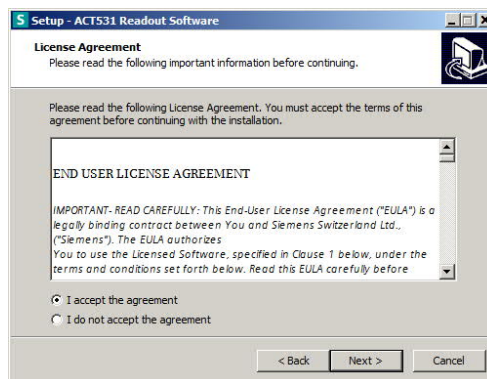
Double-click the installation file (.exe)  and select the language for installation:



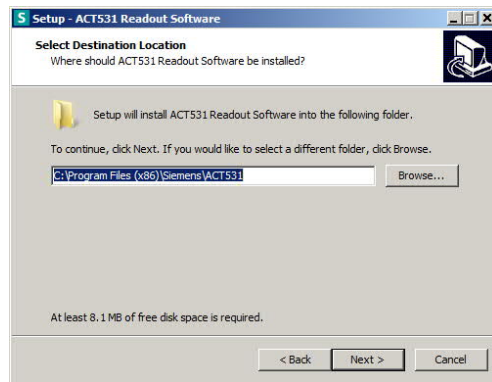
Follow the installation wizard:



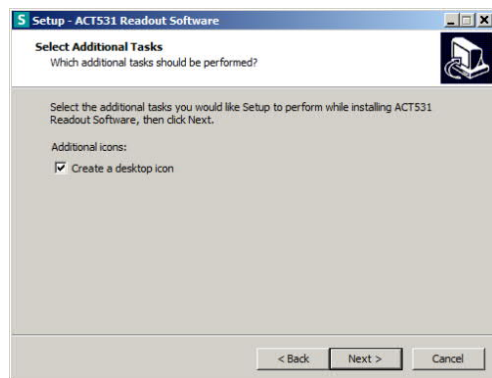
Accept the license agreement:



Select the installation folder:



Create a desktop icon as desired:

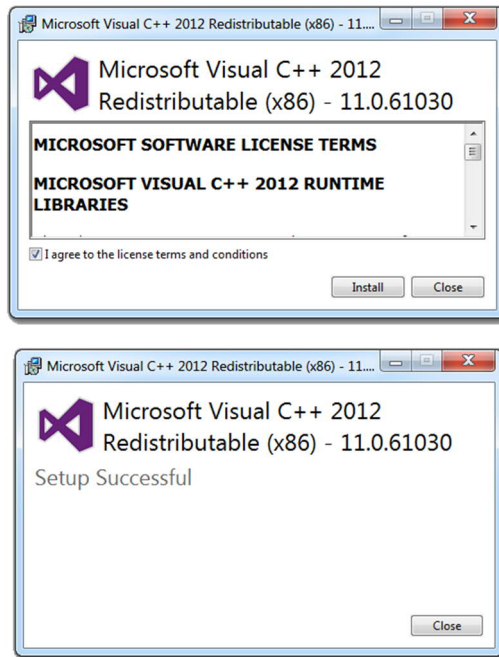


Installation is completed:





The installation wizard requests that you install the Visual C++ 2012 runtime environment on the PC is not already installed:



You now have all the required components and can start the software.

## 2.2 Preparation

You can no longer use the read out software ACT531 to read devices connected to the level converter if a level converter WTV531.. or WTX631.. is connected to an M-bus web server WTV676.

You must disconnect the level converter from the web server to read out meter data.

Then connect the level converter WTV531.. to the PC using a USB cable or the level converter WTX631.. using an USB RS-232 adapter.

Additional information on connecting the level converter with the PC is available in the Section “Connect the PC to the level converter”, page 10.

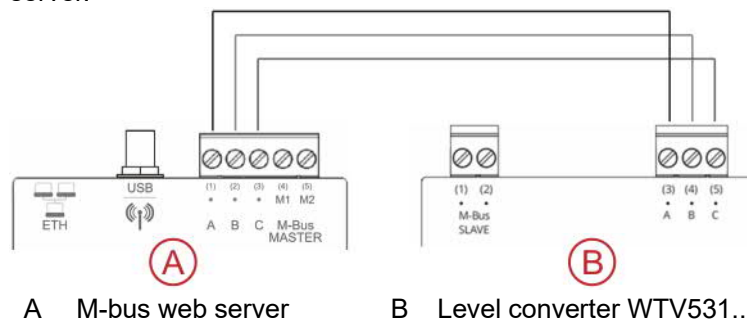
Read the meter data using the readout software ACT531.

Additional information on reading out meter data is available in Section “Readout”, page 23.

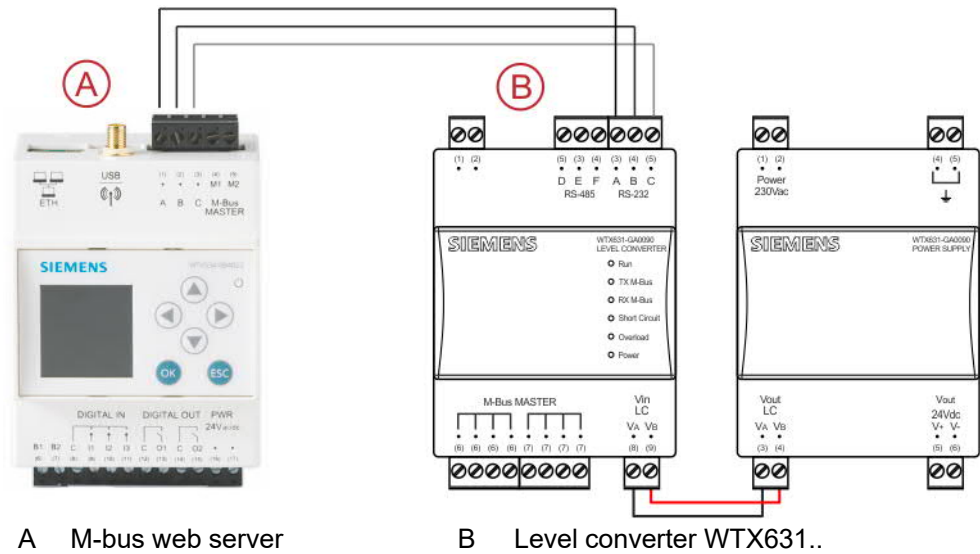
### Note

Disconnect the level converter from the PC after reading out the meter data.

Then reconnect the level converter to the web server. This connects terminals A, B and C of the level converter WTV531.. to terminals A, B and C on the M-bus web server.



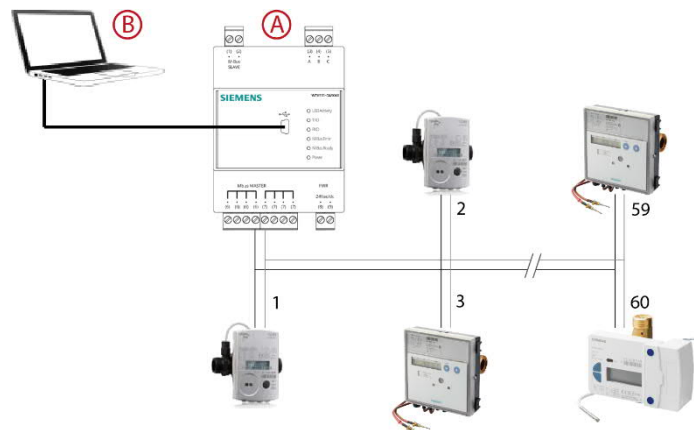
Terminals A, B and C on the level converter WTX631.. are connected to terminals A, B, and C of the M-Bus web server.



## 2.3 Connect the PC to the level converter

### 2.3.1 Level converter WTV531..

A USB cable with a mini USB-B connection on the level converter and the PC's USB interface is used to connect the level converter and PC.



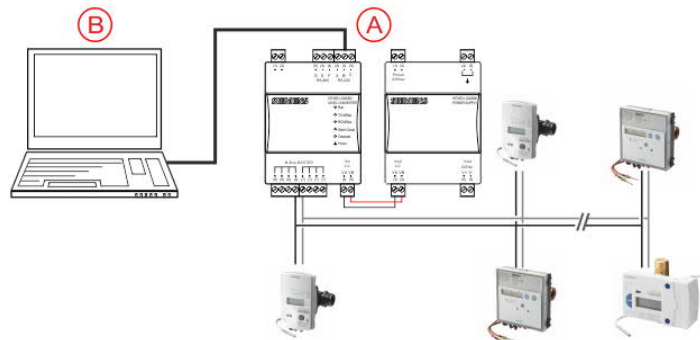
A                      Pegelwandler WTV531.. als Master  
B                      PC mit Software ACT531

### Procedure

1. Power up the level converter with the proper power supply (AC/DC 24 V).
2. Wait until the level converter's USB-LED starts to flash (ca. 8-10 s after switching on).
3. Connect the level convert with the PC using the USB cable.
4. Wait until the PC confirms that it has recognized the USB device.
5. Restart the PC if required.

## 2.3.2 Level converter WTX631..

A USB RS-232 adapter connects the level converter to the PC.



- A Level converter WTX631.. with power supply as master
- B PC with ACT531 software

### Procedure

1. Connect the level converter to the proper supply voltage (AC 230 V).
2. Connect the level converter and the PC with a USB RS-232 adapter using the RS-232 interface (terminals A, B, C).
3. Wait until the PC confirms that it has correctly detected the level converter.
4. Restart the PC as needed.

### Note

You can also use an RS-485 adapter and connect the level converter using the terminals D, E, F.

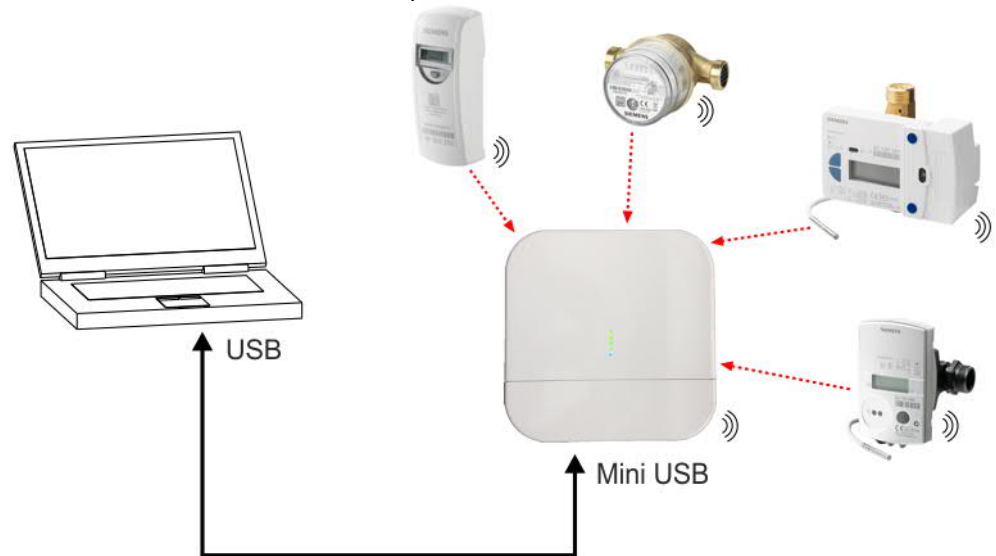
## 2.4 Connect the PC to the RF converter

The RF converter is connected to the PC with a USB cable using the mini USB B interface on the RF converter and the standard USB interface on the PC.

Note



The cable is not included with the product. You can use an off-the-shelf cable.



### Procedure

1. Connect the RF converter to the PC using the USB cable.
2. Wait until the PC recognizes the RF converter.
3. Restart the PC as needed.

# 3 Operation

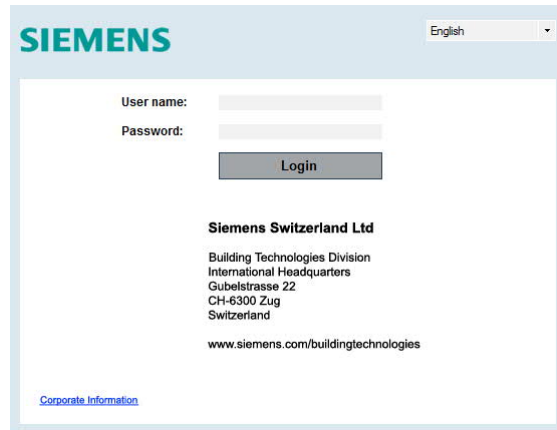
## 3.1 Login

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A login pane opens when starting the program. Enter the user name and password. These are by default:


- Username: admin
- Password: admin

After initial sign in, change the user name and password in order to protect the plant data stored on your PC against unauthorized access.



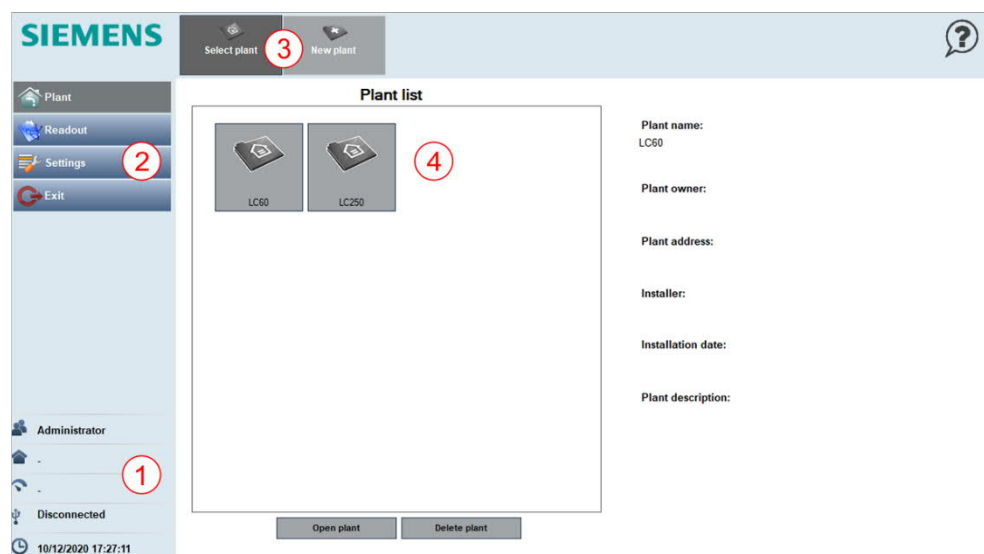
Select the desired operating language from the drop-down list and confirm the entry by clicking 'Login'.

Note

-  The selected language is now saved for the next time the program is started. You can change the language at any time.

## 3.2 Homepage

The software homepage opens after signing in in:



① This pane displays the present state of the level converter or the RF converter and software:

- Displays the signed-in user.
- Displays the name of the current plant.
- Displays activity on the M-bus.
- Displays the momentary connection state with the level converter or the RF converter.
  - Connected: The level converter or RF converter is correctly connected to the PC.
  - Initialization in progress: Checks for level converter or RF converter firmware updates.
  - Not connected!: The level converter or RF converter is not connected to the PC.
- Displays the current PC date and time.

② Software main menu:

- Access to the Plant menu.
- Access to the Read out menu.
- Access to the Settings.
- Exits the software.

③ Submenus below the main menu:

### Plant:

- If no plant is currently opened:
  - Select plant: Select the plant to open.
  - New plant: Create a new plant.
- If a plant is currently opened:
  - Plant information: A summary of plant data.
  - Plant settings: Edits the plant data.
  - Wired (M-bus): You can edit the device settings, search for devices connected to M-bus, or re-read out present device data.
  - Wireless (wM-Bus): You can edit the settings for the RF converters or manage the meter index.

- Delete plant: Deletes the currently opened plant.
- Close plant: Closes the currently opened plant.

**Readout:**

- If no plant is currently opened:
  - Open readout: Accesses the read data from **all** plants and generates a report in xls or csv format.
- If a plant is currently opened:
  - Open readout: Accesses the read data from **opened** plants and generates a report in xls or csv format.

**Settings:**

- M-bus interface: Accesses the settings on the M-bus interface (level converter).
- ACT531: Accesses the settings for the ACT531 software.

**Exit:**

- Exits the software. Back up all edited data prior to closing the program!

④ Displays the data as per the selected main and submenu.

## 3.3 Plant menu

In the **Plant** menu, you have access to the following submenus:

- Select plant
- New plant

### 3.3.1 Create new plant

Select the **New plant** submenu:

The screenshot shows the Siemens software interface for creating a new plant. The interface is divided into a sidebar on the left and a main content area. The sidebar contains the following options: Plant, Readout, Settings, Exit, Administrator, and a status bar at the bottom showing 'Connected - FW VER: 1.3' and '12/07/2016 14:27:39'. The main content area is titled 'New plant' and contains the following fields:

- Plant name:** Sample street 25
- Plant owner data:**
  - Name / Company name: Miller
  - Address: View street
  - Phone: +41 / 41 123 45 67
  - Email: info@miller.ch
- Building administrator data:**
  - Name / Company name:
  - Address:
  - Phone:
  - Email:
- Plant data:**
  - Plant address: Sample street 25
  - Installer: Meyers
  - Installation date: 12.07.2016
  - Acquisition period: Three-month

An **OK** button is located at the bottom right of the form.

You can enter information on the plant (fields in *cursive* are mandatory):

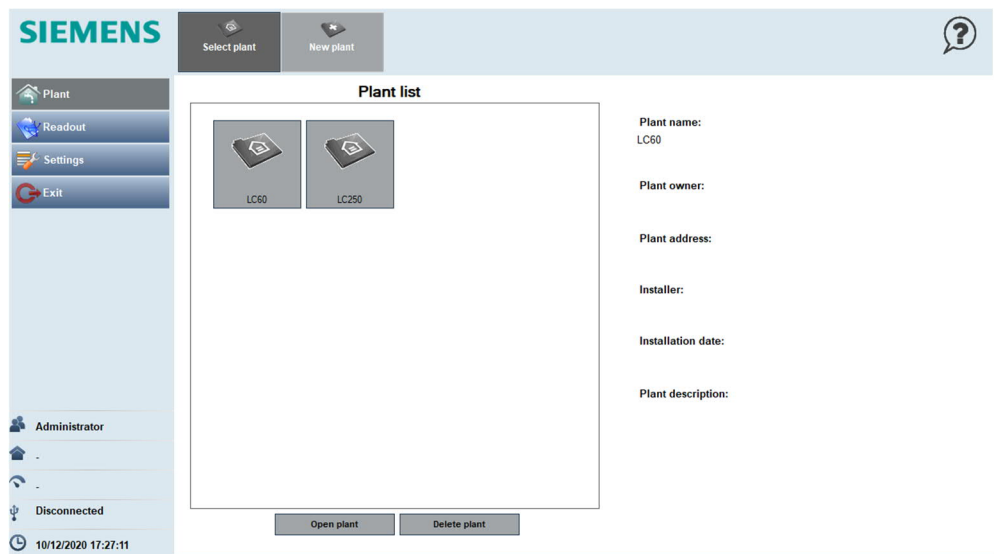
- *Plant name*: Enter a unique name for the plant.
- Plant owner data:
  - Name / Company name
  - Address
  - Phone
  - Email
- Plant data:
  - Plant address
  - Installer
  - Installation date
  - *Acquisition period*: The field is intended for remind the user to manually readout the data (no automatic readout process).
- Building administrator data:
  - Name / Company name
  - Address
  - Phone
  - Email
- Plant description: Enter an additional description and comment on the plant.

Click **OK** to save the data and open the plant.



### 3.3.2 Open an existing plant

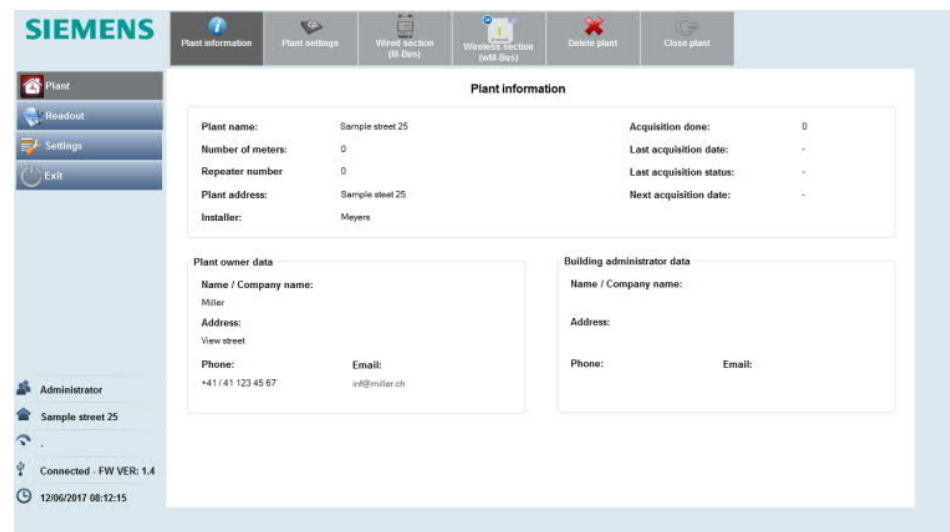
Select the 'Select plant' submenu:



Displays a list of plants saved to date. Some associated plant data is displayed in the right pane. Select the plant for editing. Click 'Open plant' to confirm.

### 3.3.3 Plant information

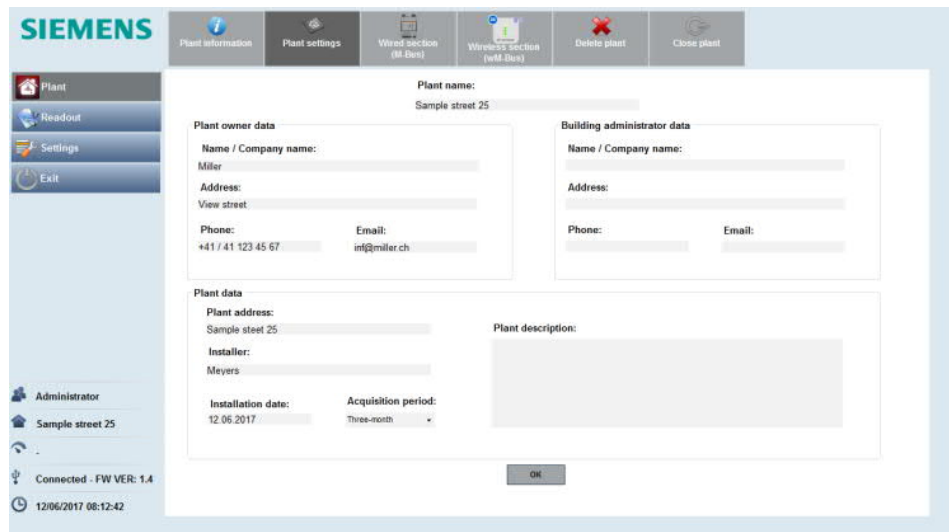
The 'Plant information' submenu displays after creating a new plant or opening an existing one.



It provides an overview of the most important plant data, e.g. plant, number of meters, RF converter number, date of next acquisition.

### 3.3.4 Plant settings

The panel displays the plant data entered thus far. You can adapt the data as needed. For a detailed description of all fields, see Section Create new plant on page 16.



### 3.3.5 Wired (M-bus)

#### 3.3.5.1 Meter setup

You can edit device settings on previously saved devices:

Click the **X** to delete the corresponding device.

Fabrication number	Device name	Description	Delete All
05205136	DEV_05205136	Water	<b>X</b>
05205137	DEV_05205137	Hot Water	X
05205138	DEV_05205138	Water	X
05205139	DEV_05205139	Hot Water	X
05205150	DEV_05205150	Water	X

**Caution!**



All data for the device is irretrievably deleted.

## Meter setup

The following fields in the pane can be edited:

- Device name
- Description 1
- Description 2
- Installation date: The data is filled out automatically during the "Meter search" process. You can manually edit the entry.
- Baud rate: Displays the transmission rate between the device and the level converter.

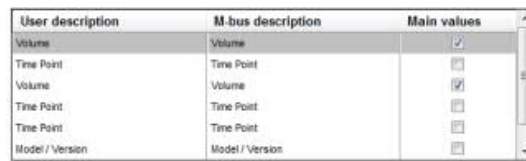
Readout by: Displays whether the device is read via the primary or secondary address.

The following fields cannot be edited:

- Fabrication number (first 8 digits of the secondary address)
- Manufacturer designation
- Version: Displays the device version.
- Medium: Displays the medium acquired by the device.
- Primary address: Displays the primary address (1...250), used to address the device over M-bus.
- Manufacturer: Displays the name of the manufacturer (if included in the database).
- Type: Displays the device type (if included in the database).
- Details: Specifies the configuration if multiple configuration types exist for the device.

## Meter data

You can select the data to be displayed in the 'Readout' menu. The following is an example of possible display values for a device. It displays all the data originating from the device polling:



User description	M-bus description	Main values
Volume	Volume	<input checked="" type="checkbox"/>
Time Point	Time Point	<input type="checkbox"/>
Volume	Volume	<input checked="" type="checkbox"/>
Time Point	Time Point	<input type="checkbox"/>
Time Point	Time Point	<input type="checkbox"/>
Model / Version	Model / Version	<input type="checkbox"/>

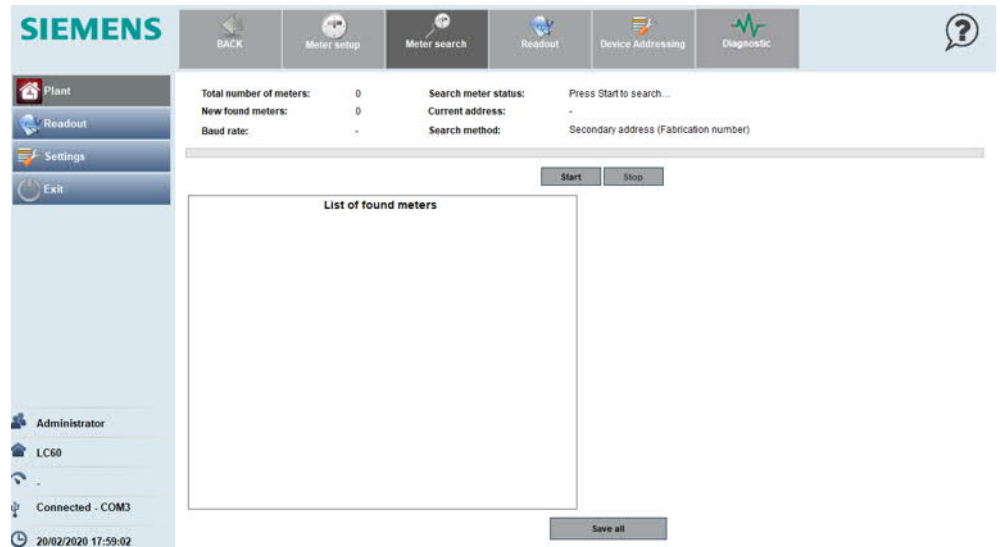
The data is automatically filled out in the "User Description" column if the device exists in the level converter database. Otherwise, you can enter your own name. By default, the name under "User description" is the same as the one under "M-bus description".

Devices included in the database are also preset in the "Main values" column, but can be edited.

### 3.3.5.2 Meter search

You can search for devices connected to the level converter as soon as the level converter is connected to the PC.

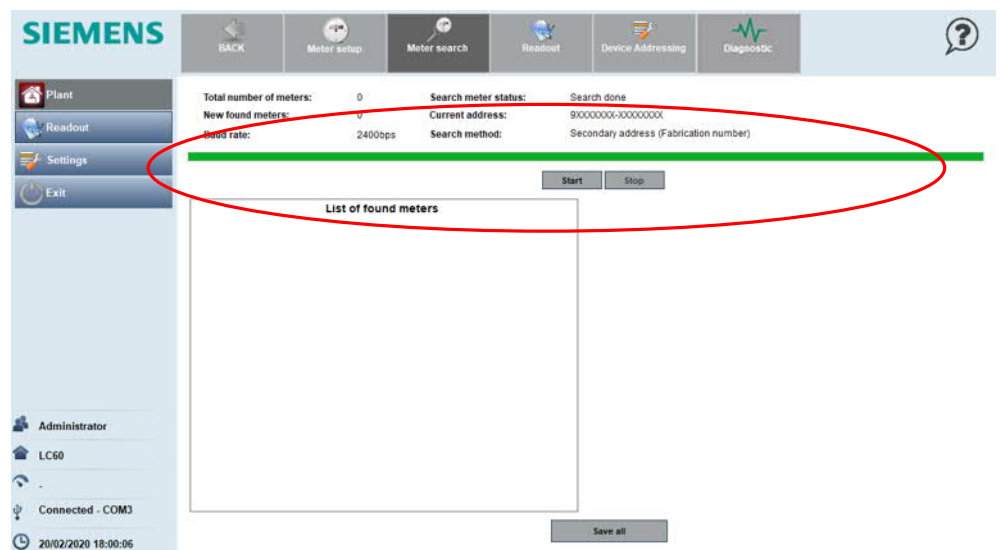
This process must be conducted if one or more devices are newly added to the plant or a new plant is created. Select the 'Meter search' submenu and start the search with 'Start'.



The search type is defined under Settings / M-bus interface (see Section "M-bus interface" pg. 34).

By default, the software first searches by primary addresses (1...250). It then attempts to find additional devices with a search by secondary addresses. The transmission rate is set by default to 2400.


A status line displays search progress and activity on the M-bus.



The following information is displayed on the search:

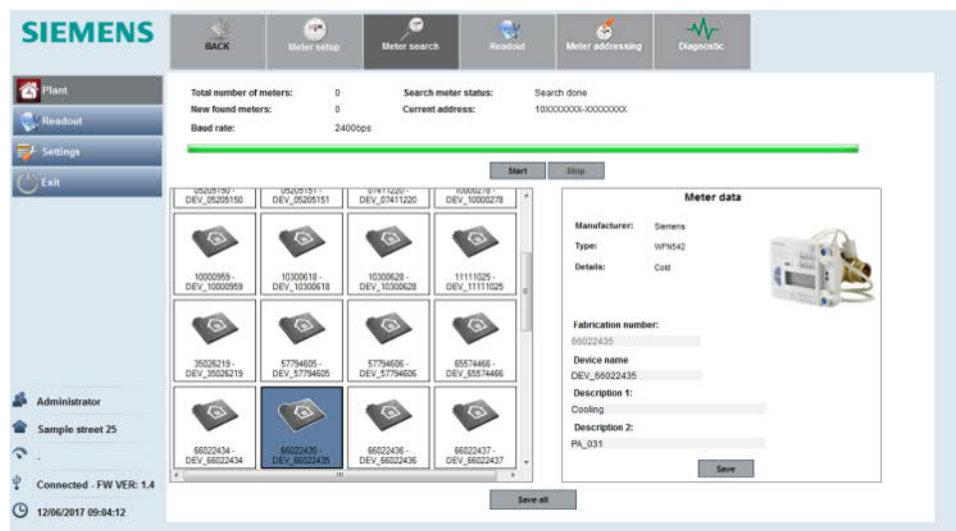
- Total number of meters: Displays the total number of devices found.
- New found meters: Displays the total number of newly found devices.
- Baud rate: Displays the transmission rate used by the software to search for new devices.
- Status of meter search
- Current address: Displays the primary address (ID) or secondary address used to search by. The search by secondary address uses a wildcard logic to be able to find all devices.
- Search method: Indicates whether the devices are searched using the primary or secondary address.

Note

 The search by secondary addresses is based on collision detection on the M-bus that occurs when polling a secondary address range (e.g. 06XXXXXX). All devices on the bus must react to this query as per the M-bus protocol. There is a slight possibility that individual devices are not recognized during this process. In this case, you can assign these devices a primary address and then start the search by primary addresses.

The device search concludes as soon as all possible primary and/or secondary addresses are polled.

The devices, responding to polling, are then displayed on the meter list.



If the level converter finds an entry on the detected devices in its database, it displays it in the software with an image of the model.

Some information on the device is automatically taken over in this case.

Additional information must be entered manually on devices not included in the database (see section "Wired (M-bus)" pg. 19)

Each found device must have a name:

- Device name: Enter a unique name for the device. The device is listed in the report under this name.
- Description 1: Enter a brief description of the device. This description is displayed in the report.
- Description 2: You can enter a second short description to more easily identify the device.

Click 'Save' to add the device with its information to the opened plant. The device symbol on the device list changes after saving:




Newly found, but not yet saved devices.  
The device has not yet been added to the plant.



Previously saved device.  
The device has been added to the plant.

Click 'Save all' to add all found devices to the opened plant.

Note

 Devices can be listed multiple time if they do not respond to a query.

### 3.3.5.3 Readout

Use the 'Readout' submenu to get the measured values.

The screenshot shows the Siemens software interface. The top navigation bar includes 'Back', 'Meter setup', 'Meter search', 'Readout', 'Meter addressing', and 'Diagnostic'. The left sidebar has 'Plant', 'Readout', 'Settings', and 'Exit'. The main area displays the 'Meter list' table with columns for Fabrication number, Device name, Description, and Acquisition status. Below the table are 'START', 'STOP', and 'Save readout' buttons. The 'Meter data' table below shows various user and M-bus descriptions, their corresponding readout values, units, types, and tariffs.

Fabrication number	Device name	Description	Acquisition status
00003004	DEV_00003004	Unknown	OK
00007805	DEV_00007805	Unknown	OK
00007806	DEV_00007806	Unknown	OK
00028964	DEV_00028964	Unknown	OK
00071725	DEV_00071725	Hot Water	OK

User description	M-Bus description	Readout value	Units	Type	Tariff
Volume	Volume	7.098	m3	Current	0
Device date time	Time Point	14/04/20 11:29	date e...	Current	0
Monthly date 1	Time Point (St. Num: 1)	16/06/19	date	Current	0
Volume historical 1	Volume (St. Num: 1)	7.098	m3	Current	0
Due date and time	Time Point (St. Num: 1)	16/06/20	date	Current	0
Fabrication number	Fabrication Number	00071725		Current	0
Monthly date 2	Time Point (St. Num: 2)	30/06/19	date	Current	0
Volume historical 2	Volume (St. Num: 2)	7.098	m3	Current	0
Monthly date 3	Time Point (St. Num: 3)	31/07/19	date	Current	0
Volume historical 3	Volume (St. Num: 3)	7.098	m3	Current	0
Monthly date 4	Time Point (St. Num: 4)	31/08/19	date	Current	0
Volume historical 4	Volume (St. Num: 4)	7.098	m3	Current	0

Click 'Start' to readout all the devices on the meter list.


As soon as a device is successfully read, the message "OK" is displayed in the "Acquisition status" column. If unsuccessful, the message "ERROR" displays.

The read out device data can be sorted by column content:

- User description
- M-bus description
- Readout value
- Type
- Tariff

You can save the data, if all devices were correctly read, to the plant by clicking the 'Save readout' button.

Note

 A manual start to plant readout can also be stopped: All the meter data read out to this time is retained.

### 3.3.5.4 Device addressing

The submenu 'Device addressing' lists the devices with fabrication number and device name. You can list and edit the primary addresses of the devices. Select the checkbox for the devices you want to edit (primary addresses).

Note



Select the checkbox at the top to select the entire column.

The following buttons are available:

- 'Read primary address': Displays the primary addresses of the devices.
- 'Assign automatically': Automatically assigns a primary address to the devices. The primary addresses are assigned in ascending order.
- 'Write and save primary address': Writes the assigned primary addresses to the associated devices.
- 'Stop': Stops the writing of the primary addresses.
- 'CSV': Exports the fabrication numbers, device names, and primary addresses of the devices to a CSV file.

Click a column header to sort the column.

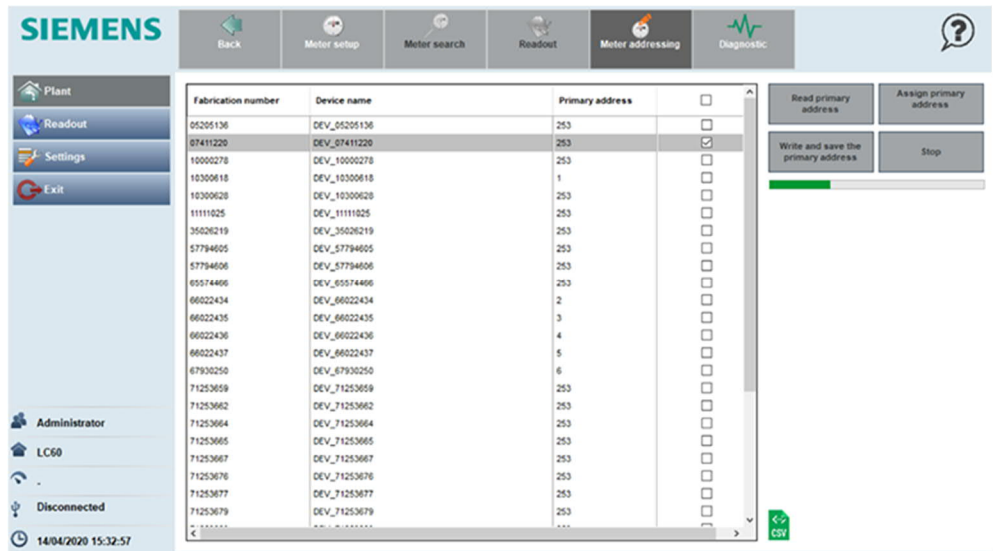
Fabrication number	Device name	Primary address	<input type="checkbox"/>
05205136	DEV_05205136	253	<input type="checkbox"/>
07411220	DEV_07411220	253	<input checked="" type="checkbox"/>
10000278	DEV_10000278	253	<input type="checkbox"/>
10300618	DEV_10300618	1	<input type="checkbox"/>
10300628	DEV_10300628	253	<input type="checkbox"/>
11111025	DEV_11111025	253	<input type="checkbox"/>
35026219	DEV_35026219	253	<input type="checkbox"/>
57794605	DEV_57794605	253	<input type="checkbox"/>
57794606	DEV_57794606	253	<input type="checkbox"/>
60574466	DEV_60574466	253	<input type="checkbox"/>
66022434	DEV_66022434	2	<input type="checkbox"/>
66022435	DEV_66022435	3	<input type="checkbox"/>
66022436	DEV_66022436	4	<input type="checkbox"/>
66022437	DEV_66022437	5	<input type="checkbox"/>
67930250	DEV_67930250	6	<input type="checkbox"/>
71253659	DEV_71253659	253	<input type="checkbox"/>
71253662	DEV_71253662	253	<input type="checkbox"/>
71253664	DEV_71253664	253	<input type="checkbox"/>
71253665	DEV_71253665	253	<input type="checkbox"/>
71253667	DEV_71253667	253	<input type="checkbox"/>
71253676	DEV_71253676	253	<input type="checkbox"/>
71253677	DEV_71253677	253	<input type="checkbox"/>
71253679	DEV_71253679	253	<input type="checkbox"/>
...	...	...	<input type="checkbox"/>

Note




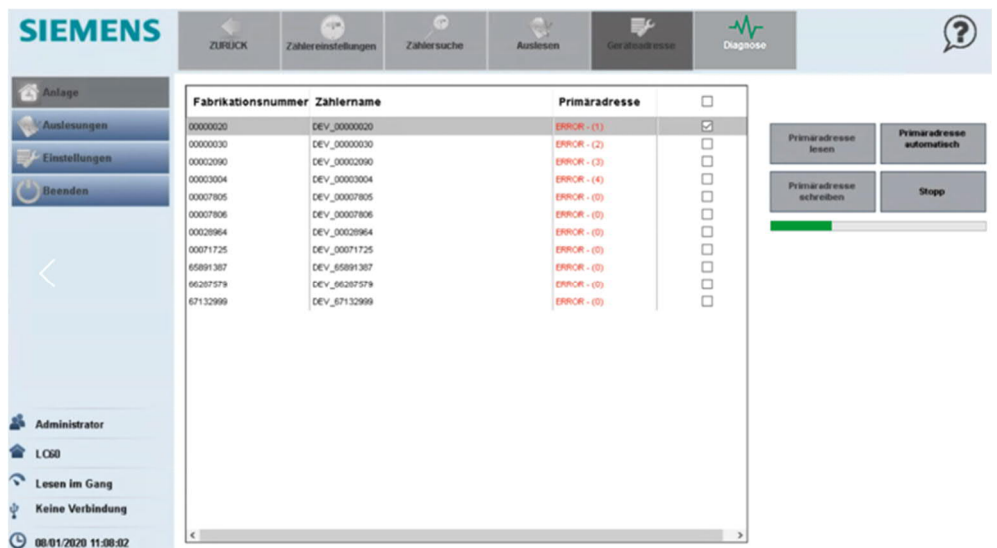
You can edit individual primary addresses by selecting the checkbox for the device to edit. Click the primary address of the device and overwrite it. Then click 'Write and save primary address' to write the primary address to the device.





Note

 A connection is required to read or write the primary address. If a device is not connected or cannot be reached, the device cannot be assigned a primary address. In this case, the message "ERROR" displays.



### 3.3.5.5 Diagnostics

The submenu 'Diagnostics' can check the quality of the connection to M-bus devices.

#### Diagnosis of readings

The quality of the connection to the M-bus devices is indicated in the 'Accessibility' column. The lower the percentage in the 'Accessibility' column, the more the connection to the corresponding device is impaired. The connection is optimal at a value of between 80 to 100 percent.

In the drop-down list 'Select a reading', you can select the diagnostic data from past readings for display.

The 'CSV' icon downloads and analyzes a report on the devices with the selected reading and can be provided to your support as needed.

#### Bus diagnosis

The commands listed under 'Bus diagnosis' assist in analyzing plant problems. Only M-bus experts should use these commands. Different fields are accessible based on the selected command.

Click 'Open log' to receive information directly on M-bus communication. A new window opens with an extract of M-bus communication. This extract is saved daily in a file.

You can select the log for the desired day in the drop-down list 'Select a log file'. Click the 'TXT' icon to download the log. The report can be provided to your support as needed.

The screenshot displays the Siemens diagnostic software interface. The top navigation bar includes 'Back', 'Meter setup', 'Meter search', 'Readout', 'Meter addressing', and 'Diagnostic'. The left sidebar contains 'Plant', 'Readout', 'Settings', 'Exit', 'Administrator', 'LC60', and 'Disconnected' (14/04/2020 15:25:19).

The main content area is divided into two sections:

- Diagnosis of readings:** A table with columns: Serial number, Device name, User description, Primary address, and Accessibility. The table lists several devices with their respective details and accessibility percentages (all 100%). A 'Select a reading' dropdown is set to '01/04/2020 17:20:52'. A green 'CSV' icon is visible.
- Bus diagnosis:** A form for sending commands. 'Select a command' is set to 'REQ\_UD2'. 'Baudrate' is '2400'. There is a checkbox for 'Use FCB (Frame Counter Bit)'. Fields for 'Identification number', 'Manufacturer', 'Generation', 'Medium', and 'Primary address' are filled with hexadecimal values. A 'Data to be sent' field is empty. A 'Send command' button is present. Below the form, there is a 'Plant Name: LC60' field and a 'Select a log file' dropdown set to '01\_2020\_04\_14\_userlog.txt'. A 'TXT' icon is visible. At the bottom, there are 'Open log' and 'Clear log' buttons.

## 3.3.6 Wireless (wM-bus)

### 3.3.6.1 Repeater settings

You can acquire and edit RF converter settings (repeater).

Serial number	Description 1	Description 2	Install date	Erase

**Repeater configuration**

Serial number:   
Description 1:   
Description 2:   
Install date:   
Mesh ID:   
Mesh channel:   
wM-Bus mode:   
 Change password

**Manage access to the Repeater**

COM-port:  AUTO   
Password login:   Standard password  
Serial Number:

**Firmware**

FW revision available:  FWRPT1\_VTR26.hex

**Recovery Password Settings**

Recovery password:   
New password:   
Confirm password:

**Repeater settings**

FW Revision:   
Model:   
Serial:   
Error code:   
Operating time:   
Current date time:

wM-Bus type:   
wM-Bus HW Revision:   
wM-Bus FW Revision:   
Mesh type:   
Mesh HW Revision:   
Mesh FW Revision:

Note



Click to delete the corresponding RF converter.

You can only delete devices that are not currently connected.

Serial number	Description 1	Description 2	Install date	Erase
RP18507408	DEV_RP18507408		12/8/2017	

#### Repeater configuration

You can edit the following fields in section 'Repeater configuration'.

- Description 1
- Description 2
- Install date
- Mesh ID: Enter the Mesh network address. Ensure that all RF converters and the web server are on the same network.
- Mesh channel: You can change the channel ID in the event of faults.
- wM-bus mode: Select an operating mode: C, S, and T mode.
- New password: You can enter a new password for the RF converter. Select 'Change password'.

Save the settings on the plant by clicking 'Save configuration'.

Send the settings as entered under 'Repeater configuration' to the RF converter by clicking 'Send configuration to Repeater'.

#### Administer access to the repeater

- COM-Port: Select AUTO if you are connected the RF converter (repeater) to the PC using the USB connection and click **Connect**. The COM port value changes to COM\* and the RF converter data is read.
- Access password: You can log in using the default password if the "Default password" is selected or define your own password.

- FW revision available: The ACT531 software is supplied with the current firmware . The current firmware can also be transmitted to the RF converter. Additional information is available in section “Update firmware”, page 28.
- Serial number: The serial number cannot be changed.
- Recovery password: Sends a new password if you have forgotten the password.
- New password: Set your own password after receiving a password.
- Confirm the new password

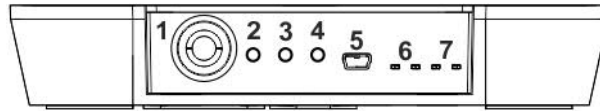
### 3.3.6.2 Update firmware

#### Caution!



Do not disconnect the PC and RF converter while the firmware is being updated and do not switch off the RF converter.

- Select the desired firmware from the field 'FW update available'.
- Click 'Firmware' to initiate the firmware update to the current version.
- Click 'OK'.
- On the RF converter, press buttons 2, 3, and 4 at the same time and wait until the update is completed.



- |   |                                  |   |                        |
|---|----------------------------------|---|------------------------|
| 1 | Power (AC 100..240 V)            | 2 | Local settings S1      |
| 3 | Local settings S2                | 4 | Reset button           |
| 5 | USB connection                   | 6 | LED mesh network TX-RX |
| 7 | LED wireless M-bus network TX-RX |   |                        |

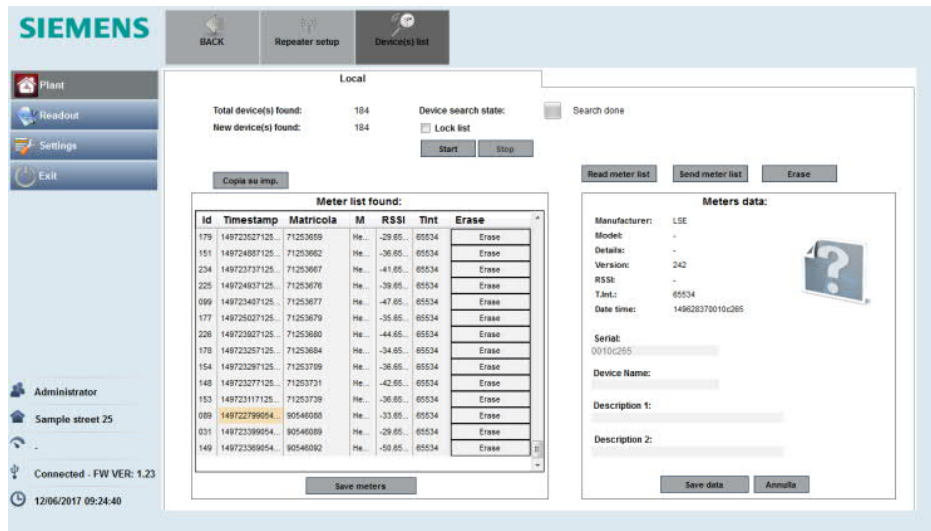
#### Repeater data

Displays the RF converter data including the current firmware version, serial number, error code, current date and time, data on wM-bus and Mesh network.

You can read the settings for the RF converter by clicking 'Read current configuration'.

### 3.3.6.3 Administer device list

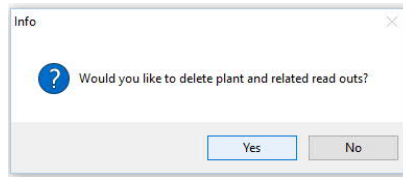
You can create a list containing up to relevant 500 devices for a specific RF converter. This list has a higher priority than the list on the web server.



If a list is loaded (in .csv or rpt format), only those devices contained in this list will be taken into consideration by the RF converter and transmitted to the web server.

### 3.3.7 Delete plants

The **Delete plant** submenu deletes the currently opened plant.



Click 'Yes' to delete the opened plant.

#### Caution!



All data belonging to the plant, including all read outs, are irretrievably deleted.

### 3.3.8 Close plant

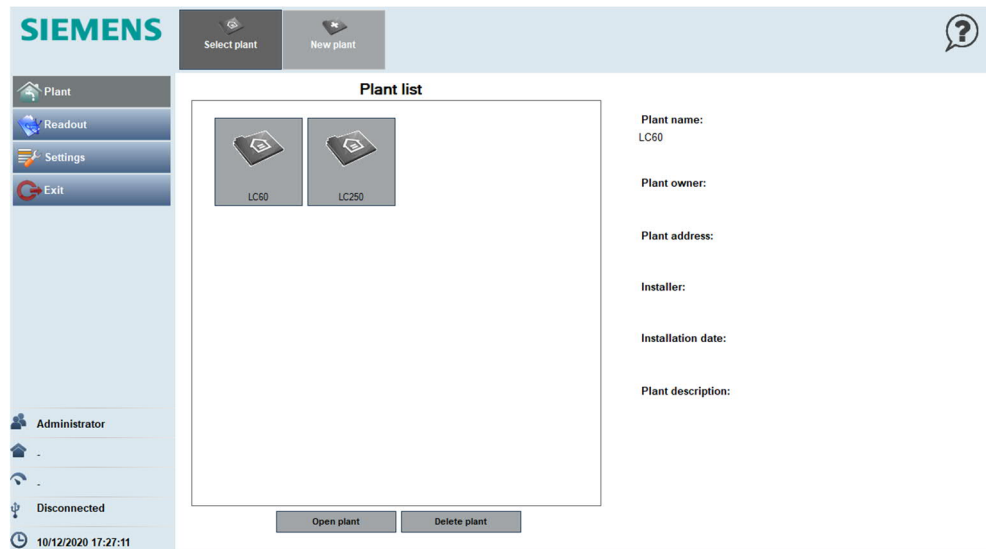
The 'Close plant' submenu closes all opened plants.

**Caution!**



Newly detected devices and newly acquired read outs are not automatically saved. Ensure, prior to closing the plant, that you have saved all desired devices and read outs.

The program goes to the start page for the 'Plant' menu after closing the plant.

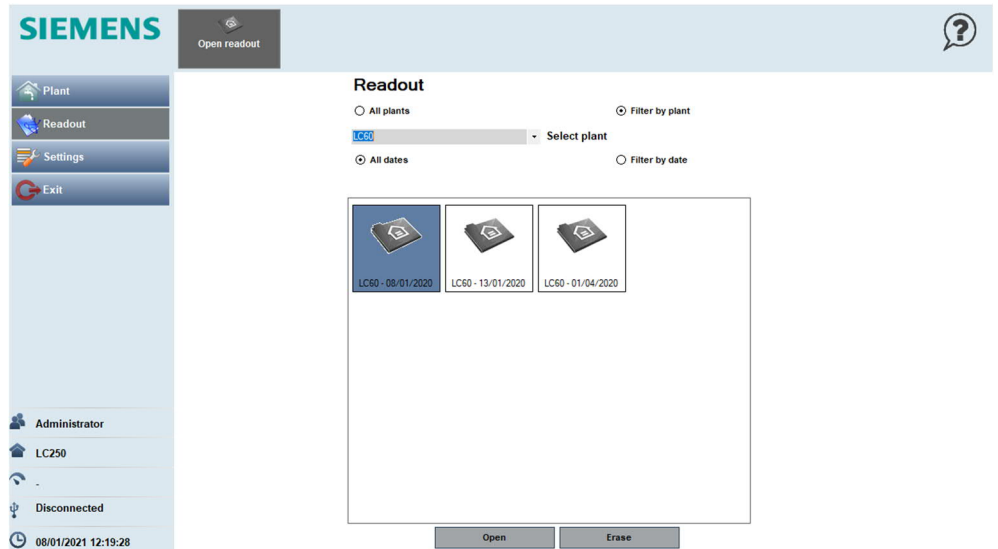


## 3.4 Readout menu

In the 'Readout' menu, select 'Open readout'.

You can open an existing read out to view consumption data or generate a report.

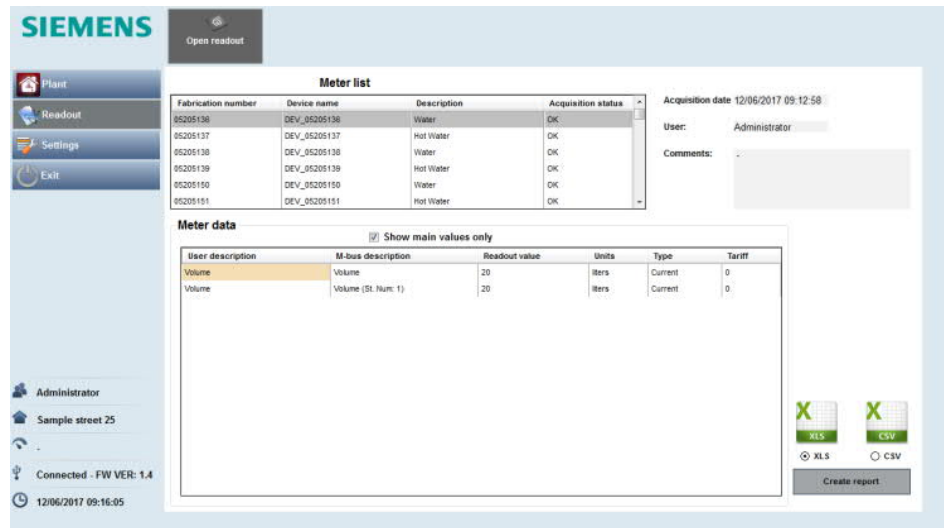
Displays a list of all read outs to date:



Select filter criteria:

- All plants: Displays the read outs on all generated plants.
- Filter by plant: You can select the plant to view its read outs.
- All dates: No filtering by date.
- Filter by date: Displays read outs within the selected date range.

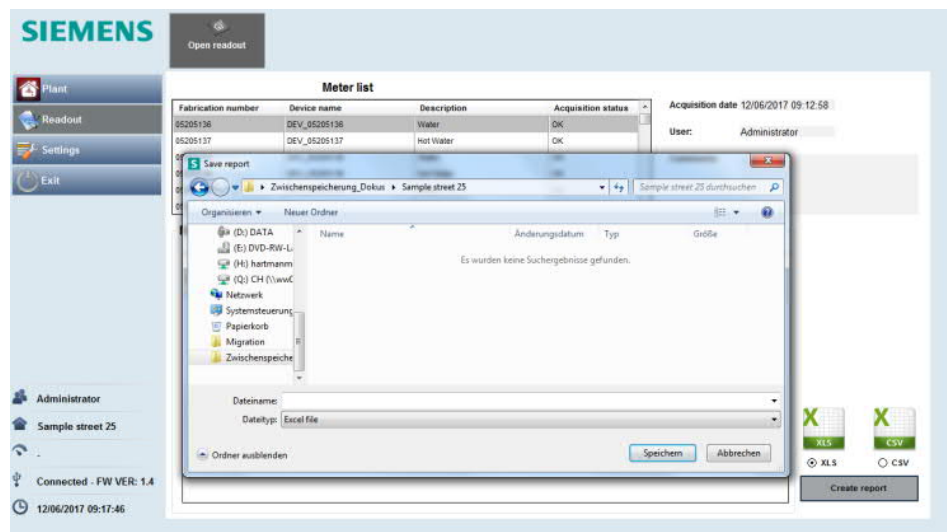
Select the desired read out from the list and confirm with 'Open'.



The following information is provided on the display:

- Meter list:
  - Device fabrication number
  - Device name
  - Description (if entered)
  - Device acquisition status
- Device acquisition date
- User: Displays the name of the user who triggered the read out.
- Comments: Displays any comments.
- Meter data: Displays the values as defined in the meter settings.
  - Show main values only: Displays only the main values for the device (default setting) as per the device settings. If cleared, displays all values read from the meter.
  - User description
  - M-bus description
  - Readout value
  - Units
  - Type
  - Tarif
- Report options
  - XLS: The report is created in XLS format
  - CSV: The report is created in the CSV format

Click 'Create report' to create a report in the selected format. Select the save location and the report name to save the report:





## Example of XLS report

The following is an example of a report in Excel format for a plant with three meters:

User	Plant name:	Address:	Date	Time						
Administrator	Sample street 25	Sample street 25	12.07.2016	14:46						
Fabrication number	Device name	Description 1:	Description 2:	Date	Time	M-bus status	Energy (Wh) - Energy	Volume Flow (l/h) - Volume Flow	Flow Temperature (C) - Flow Temperature	Time Point (date e time) - Device date
7923586	DEV_07923586	Heat/Cooling	PA_001	12.07.2016	14:46:44	0	50800	0	27,2	
Fabrication number	Device name	Description 1:	Description 2:	Date	Time	M-bus status	Energy (kWh) - Warm energy	Volume (m3) - Warm volume	Time Point (date e time) - Device date	
65589679	DEV_65589679	Heat	PA_000	12.07.2016	14:46:48	0	19896,7	2437,869	12.07.2016 13:44	
Fabrication number	Device name	Description 1:	Description 2:	Date	Time	M-bus status	Energy (Wh) - Energy	Volume (liters) - Volume	Volume Flow (l/h) - Volume Flow	
65589680	DEV_65589680	Cooling	PA_000	12.07.2016	14:46:53	0	9894200	2437869	0	

The report has the following elements in both XLS, as well as CSV format:

- Header: Displays the user, who generated the report, plant name, plant address, as well as data and time of acquisition.
- Meter data: This pane displays the data of devices belonging to the plant at the time of the readout.
  - The first six columns are fixed and display the fabrication number, the name of the device, the description, date and time. The presence of the rest of the columns is based on the choices made on “Meter data” options on the “Meter setup” page and is based also on the meter type.

## Note

 The numbers in the reports are depicted as follows:

- Period as a 1000 separator.
- Comma as a decimal point separator.

## 3.5 Settings menu

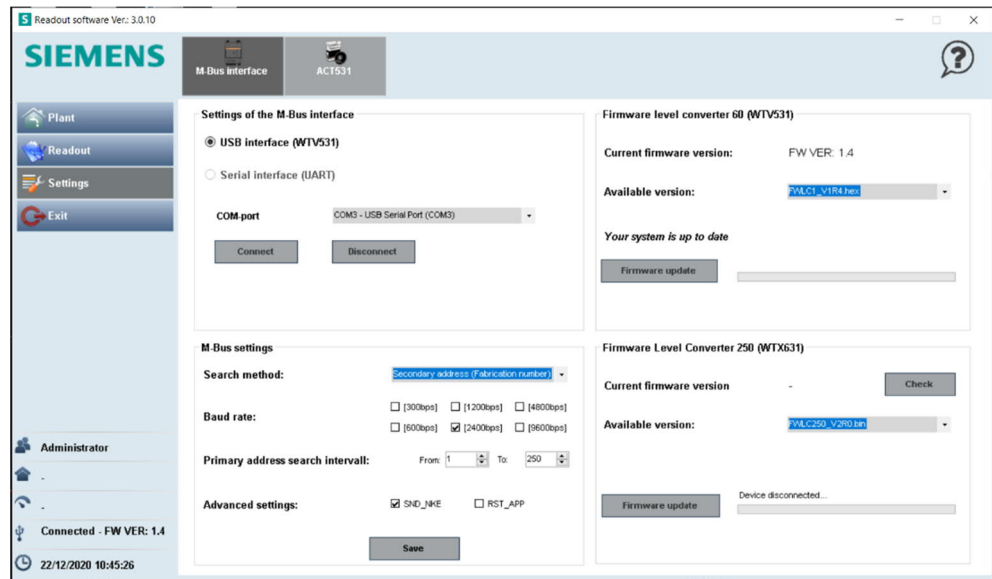
In the 'Settings' menu, you have access to the setting options for the following components:

- M-bus interface
- ACT531

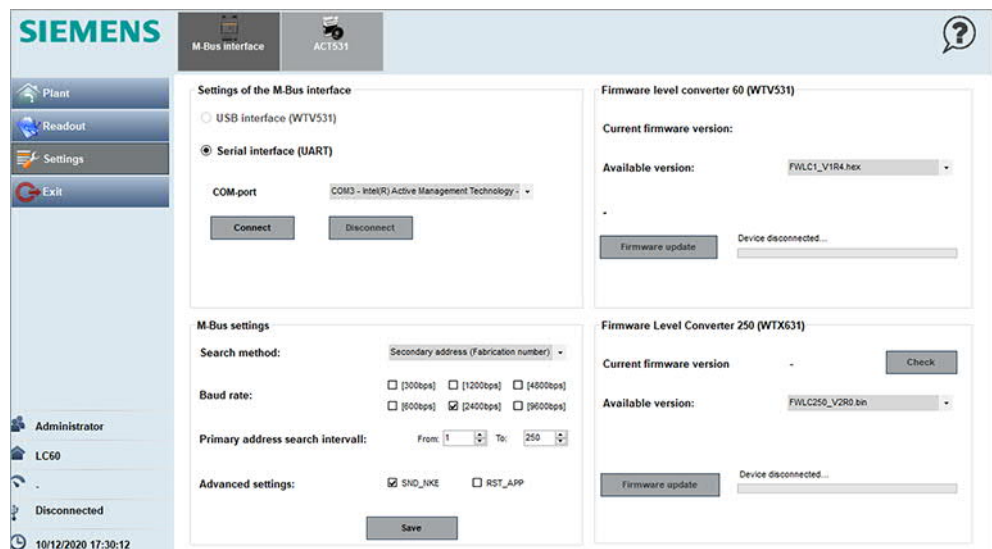
### 3.5.1 M-bus interface

The 'M-bus interface settings' submenu selects the interface used to connect the level converter to the PC:

- 'USB Interface (WTV531..)': Select the USB interface to connect the level converter WTV531.. to a PC.



- 'Serial Interface (UART)': Select the serial interface to connect the level converter WTX631.. to a PC. The level converter WTX631.. is connected to a PC with a USB RS-232 adapter. Also select the COM port.



Conclude by clicking 'Connect'.

The 'M-Bus settings' submenu as the following options:

- Search method: You can search for devices connected to the level converter in various ways (see product documentation on meters and the level converter):
  - Primary address: Search by primary addresses 1...250.
  - Secondary address: Search by secondary addresses
  - Primary and secondary addresses: Search by primary and secondary addresses.
- Baud rate: The default transmission speed is set to 2400 bps. Refer to the product documentation for meters and the level converted for different transmission speeds.
- Primary address search interval: You can limit the search range of the primary addresses. The maximum address range is 1...250.
- Special functionalities for M-bus experts:
  - SND-NKE: Sends the M-bus command to initialize M-bus devices prior to performing the readout.
  - RST-APP: Starts the reset application prior to starting the search function (use only if expressly required by the devices).

The 'Save' button saves the settings.


You can update the firmware in the panes 'Firmware Level Converter 60 (WTV531)' and 'Firmware Level Converter 250 (WTX631)':

- Current firmware version: Displays the currently installed firmware version.
- Available version: Displays the latest available firmware version for the level converter.

You can check for new firmware for the Level Converter 250 at any time by clicking 'Check'.

The 'Firmware' button updates the firmware to the latest version.

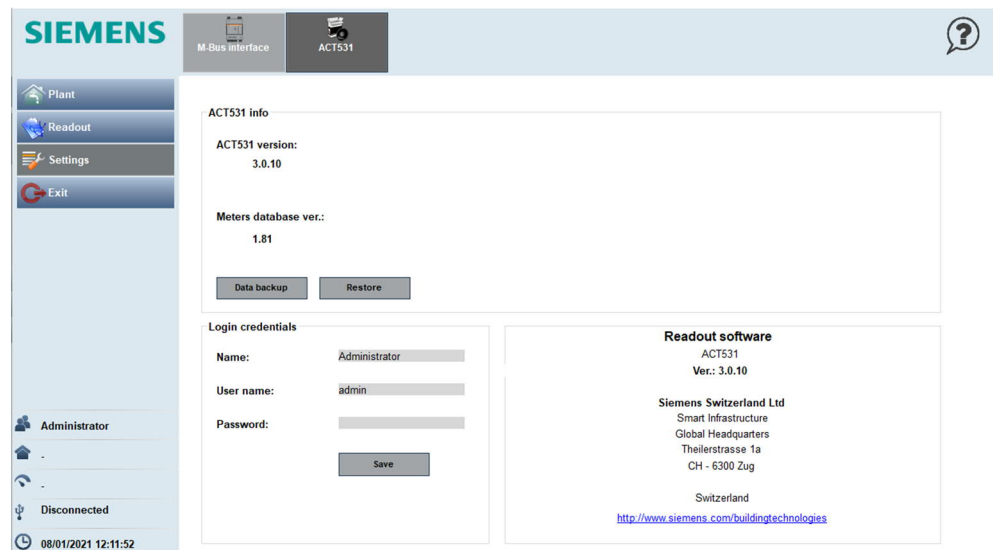
Note

 The firmware version for the level converter also includes the latest version of the ACT531 readout software. It is important to always update ACT531 readout software to the latest version.

## 3.5.2 Settings for ACT531 software

The ACT531 submenu has two panes:

- ACT531 update
- Login credentials



The 'ACT531 firmware update' pane has the following information and settings:

- ACT531 version: Displays the current software version.
- Meters database version: Displays the current version of the meter database.
- Data backup: Generates a complete backup of all data and software settings in one file.
- Restore: Restores the data and software settings from a file previously created with data backup.

In the Account login pane, you can edit the information for access to the software:

- Name: This is the name displayed while using the software.
- Username (default is "admin")
- Password (standard is "admin")

Click 'Save' to save the settings.

After initial sign in, change the user name and password in order to protect the plant data stored on your PC against unauthorized access.

## 3.6 Exit menu

---

The Exit menu exits the software. Back all edited data prior to closing the program!

## 4 Technical data

---

System requirements	
Operating system	Windows 10
Processor architecture	32 or 64-bit
Required libraries	Microsoft C++ 2012 Ver 11.0.60.610 (included in the installation file)
RAM	4 GB
Disk space	500 MB
USB port	1.1 or higher

Operation	
Languages	German, English, Italian, French

Functional features	
Operable devices	Max. 1000 (logical) M-bus devices

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