

User guide for version 4.8

USB Meter Reader



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1 What's new

With USB Meter Reader 4.8 it is now possible to use READy Converter for walk-by/drive-by reading. For details, see this [Video](#).

Step-by-step instructions can also be found here:

- [How to add converters to the system](#)
- [How to read meters with a converter](#)

2 Introduction

USB Meter Reader is a meter reading system used for remote reading of meters with wireless and wired M-Bus as well as water meters with one-way radio and meters with Kamstrup 434 MHz radio modules.

2.1 Data security

The USB Reader Meter program is a single-user program to be installed locally on a Windows computer.

The use of the program must take place through secured procedures on a secure machine.

When the program is used where the EU General Data Protection Regulation (GDPR)* applies, the user must be authorized to handle personal data as follows:

- Reading of consumption data
- Handling of consumption data
- Export of consumption data

It is recommended to use a password at the start-up of the program.

* Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing of Directive 95/46/EC (General Data Protection Regulation).

2.2 Wireless reading components

Wireless reading includes the following components:

- USB Reader
- Power Pack
- Charging cable
- Quick Guide

USB Reader

USB unit for wireless reading of Kamstrup meters. Connect the unit to a USB port on a Power Pack, as described below, or on a PC. Alternatively, it is possible to use a cigarette plug with USB. The USB Meter Reader program can handle a USB Reader for 434 MHz and a USB Reader for Wireless M-Bus at the same time.

This means that you can read meters with a 434 MHz radio module and meters with Wireless M-Bus simultaneously.

Power Pack

Power supply for USB Reader. Before using Power Pack, it must be charged. For further information please see the instructions enclosed with the Power Pack.

It automatically switches on when the USB Reader is connected.

Charging cable

The charging cable is used for charging Power Pack. Connect the little plug to Power Pack and the big plug to a USB port, e.g. on a PC. The charging time is 3-5 hours, depending on how much power the USB port can supply.

Quick Guide

Describes how to download the program Kamstrup USB Meter Reader from Kamstrup's website and how to install it on the PC.

2.3 Wired reading components

Wired reading includes the following components:

- Kamstrup M-Bus Master MultiPort 250D or 250L
- Installation and User Guide for M-Bus Master
- USB cable 6699-336 for M-Bus Master

As M-Bus master, it is recommended to use Kamstrup M-Bus Master MultiPort 250D or 250L. The master must be connected to the PC via the USB cable. When using a RS-232 connection, the master must be created manually in the program.

2.4 Usage/good practice, wireless reading

This section describes how to use the USB Reader for collecting/reading data wirelessly from meters in the best way. The first time a meter is read, the reading duration may be longer as some extra data needs to be collected.

Using Power Pack

When you use Power Pack, the work procedure is as follows:

1. Create a job for the USB Reader that you use with Power Pack. Note: If another USB Reader is already connected to the PC, you do not need to insert the USB Reader from the Power Pack into the PC. The job list will be sent to your USB Reader wirelessly.
2. The USB Reader starts the reading as soon as it is in motion (green diode starts to emit light). Therefore, the USB Reader starts to read when you start walking/driving. Note: There is a small delay before it starts to read. When the green diode flashes (once per second), you must stop and wait until it stops flashing. When it stops, you can carry on walking until it starts flashing again. Continue in this way until you have completed your route.
3. The next time, your USB Reader is in contact with the Kamstrup Meter Reader system, it will transfer the data to the system. Under "[Home](#)", click "USB Reader" to check if meters are missing. If this is the case, you can transfer the list of the missing meters to your USB Reader (see how to under "[Home](#)").

Pay attention to the "USB Reader" which is connected to a PC

If you use a Power Pack, it is best to keep a distance to the USB Reader which is connected to a PC. Thus, you avoid that the USB Reader inserted in the PC contacts your USB Reader during the reading. The USB Reader in the PC will continuously try to collect new data from your USB Reader. Therefore, each time you collect new data, your USB Reader must return the new data to the other USB Reader before it resumes the reading sequence. The communication also prevents the USB Reader from showing "Reading completed" (the orange diode flashes 3 times).

Using a PC for collecting data

The procedure when using the Kamstrup USB Meter Reader system for collecting data is as follows:

Collect data from a meter list

1. Create a job for the USB Reader which is inserted in the PC.
2. Click "[Reading](#)" on the toolbar, and select the tab "Read meter(s) on USB Reader".

Collect data from a specific meter

1. Click "[Reading](#)" on the toolbar, and select the tab "Read specific meter(s)".

2.5 Usage/good practice, wired reading

The establishment of a wired M-Bus network and reading of meters via M-Bus Master MultiPort 250 is described in the installation and user guide for M-Bus Master MultiPort 250.

2.6 Definitions

This section contains the various definitions used in the Kamstrup Meter Reader program.

Missing meters

The definition "Missing meters" is used in the [Home](#) and [Reading](#) windows. A meter is defined as missing if the latest reading time is before the definition "Missing meters" (see below). This means that if, for example, a meter was read on 26/11/2015 and the definition "Missing meters" is set to 2 days (standard), the meter appears in the list of missing meters on 29/11/2015. If the definition "Missing meters" is changed to 14 days, the meter appears in the list of missing meters on 11/12/2015.

The definition "Missing meters"

The number of days after which the data is considered as old. If the definition "Missing meters" is set to e.g. 2 (standard) and today's date is 20/10/2015, all data from 17/10/2015 as well as earlier data will be considered as old. The value can be entered under **File > Setup**. Meters which have been read prior to the pre-programmed number of days will appear from the list of missing meters.

Time of receipt

The time of receipt is the time when the Kamstrup USB Meter Reader system receives data from a USB Reader. Therefore, if you read data on e.g. 08/08/2015 and do not return to the office on the same day (but e.g. the following morning), the date of the "Latest reading" will be 09/08/2015.

Job / Job list

A job or job list is a list of meters that a USB Reader must read. To create a job (a job list), click [Job lists](#) in the toolbar and create the job in the [New job window](#).

3 Basic working procedures

Step-by-step instructions on how to perform the most common tasks in USB Meter Reader are found below.

What do you want to do?

Meters

- [Add meters to USB Meter Reader](#)
- [Remove meters from USB Meter Reader](#)
- [Rename a meter](#)
- [Add addresses to meters](#)
- [Organise meters in groups](#)

Data collection units

- [Add a converter to USB Meter Reader](#)
- [Add an M-Bus master to USB Meter Reader](#)

Reading of meters

- [Read meters with a converter](#)
- [Read meters via an M-Bus master](#)
- [See meter readings](#)

Heat supply

- [Dis- and reconnect heat supply](#)

Data export

- [Export meter readings](#)

Program

- [Activate add-on features](#)

3.1 How to add meters

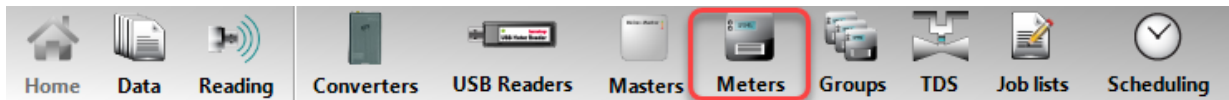
There are three ways of adding meters to the system:

- [To import meters from a KEM file](#) (you have received an email from Kamstrup with a link to the KEM file that you download to your PC), follow [this procedure](#).
- [To import meters from My Kamstrup](#) (you have a user login to Kamstrup's customer portal, My Kamstrup, from which the program automatically collects the required information), follow [this procedure](#).
- [To manually create meters](#) (only used for wired M-Bus reading of unencrypted meters - i.e for meters that are wired to an M-Bus master), follow [this procedure](#).

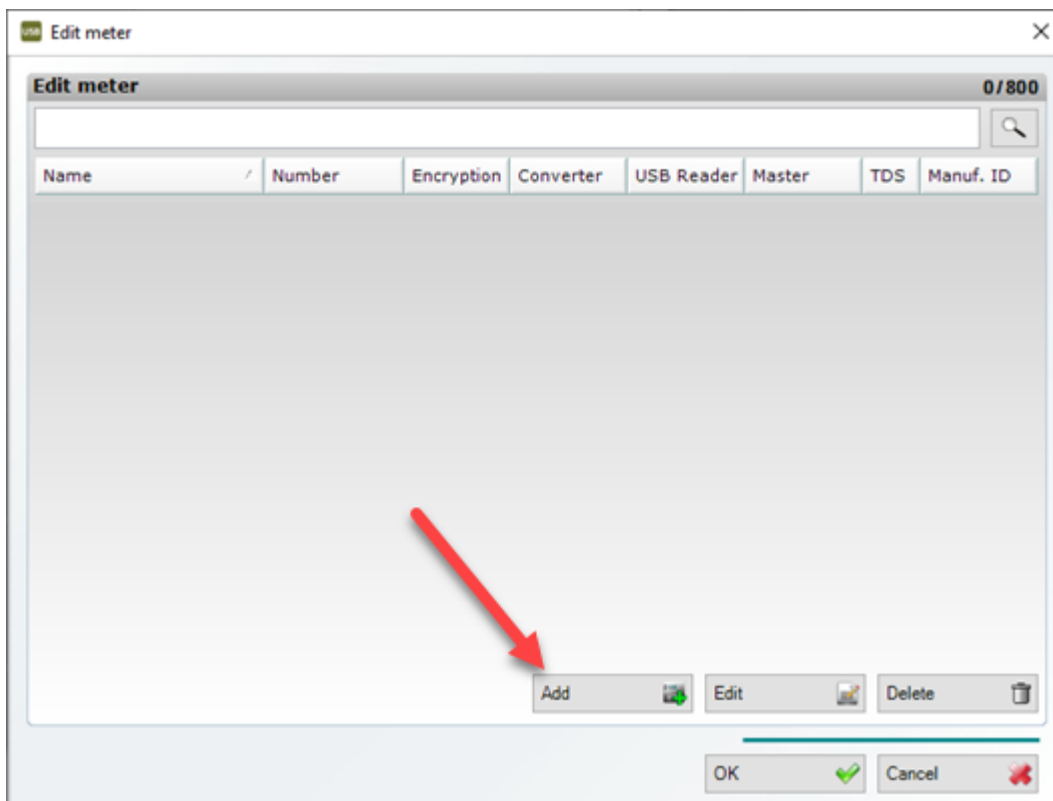
3.1.1 Import meters from KEM file

Prerequisite: You have received an email from Kamstrup with a link to a KEM file (the file name consists of a long string of numbers and letters and ends with "zip.kem") and you have downloaded the KEM file to your PC.

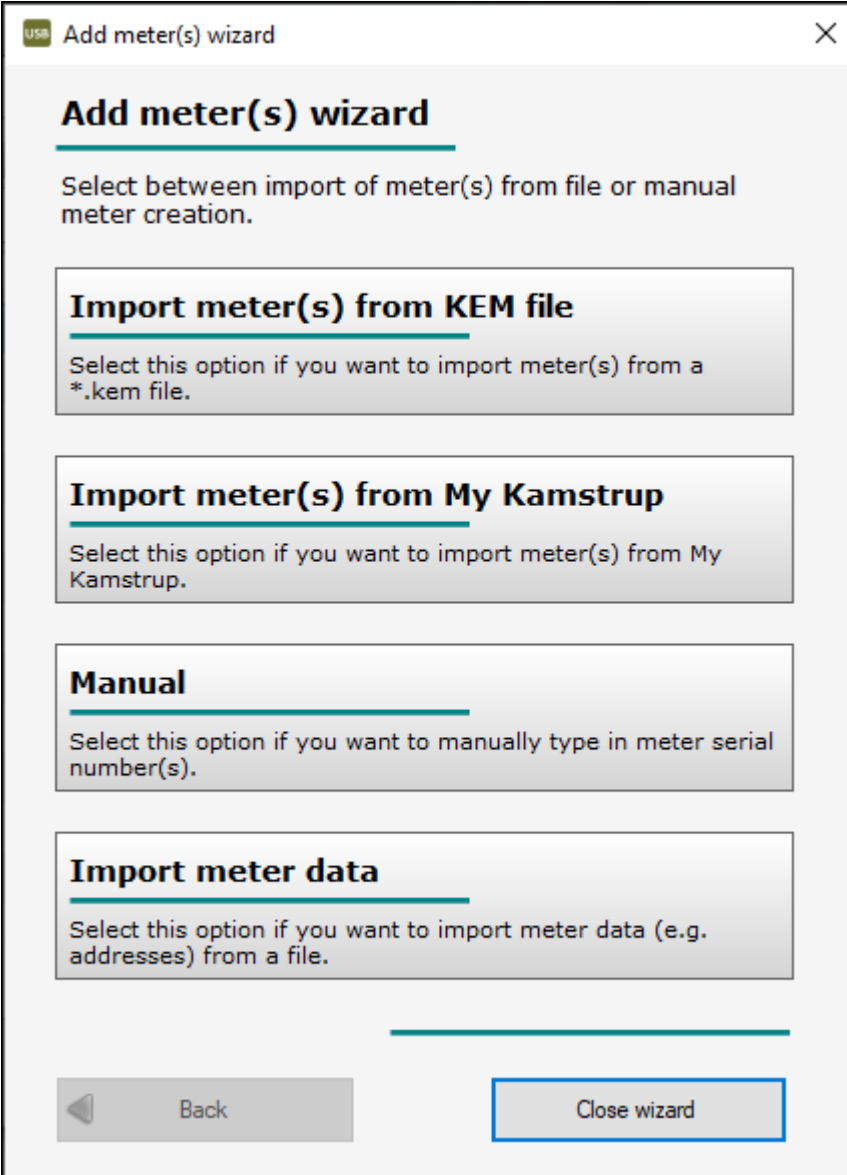
1. In the toolbar, select **Meters**:



2. In the **Edit meter** window that appears, select **Add**:



3. Select **Import meter(s) from KEM file**.



Add meter(s) wizard

Select between import of meter(s) from file or manual meter creation.

Import meter(s) from KEM file
Select this option if you want to import meter(s) from a *.kem file.

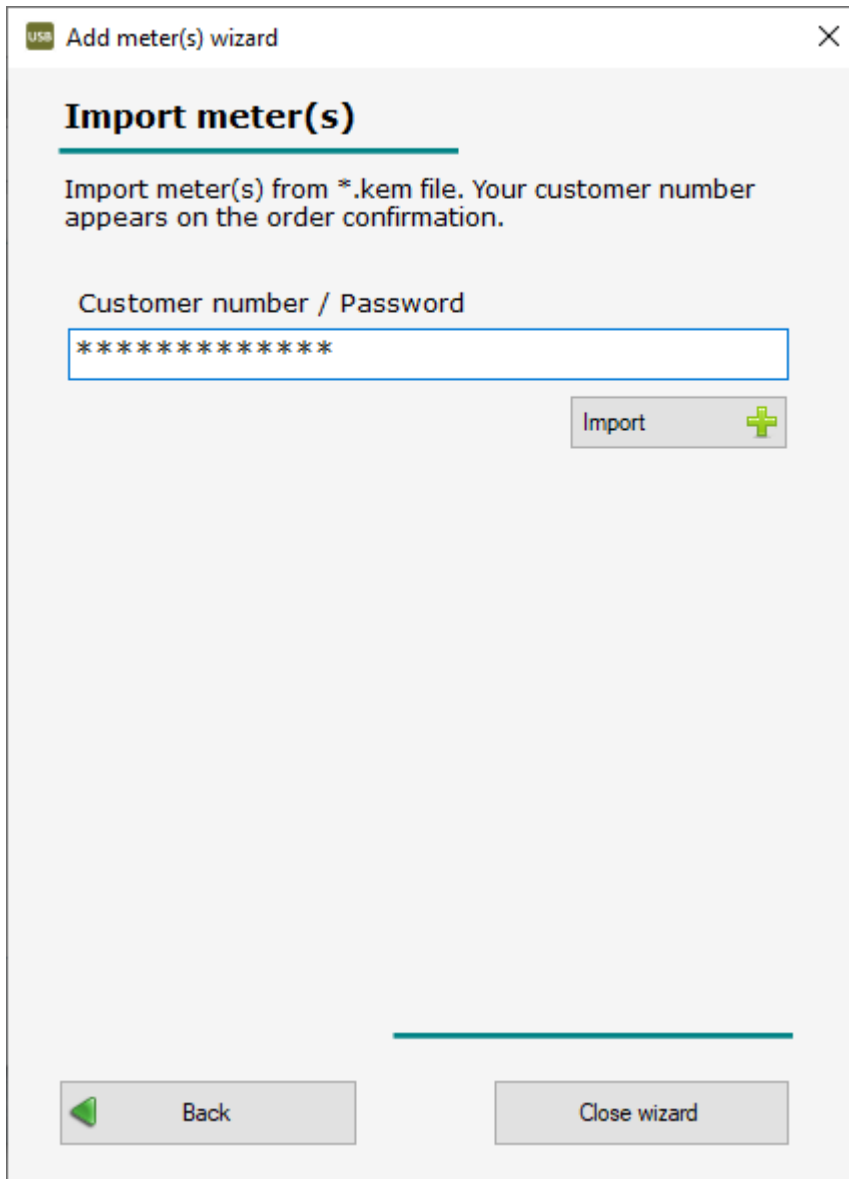
Import meter(s) from My Kamstrup
Select this option if you want to import meter(s) from My Kamstrup.

Manual
Select this option if you want to manually type in meter serial number(s).

Import meter data
Select this option if you want to import meter data (e.g. addresses) from a file.

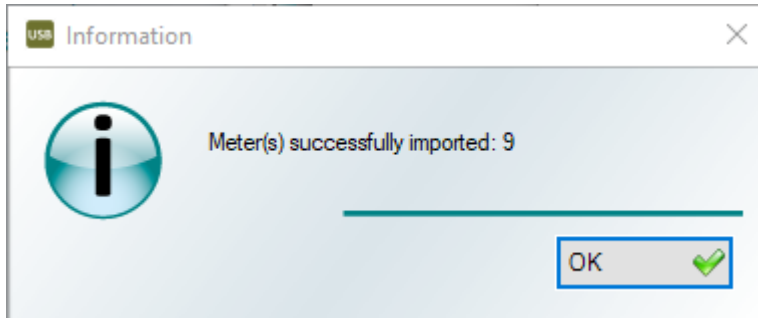
Back Close wizard

4. In **Customer number / Password**, enter the password you have received for the KEM file.
Typically, you have received the password via SMS.



5. Select **Import**.
6. Browse to and select the file. Click **Open**.

7. Click **OK** in the message that appears:

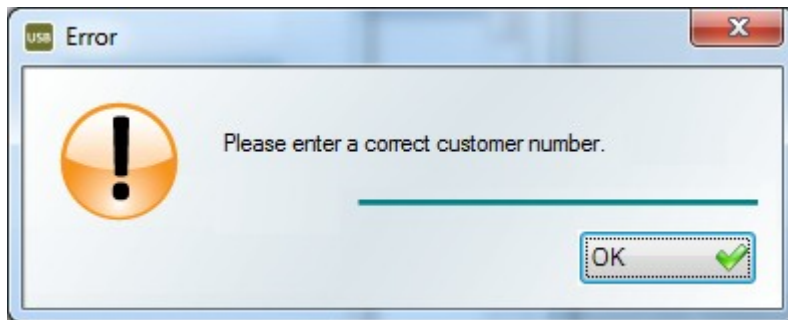


8. Click **Close wizard**.

Errors that may occur while importing the KEM file

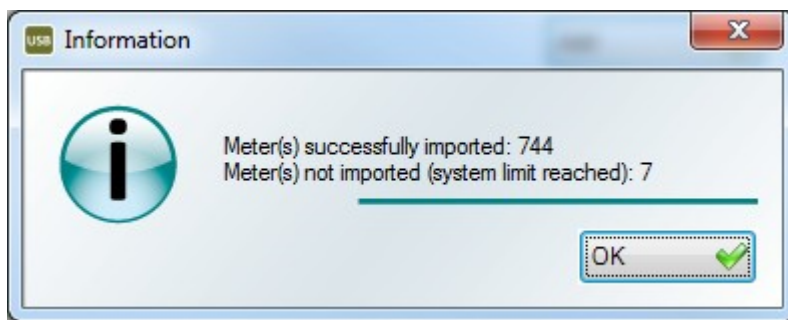
If you cannot import the KEM file, it may be due to one of the following errors:

Error message

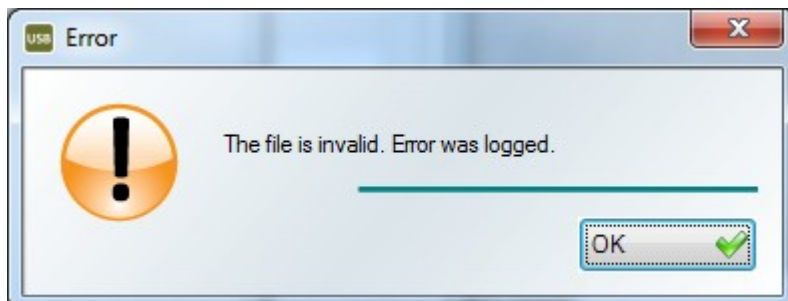


Cause

The password may have been entered incorrectly. Try to enter the password again. If the problem persists, please contact Kamstrup A/S.



The system can contain a maximum of 800 meters (4,000 meters if you have a licence). If this limit is exceeded, the system will import up to 800/4,000 meters. The remaining meters will not be imported.

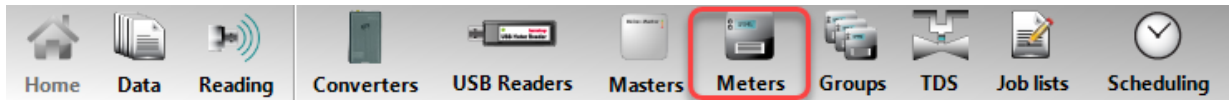


If an error has occurred while generating the file, or if the KEM file has been changed, the meters in this file cannot be imported. Please contact Kamstrup A/S to receive a new file.

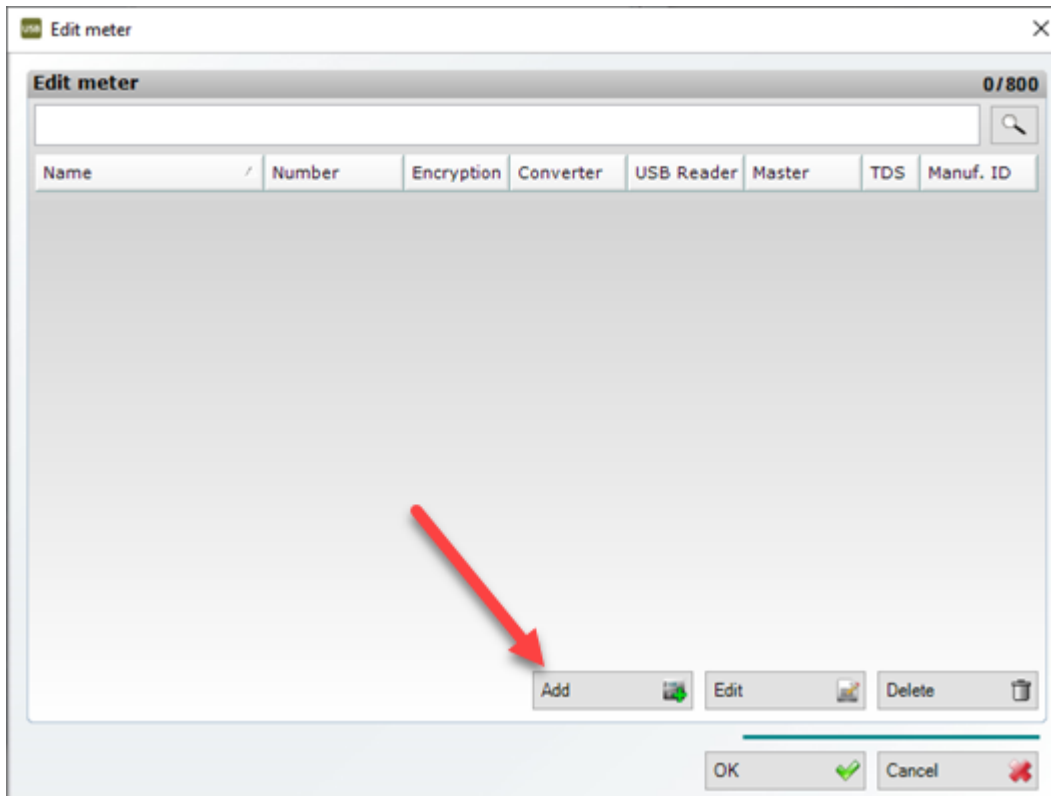
3.1.2 Import meters from My Kamstrup

Follow the steps below to add one or more meters to USB Meter Reader:

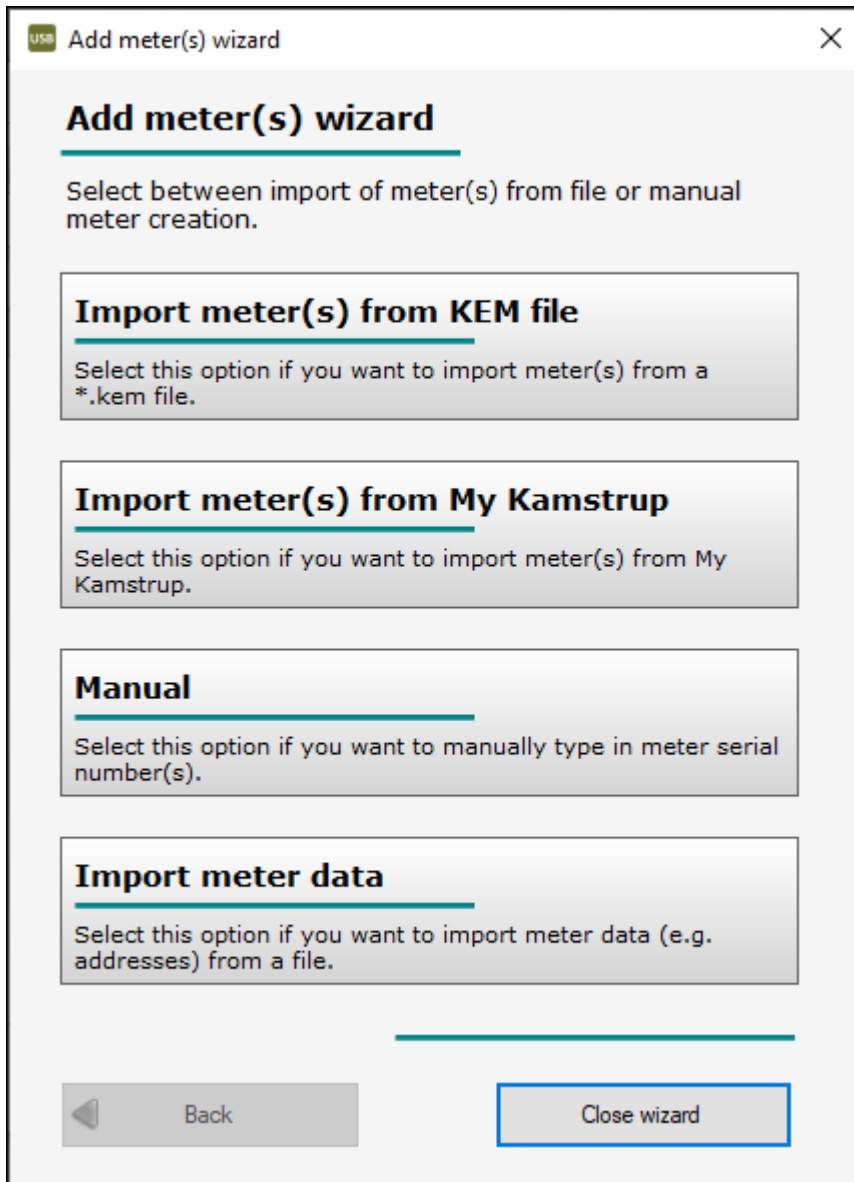
1. In the toolbar, select **Meters**:



2. In the **Edit meter** window that appears, select **Add**:



3. Select **Import meter(s) from My Kamstrup**:



4. Enter your user name and password to My Kamstrup:

USB Add meter(s) wizard

Import meter(s) and encryption keys


Import meter(s) and encryption keys from My Kamstrup.

E-mail address
johnsmith@kamstrup.com

Password
●●●●●●●●●●

Remember me

Import all meters

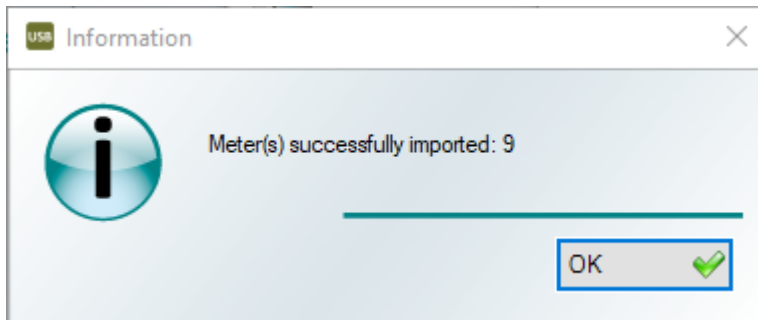
Import 

Back Close wizard

By default, only meters that are not already in USB Meter Reader will be imported. To import all meters (and overwrite meters that are already in USB Meter Reader), select **Import all meters**.

5. Select **Import**.

- Click **OK** in the message that appears:

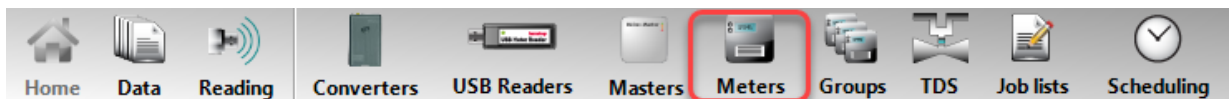


- Click **Close wizard**.

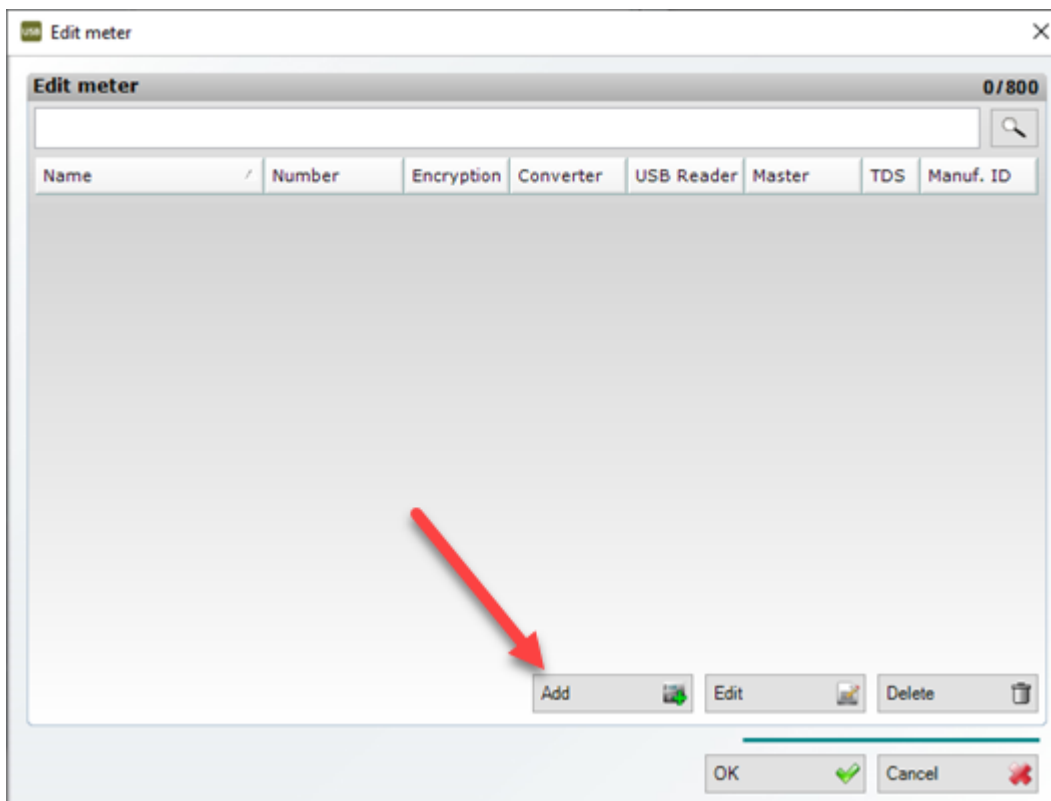
3.1.3 Manually create unencrypted meters

Follow the steps below to manually add one or more meters to USB Meter Reader:

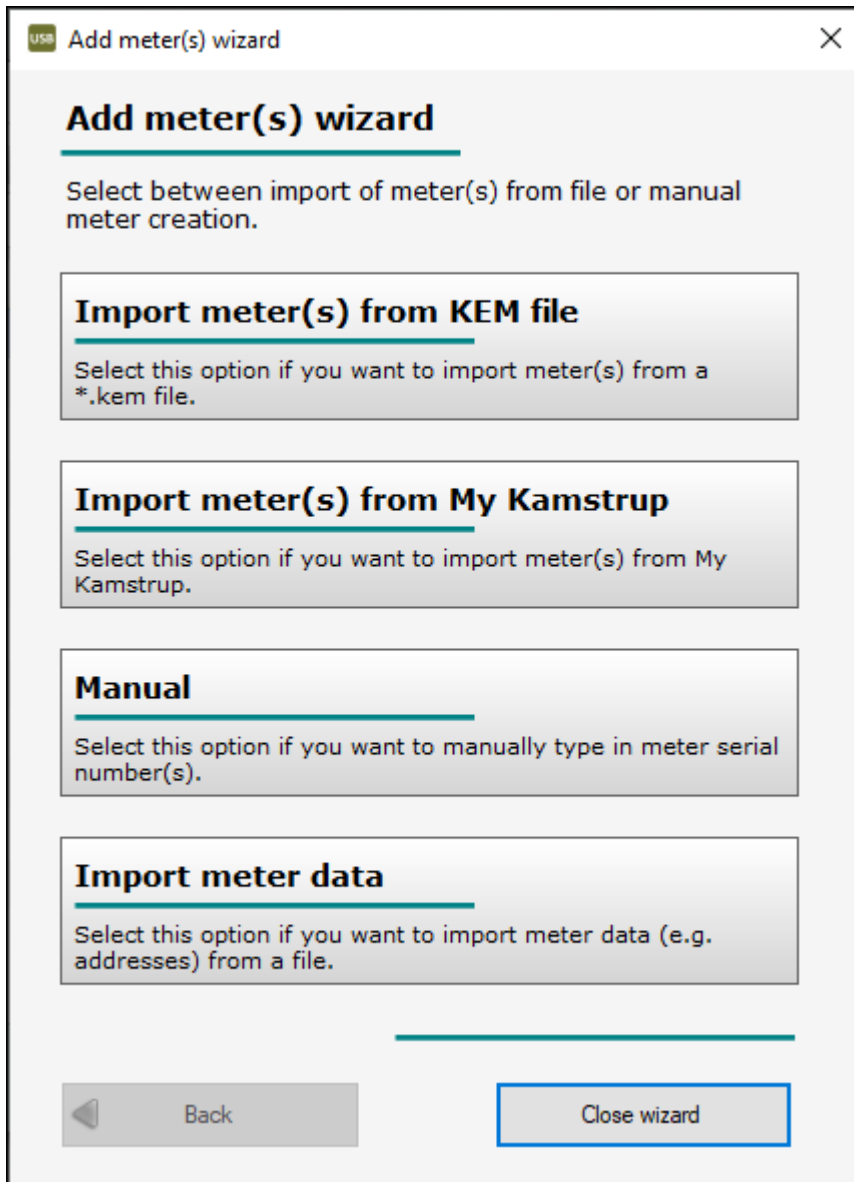
- In the toolbar, select **Meters**:



- In the **Edit meter** window that appears, select **Add**:



3. Select **Manual**:



4. In **Manufacturer ID**, select the following depending on the meter type you want to add:

- Kamstrup heat meter: **KAM**
- Kamstrup water meter of the type MULTICAL® 21, flowIQ® 21xx or flowIQ® 3100: **KAM**
- Kamstrup water meter of other types: **KAW**

- Enter a meter serial number in **Meter serial number from** to add a single meter. To add more consecutive numbered meters, enter the lowest serial number in **Meter serial number from** and the highest number in **Meter serial number to**:

- Select **Add**.
- Select **OK** in the message that appears:

8. Select **Close wizard**.

3.2 How to add converters



Converters are used for drive-by/walk-by reading of your meters.

In order to use the converter, it must be added to USB Meter Reader so that you can:

- add the meters you want to read to the converter
- transfer meter readings from the converter to USB Meter Reader when the meters have been read.

The communication between USB Meter Reader and the converter takes place either:

- via cable (by plugging the USB cable that came with your converter into the PC on which USB Meter Reader is installed)
- or via wireless Bluetooth connection

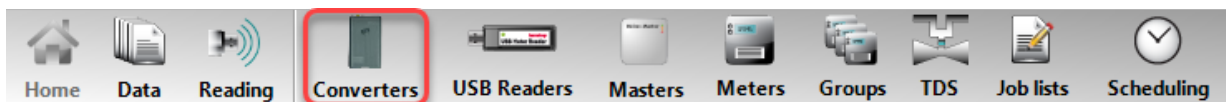
How to add a new converter to USB Meter Reader

- If you want to be able to communicate with USB Meter Reader both via cable and via wireless Bluetooth connection, follow [this procedure](#).
- If you want to communicate with USB Meter Reader via cable only, follow [this procedure](#).

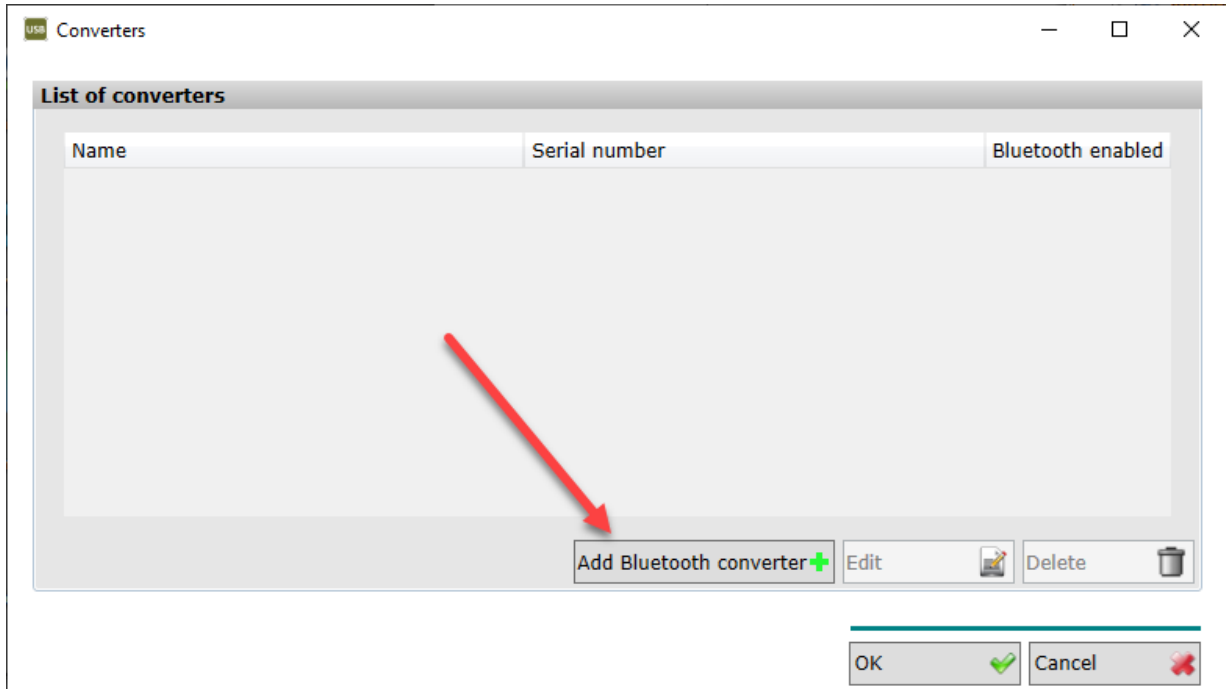
3.2.1 Adding a converter with Bluetooth connection to PC

Follow the steps below to add a converter to USB Meter Reader:

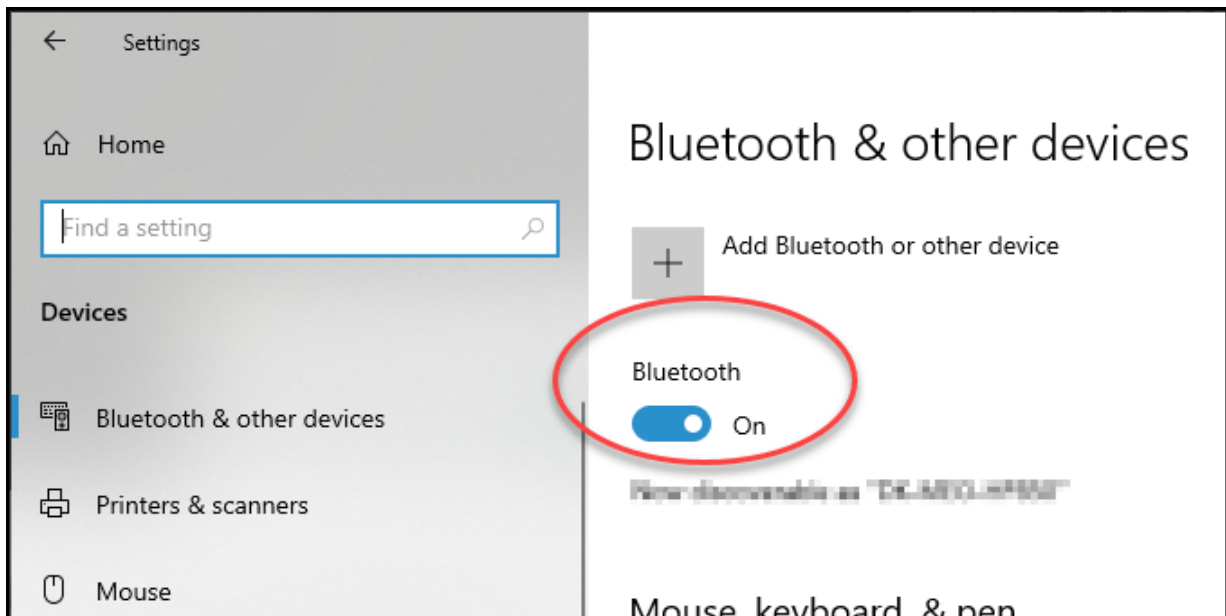
1. Turn on the converter by pressing the button on the front of the converter.
2. In the toolbar, select **Converters**:



3. In the **Converters** window that appears, select **Add Bluetooth converter**:

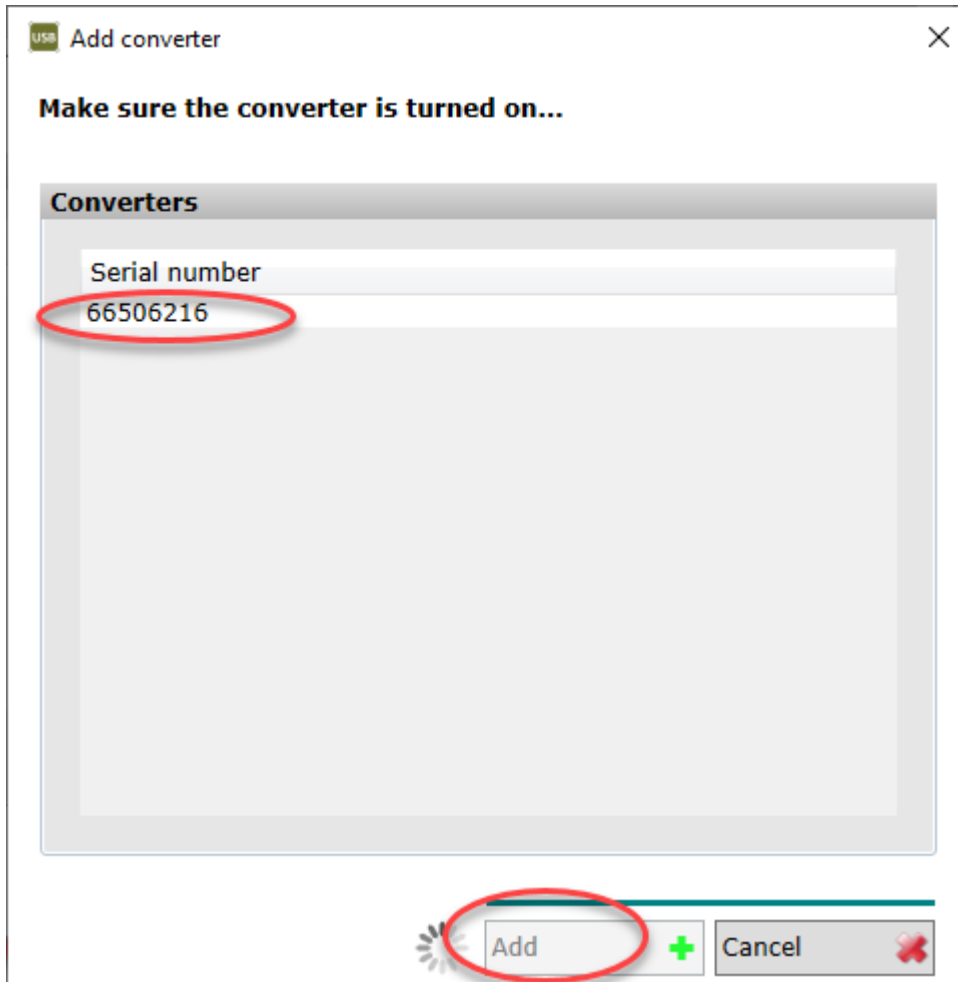


If the **Add Bluetooth converter** button is unavailable (dimmed), it means that Bluetooth communication is deactivated on your PC. If so, go to **start** menu > **Settings** > **Devices** and turn on **Bluetooth**:

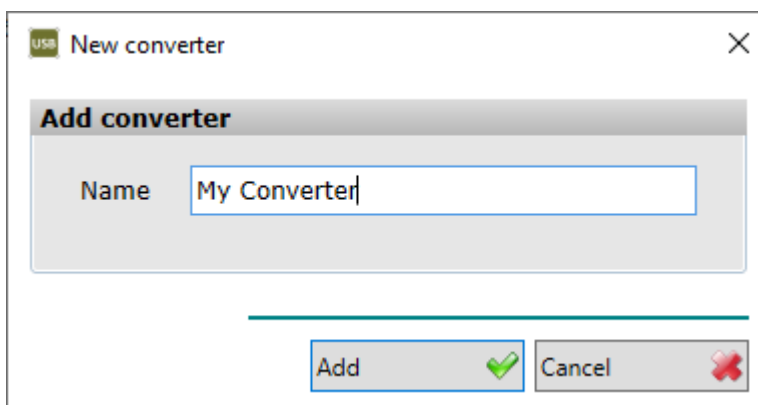


Close USB Meter Reader and open it again, for the new setting to take effect.

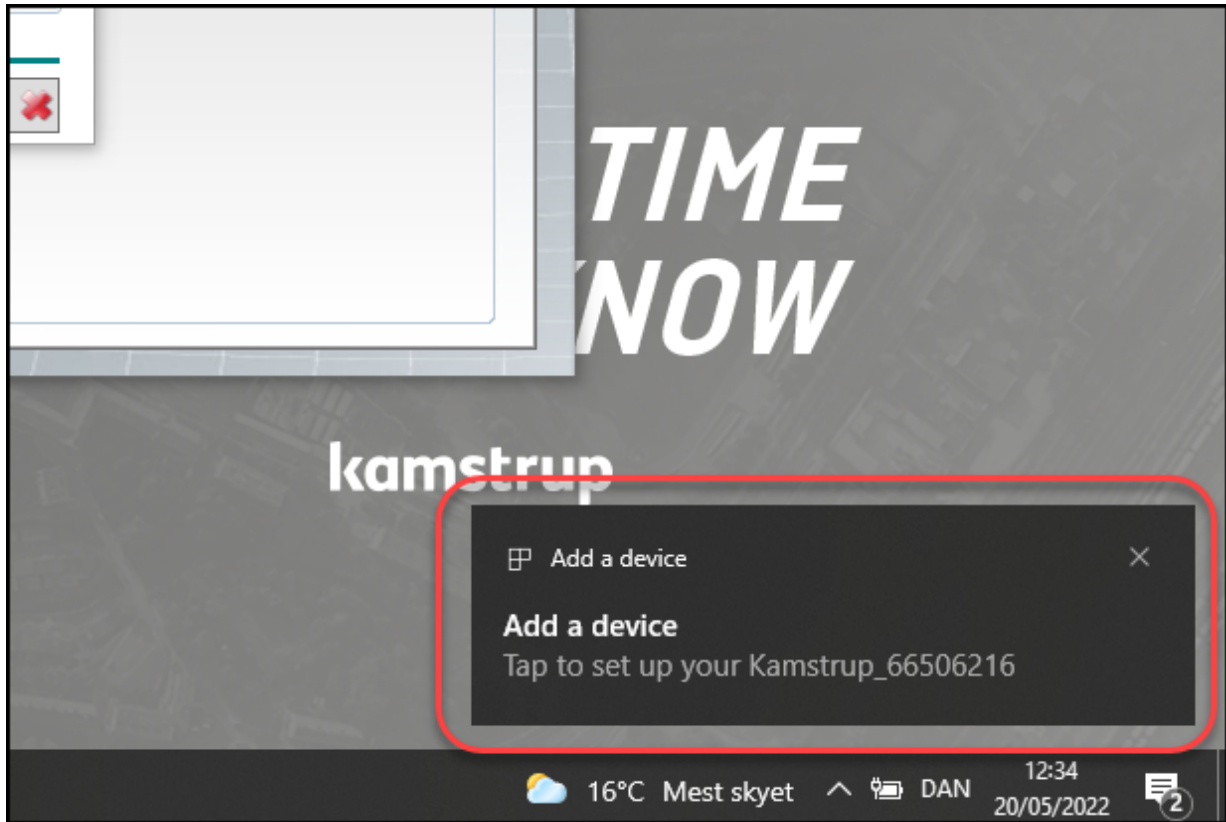
- In the window that appears, select the converter that appears in the list, and click **Add**:
If in doubt, check that the serial number (**S/N**) on the back of the converter matches the converter you select.



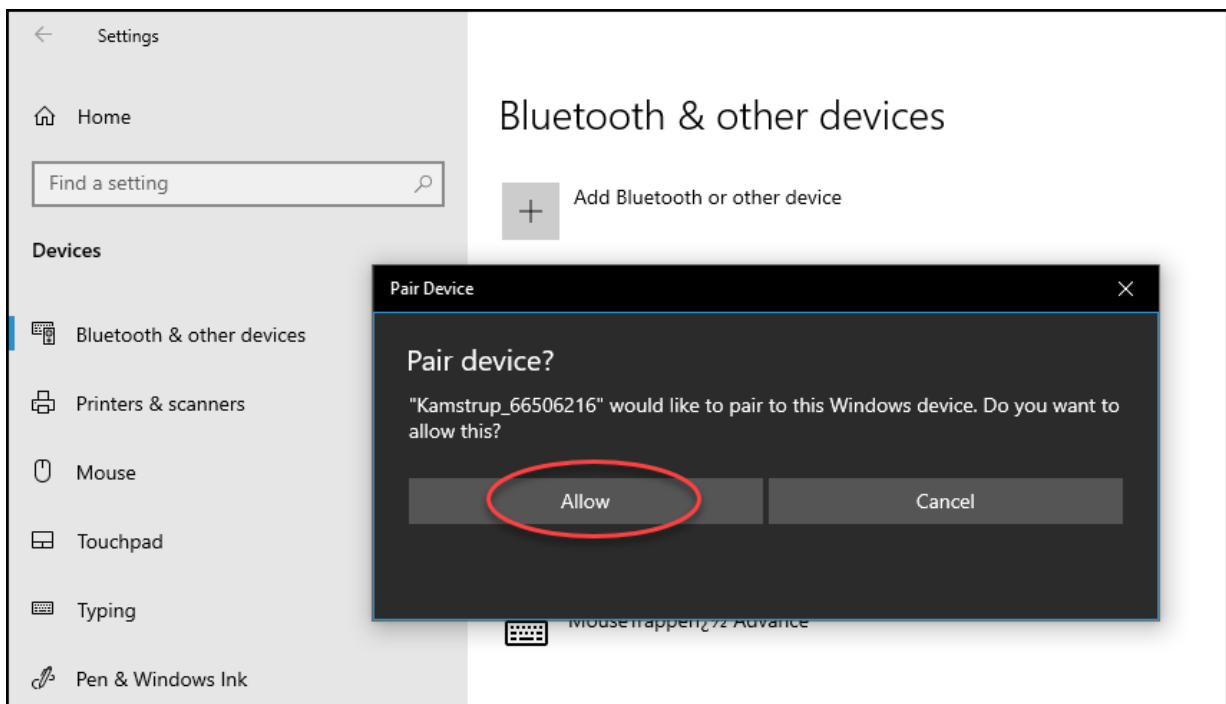
- Enter a name for your converter and click **Add**:



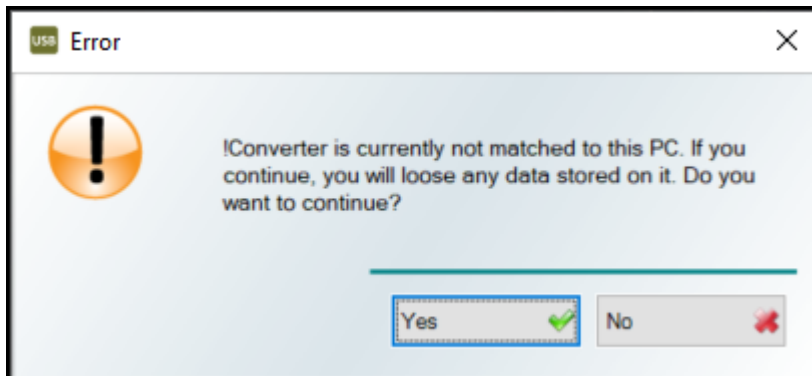
6. Click the message the appears at the bottom of your pc screen:



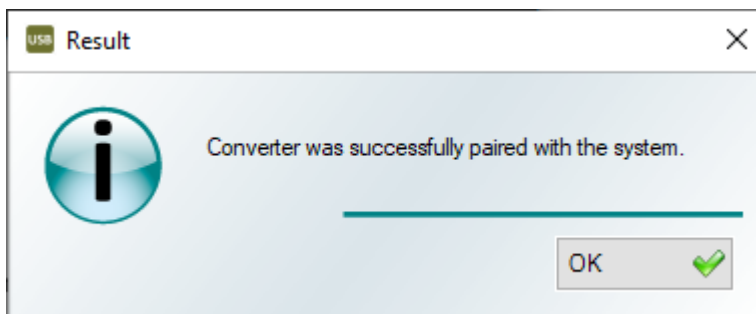
7. In the **Pair Device** window that appears, click **Allow**:



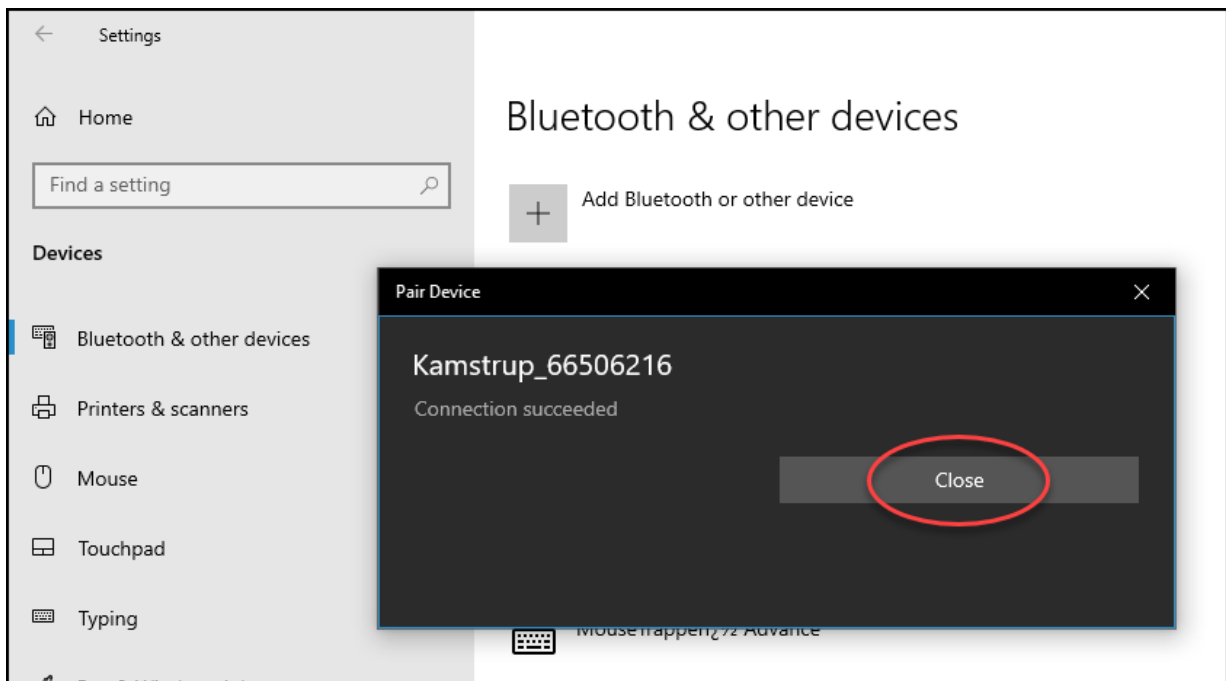
8. In the message that appears, click **Yes**:



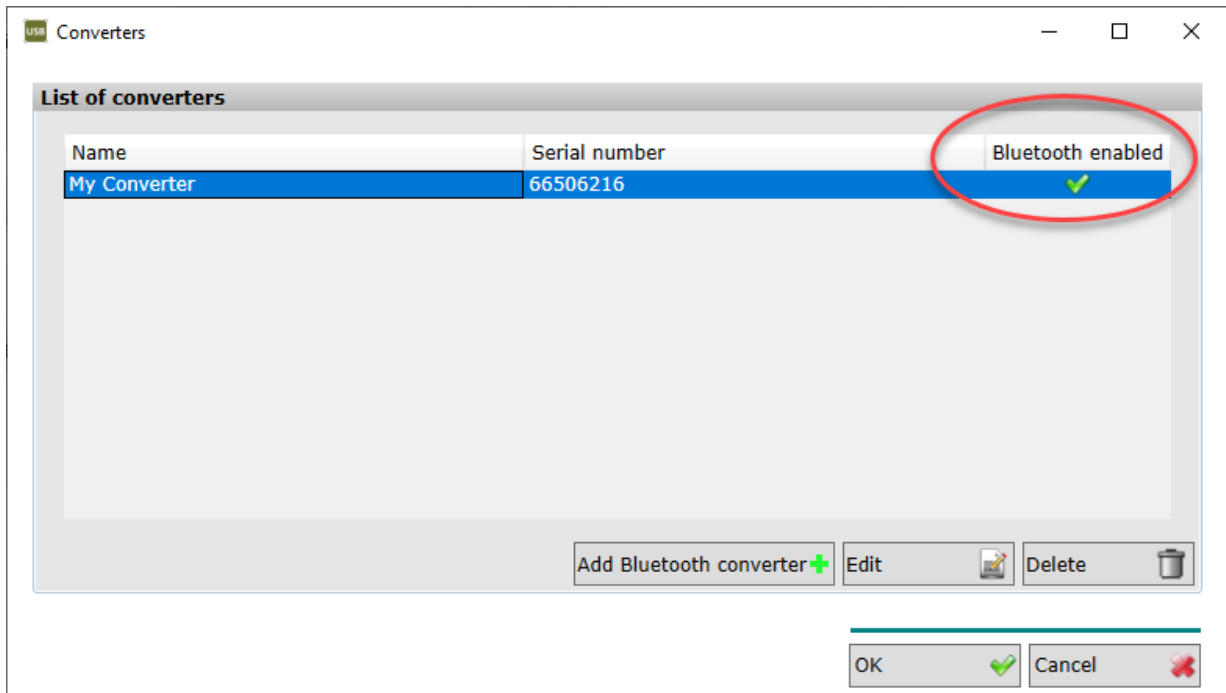
9. In the **Result** window that appears, click **OK**.



10. Click **Close** in the **Pair Device** window.



In the **Converters** window, you can now see that Bluetooth communication has been enabled for the converter:

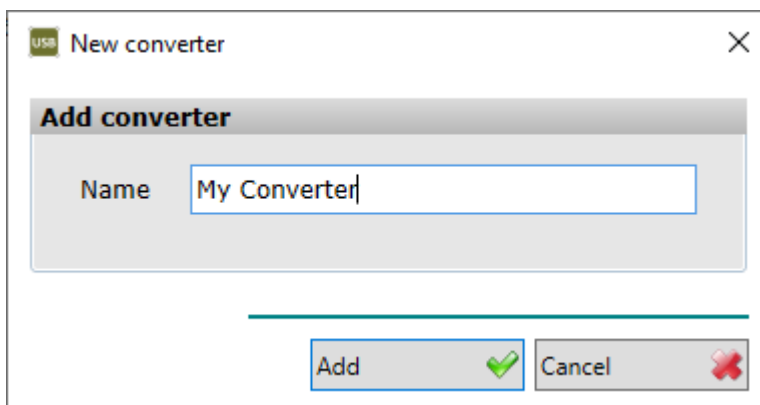


11. Click **OK**.

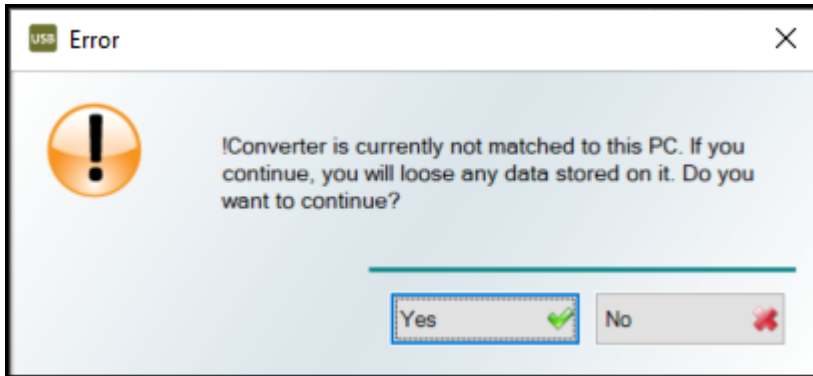
3.2.2 Adding converter with cable connection to PC

Follow the steps below to add a converter to USB Meter Reader:

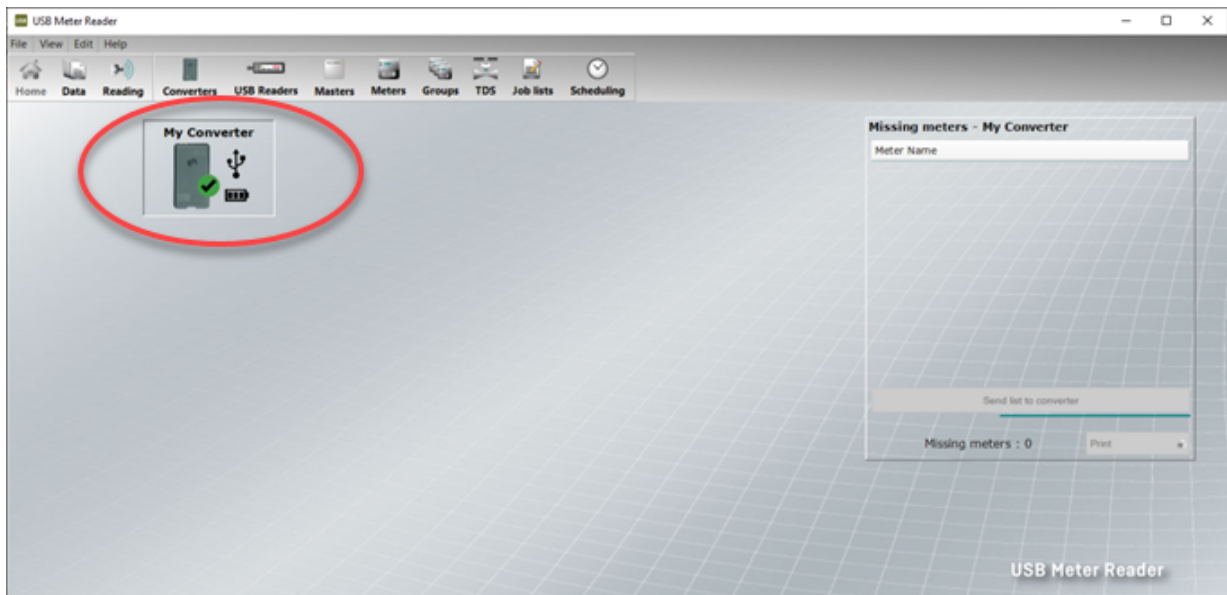
1. Plug the converter into your PC with the USB cable that came with your converter.
2. In the window that appears, enter a name for your converter and click **Add**:



3. In the message that appears, click **Yes**:



The converter is now added to USB Meter Reader:



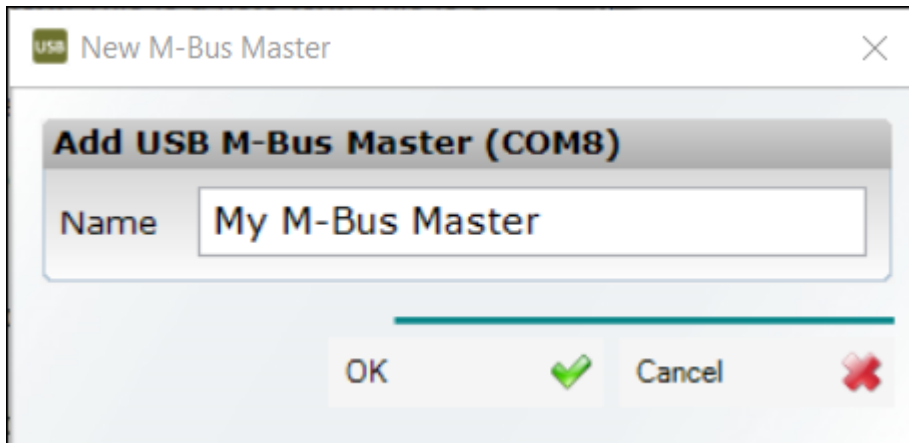
3.3 How to add M-Bus masters

Note An [M-Bus Master licence](#) for USB Meter Reader is required to add an M-Bus master to the system.

Follow the steps below to add a new M-Bus master:

1. Plug the USB cable from your M-Bus master into your PC.

2. In the **New M-Bus Master** window that appears, enter a name for your M-Bus master:



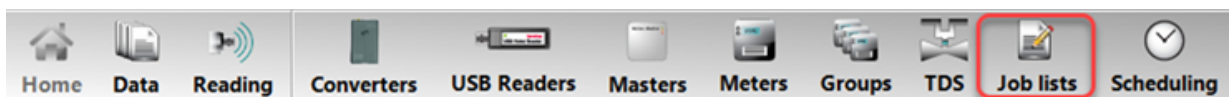
If a red error icon appears in the **Name** field, the name already exists and cannot be used.

3. Click **OK**.

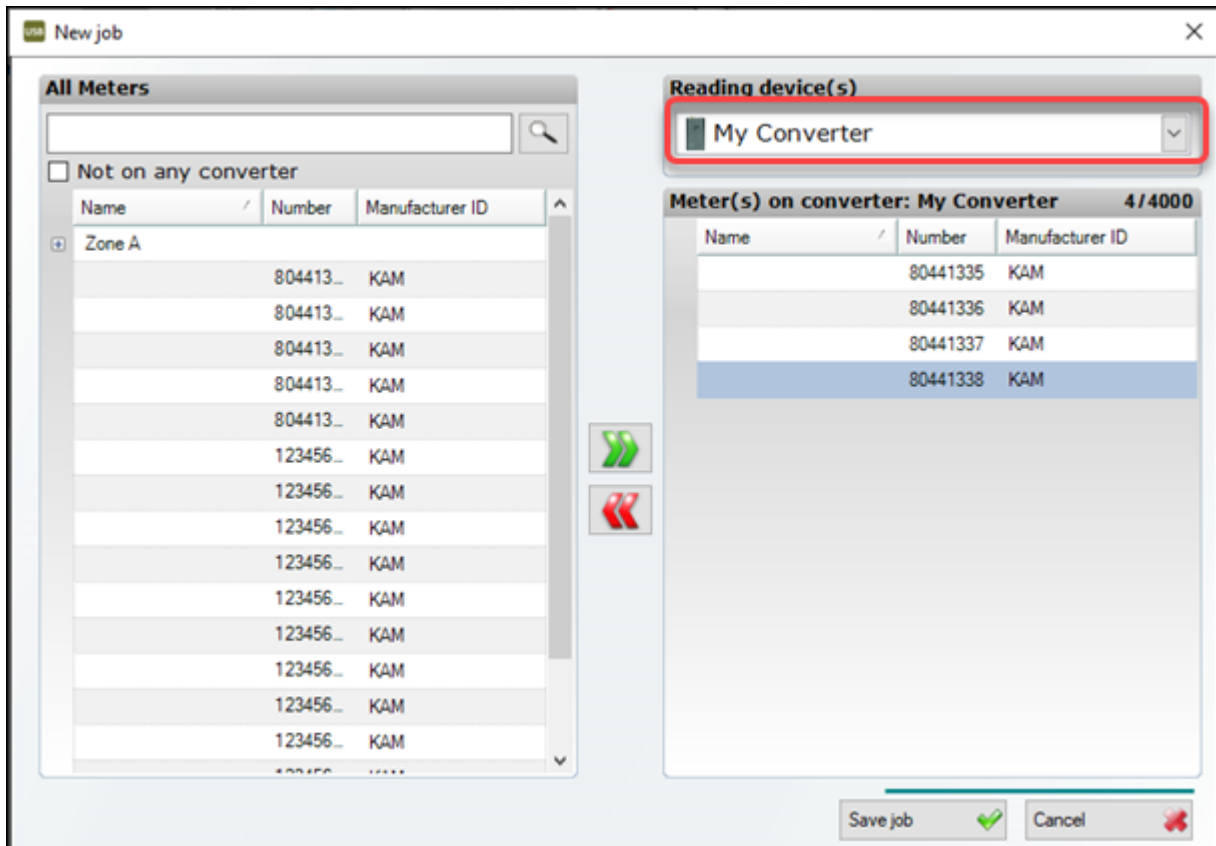
3.4 How to create a reading job



Follow the steps below to create a reading job with the list of meters you want to read:

1. In the toolbar, select **Job lists**:



- In the top right corner of the **New job** window that appears, select the converter or M-Bus master for which you want to create a reading job:



- In the **All Meters** list to the left, select the meter groups or meters you want to read with the converter/M-Bus master and click  to add them to the reading job. To remove meters from the reading job, select the meters in the list to the right and click .
- Click **Save job**.

3.5 How to read meters with a converter

When you read meters with a converter, you drive (or walk) past the houses where the meters are installed. The drive-by reading takes place in one of the following ways:

- [Stand-alone reading](#): You only use the converter when driving around to read your meters.
- [Reading via PC](#): You start and follow the reading via USB Meter Reader on your PC (meaning you bring both your PC and your converter when driving around to read your meters).

Important The very first time you read your meters with a converter, make sure to read them via PC in order to register basic information about the meter reading correctly in the system.

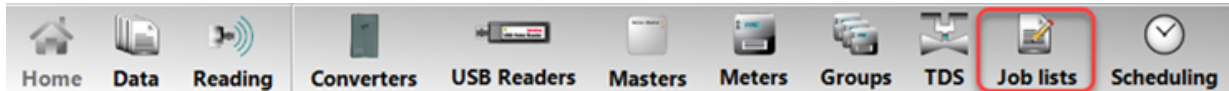
3.5.1 Stand-alone reading

Follow the steps below to read meters using the converter only:

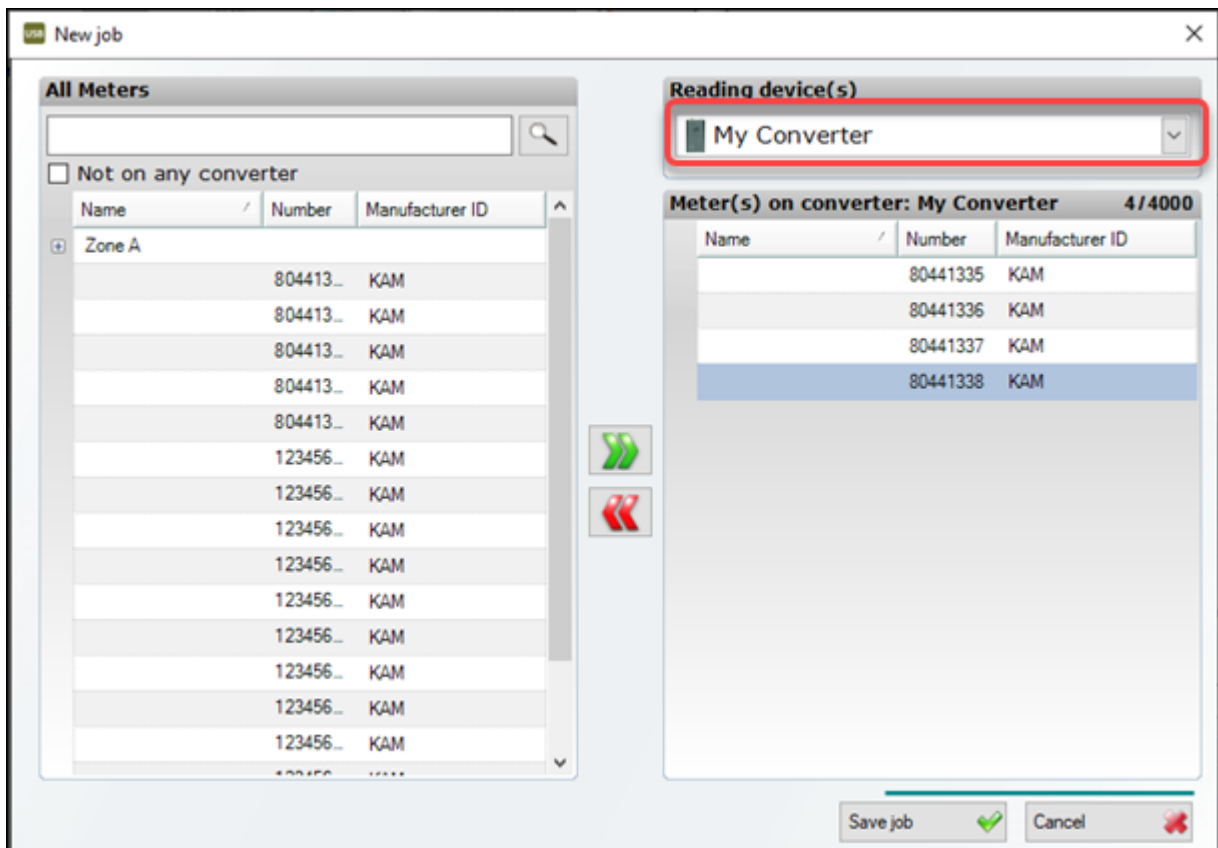
1. Make sure that USB Meter Reader is open on your PC and the converter is turned on.



If you plug the converter into your PC it turns on automatically. If you use the wireless Bluetooth connection, press and hold the button on the front of the converter until the green lights turn on - and keep it near the PC.

2. In the toolbar, select **Job lists**:



3. In the **New job** window that appears, select the converter in the top right corner:



4. Use the add  and remove  buttons to create the list of meters you want to read with the converter (list to the right).
5. Click **Save job**.
6. Start the reading by pressing the button on the front of the converter quickly twice followed by a long press (approx. 4 seconds).

The green light starts flashing on the converter. Each time a meter is read, the green light flashes twice with double speed. When the green light starts flashing slowly, all meters have been read.

Your data will be transferred to USB Meter Reader, the next time the converter connects to USB Meter Reader. You can see the data by selecting **Data** in the toolbar in USB Meter Reader.

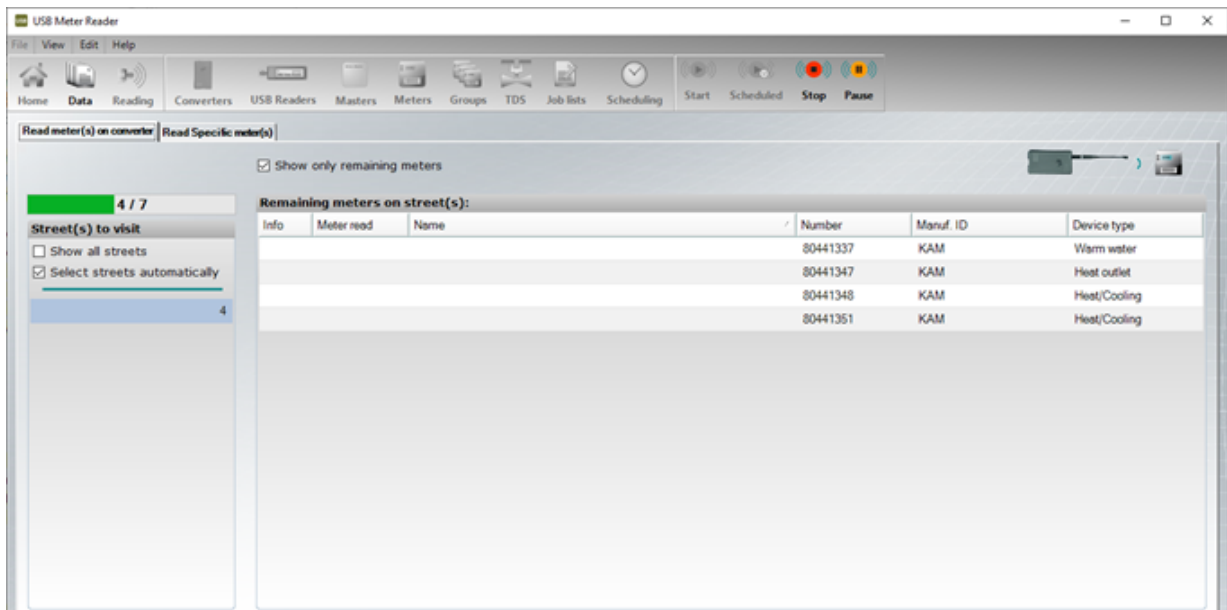
3.5.2 Reading via PC

Follow the steps below to read meters using both the converter and the PC:

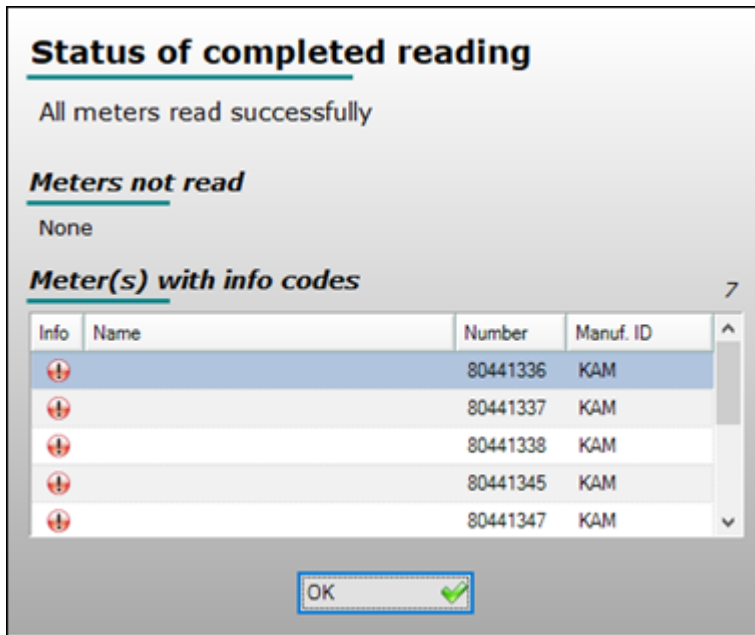
1. Make sure that USB Meter Reader is open on your PC and the converter is turned on.
If you plug the converter into your PC it turns on automatically. If you use the wireless Bluetooth connection, press and hold the button on the front of the converter until the green lights turn on - and keep it near the PC.
2. Select **Reading** in the toolbar, and check that the correct list of meters is saved in the converter. If not, create a new reading job list for the converter (for details, see [How to create a reading job](#)).
3. Select **Start reading** in the toolbar:



You can now follow the progression of the reading and see which meters still need to be read. You can also stop or pause the reading from the toolbar:



When the reading is completed, the following window appears:



5. Click **OK** and select **Data** in the toolbar to see the reading data.

3.6 How to read meters with an M-Bus master

Note An [M-Bus Master licence](#) for USB Meter Reader is required to read meters wired to an M-Bus master.

The reading takes place in one of the following ways:

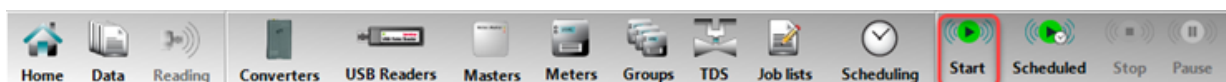
- Manually: You start the reading manually from USB Meter Reader. For details, follow [this procedure](#).
- Automatically: the reading takes place automatically according to a reading schedule that you have set up. For details, follow [this procedure](#).

3.6.1 Manual M-Bus reading

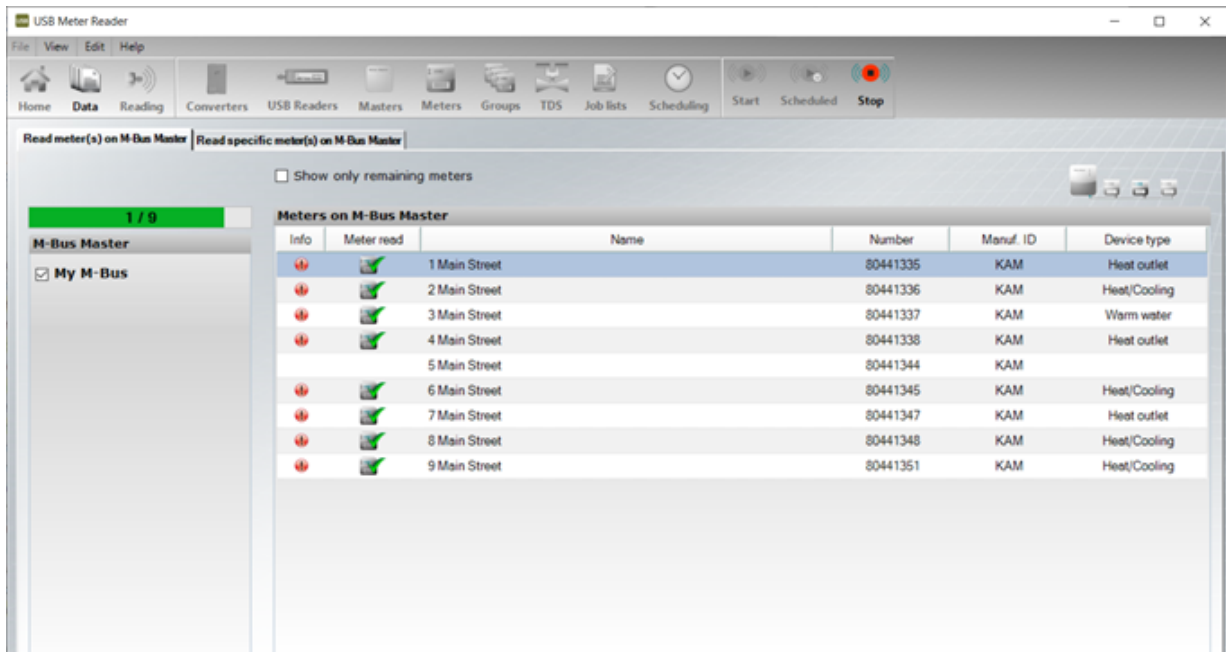
Prerequisites: The M-Bus master(s) must be connected to USB Meter Reader.

Follow the steps below to read meters connected to an M-Bus master:

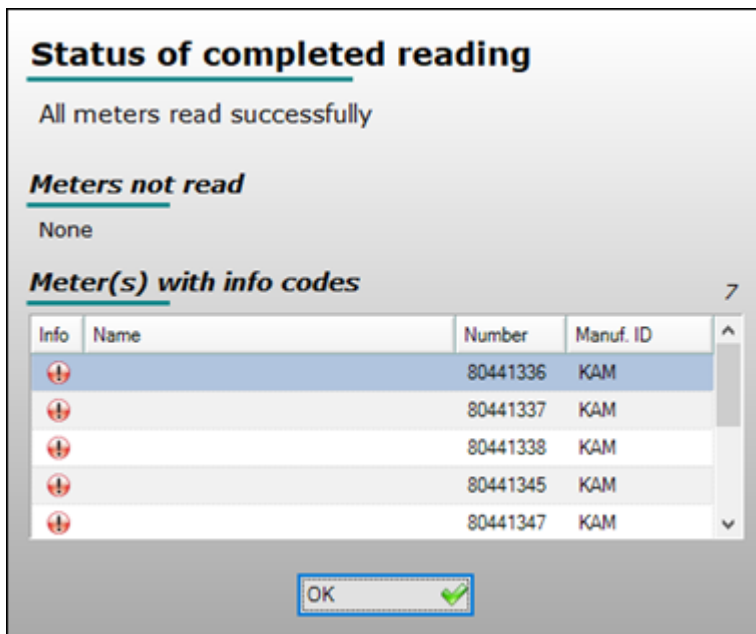
1. Select **Reading** in the toolbar, and check that the correct list of meters is going to be read. If not, create a new reading job for the M-Bus master (for details, see [How to create a reading job](#)).
2. Select **Start reading** in the toolbar:



You can now follow the progression of the reading and see which meters still need to be read. You can also stop the reading from the toolbar:



When the reading is completed, the following window appears:



5. Click **OK** and select **Data** in the toolbar to see the reading data.

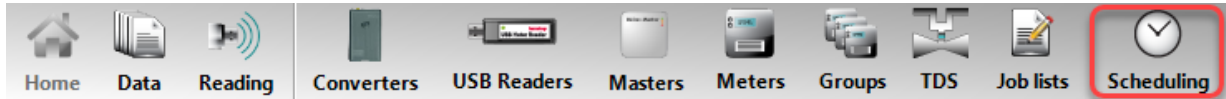
3.6.2 Automatic M-Bus reading

Prerequisites: For automatic meter reading to work, the M-Bus master(s) must be connected to USB Meter Reader, and a reading schedule must be set up.

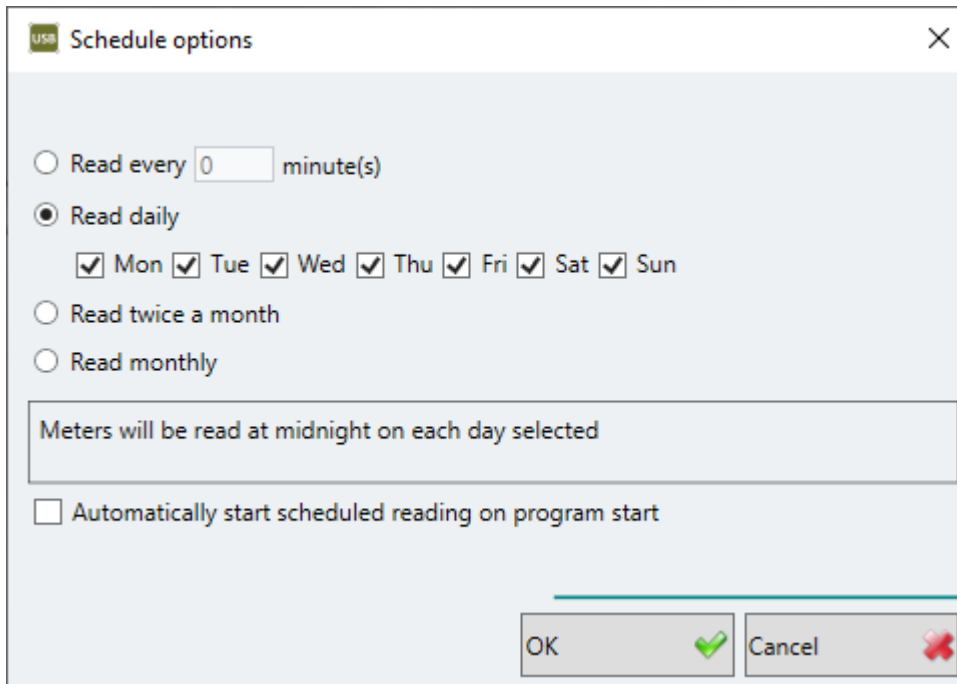
Note Only meters that are wired to the active M-Bus master(s) and included in the [current reading job](#) of the M-Bus master(s) will be automatically read.

How to set up a reading schedule

1. In the toolbar, select **Scheduling**:



2. In the **Schedule options** window that appears, select the desired reading interval:



3. Turn on **Automatically start scheduled reading on program start**.

The reading takes place automatically at the scheduled time if the program is open at that time. If not, the reading starts automatically when you open USB Meter Reader.

If you turn off **Automatically start scheduled reading on program start**, no automatic meter reading takes place.

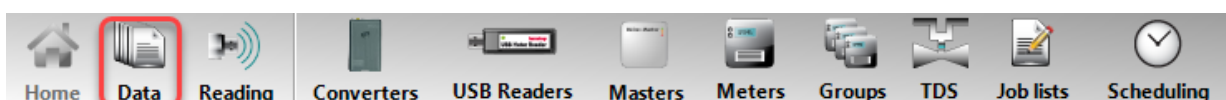
4. Click **OK**.

3.7 How to see meter readings

Note Only the latest meter reading for each meter is visible in USB Meter Reader. However, if you have the [import/export of meter data licence](#), you are able to [export all readings](#) for the time period that you select.

Follow the steps below to see the latest meter readings for all meters:

1. In the toolbar, select **Data**:



The latest reading for each meter now appears:

The screenshot shows the USB Meter Reader application window. The 'Views' panel on the left has 'List view' selected. The main area displays a table of meters with the following columns: Name, Number, Receive time, Manuf. ID, Volume - V1, Energy - E1, and Pulse A. The table contains 16 rows of data, including meters on Main Street and Church Road.

Name	Number	Receive time	Manuf. ID	Volume - V1	Energy - E1	Pulse A
1 Main Street	80441335	31/05/2022 13:18:32	KAM	27079.26 m³	2589912 kWh	0 m³
2 Main Street	80441336	13/06/2022 09:08:11	KAM	6232.018 m³	480121.3 kWh	
3 Main Street	80441337	13/06/2022 09:08:18	KAM	36637.261 m³		
4 Main Street	80441338	13/06/2022 09:08:14	KAM	724343 m³	252919 GJ	
5 Main Street	80441344		KAM			
6 Main Street	80441345	13/06/2022 09:08:14	KAM	163736 m³	15603.47 MWh	0 m³
7 Main Street	80441347	13/06/2022 09:08:14	KAM	4161931 m³	304282.8 MWh	
8 Main Street	80441348	13/06/2022 09:08:42	KAM	4150921.9 m³	8303697.4 GJ	0 m³
9 Main Street	80441351	13/06/2022 09:08:19	KAM	3936353.9 m³	8162170.9 GJ	
1 Church Road	123456789		KAM			
2 Church Road	123456790		KAM			
3 Church Road	123456791		KAM			
4 Church Road	123456792		KAM			
5 Church Road	123456793		KAM			
6 Church Road	123456794		KAM			
7 Church Road	123456795		KAM			
8 Church Road	123456796		KAM			

- To only see the meter readings belonging to a specific device (converter/M-Bus master) or meter group, select the device/meter group in the **Show only** field.
- To see more data from the latest reading, select **Detail view** and use the **Navigation** arrows to browse through the meters in **Detail view**:

The screenshot shows the USB Meter Reader application window with 'Detail view' selected. The 'Navigation' panel on the left has navigation arrows highlighted with a red box. The main area displays detailed information for meter 80441336 at 2 Main Street.

80441336 2 Main Street	
Basic Information:	
Receive time	13/06/2022 09:08:11
Manuf. ID	KAM
Device type	Heat/Cooling
Meter type	MC603
Hardware version	53
Actual data:	
Date	13/06/2022
Energy - E1	480121.3 kWh
Energy - E3	0 kWh
Energy - E8 (m³T1)	3664030 m³°C
Energy - E9 (m³T2)	3724781 m³°C
Volume - V1	6232.018 m³
Flow V1	1458 l/h
Flow Temperature	92.91 °C
Outlet temperature	10.29 °C
Operating hour counter	24931 hours

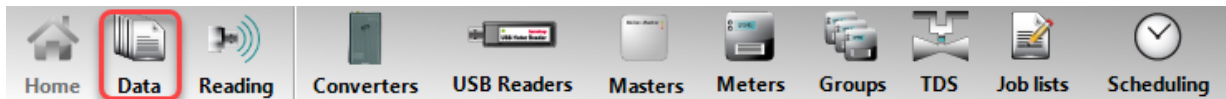
For details about how to sort and adjust the columns in list view, click [here](#).

3.8 How to export meter readings

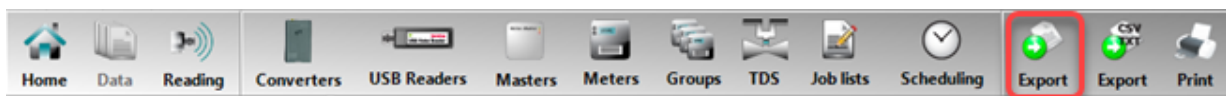
Note An [Import/export of meter data licence](#) is required to export all readings for selected meters in a selected period. Otherwise you will only be able to export the latest reading for all meters.

How to export latest reading for all meters

1. In the toolbar, select **Data**:



2. In the toolbar, select **Export**:

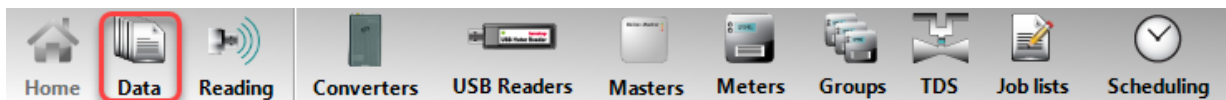


3. Browse to the desired folder and enter a name for your export file.
4. Select the desired file format and click **Save**.

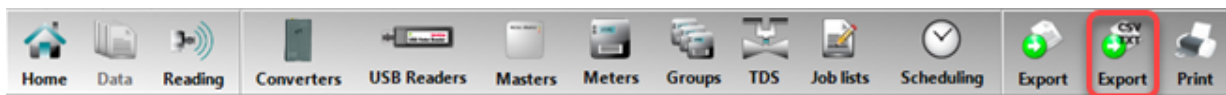
By default, reading data can be exported in the following formats: XLS, XLM, TXT, CSV and PDF.

How to export all readings for one or more meters in a selected period

1. In the toolbar, select **Data**:



2. In the toolbar, select **CSV/TXT Export**:



3. In the **Meter data export** window that appears, select whether you want to export **All meters**, selected meters (**Custom list**) or a meter group.
4. In **Time limits**, select the time interval for which you want to export readings.
5. In **Format**, select a previously defined export and go to step 14. Otherwise follow the steps below to define an export format.
6. In **Separator**, select the character you want to insert between all meter values to separate them (typically semicolon or comma).
7. In **Only the latest reading** check box, select if you want to export all readings (turned off) or only the latest reading (turned on) in the selected time interval.
8. In **Date format**, select the format in which you want to export dates.
9. In **Property**, select the meter value you want to export.

10. In **Index**, enter a number for the meter value to indicate the sequence of exported values.
11. In **Exclude unit**, select whether you want to include units of measurement (turned off) or not (turned on) in the export file
12. In **Split value and unit**, select whether you want to insert a separator between the value and unit (turned on) or not (turned off)
13. Select **Export**.
14. Browse to the desired folder and enter a name for your export file.
15. Select the desired file format and click **Save**.

By default, reading data can be exported in TXT or CSV format.

3.9 How to dis- and reconnect heat supply

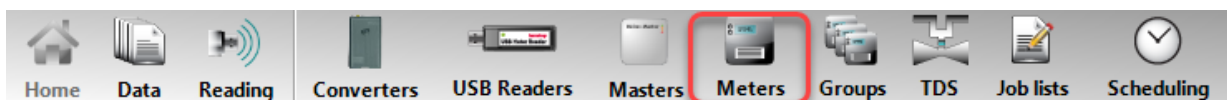
Note A [Thermal Disconnect licence](#) for USB Meter Reader is required to disconnect and reconnect the heat supply.

Only the heat supply of meters that fulfill the following criteria can be dis- and reconnected:

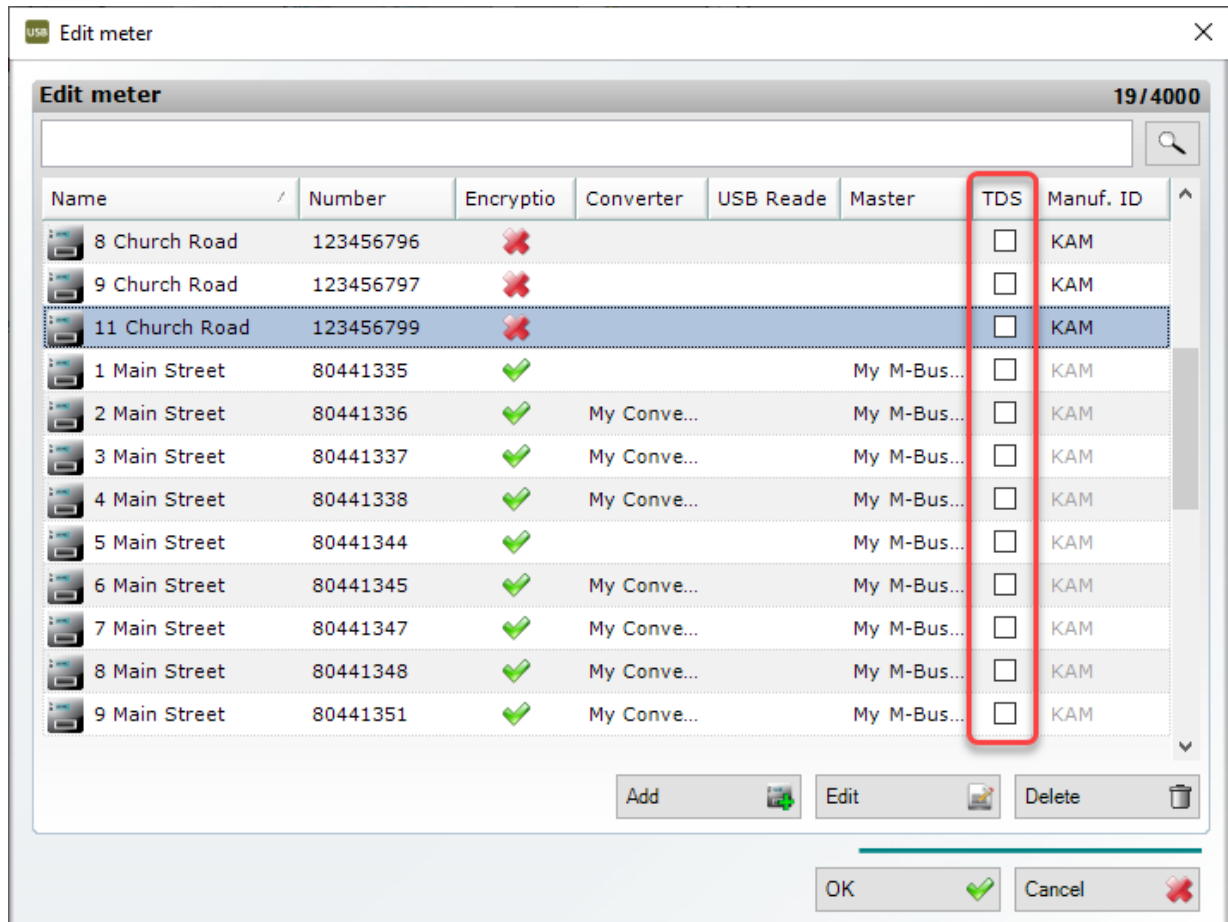
- The meter must be a MULTICAL® 403, 603 or 803 meter
- The meter must be read by an M-Bus master
- The meter must be equipped with a HC-003-22 module connected to a thermal actuator
- The meter must be configured for “controlled outputs” (the PP configuration of the meter is set to 99)

How to set up a meter as a thermal disconnect meter in USB Meter Reader

1. In the toolbar, select **Meters**:

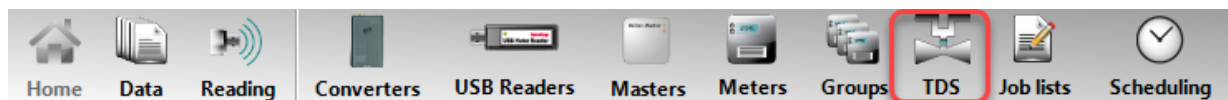


- In the **Edit meter** window that appears, select the **TDS** check box for the meter in question and click **OK**:

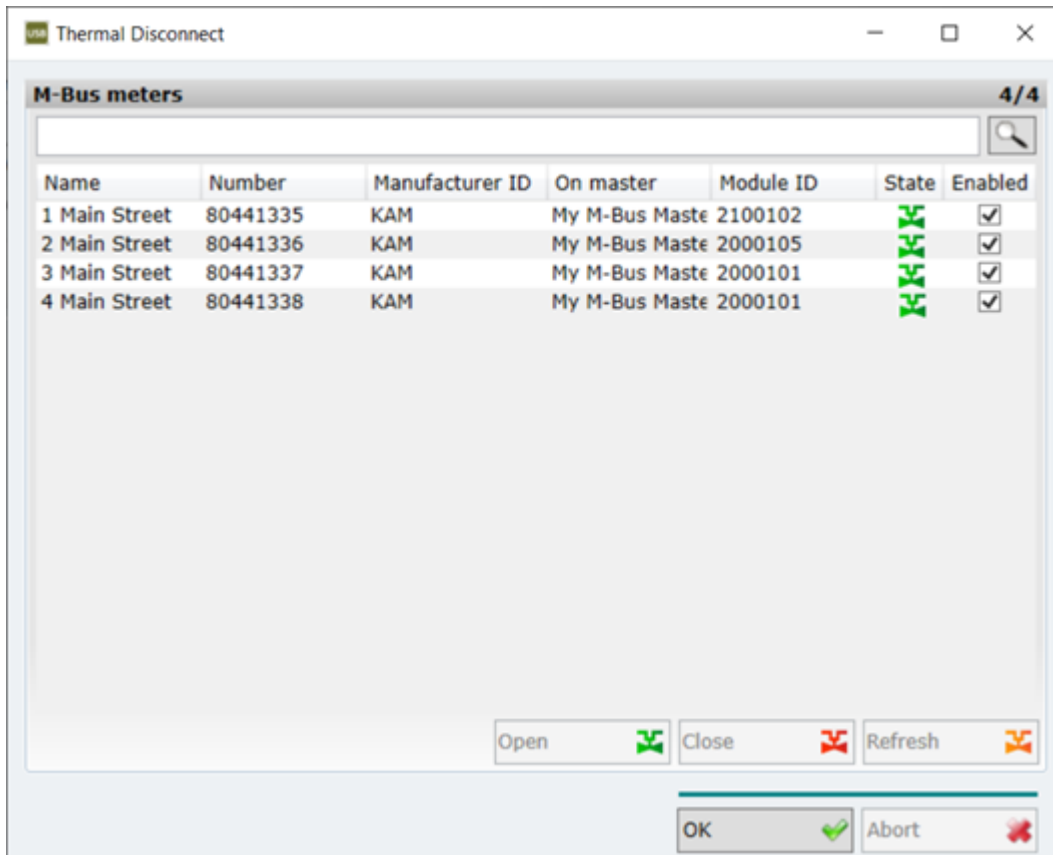


How to disconnect or reconnect the heat supply for a meter

- In the toolbar, select **TDS**:



2. In the **Thermal Disconnect** window that appears, select the meter for which you want to disconnect or reconnect the heat supply:



3. Follow step a or b:
 - a. To disconnect the heat supply, select **Close**.

OR

 - b. To reconnect the heat supply, select **Open**.
4. Click **OK** to confirm.

3.10 How to work with meters

Once you have added meters to USB Meter Reader, you can

- [Add addresses to meters](#)
- [Organise meters in groups](#)
- [Add meters and meter groups to reading jobs](#)
- [See reading for a meter](#)
- [Rename meters](#)
- [Delete meters](#)

3.10.1 How to add addresses to meters

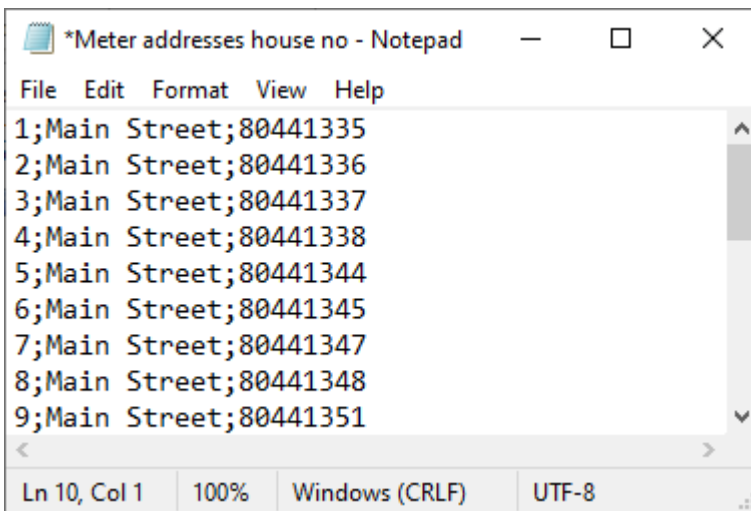
There are two ways of adding addresses to your meters:

- [Import a file](#) in TXT or CSV format, e.g. from your billing system, with meter serial numbers and address information. (Requires an Import/Export add-on to USB Meter Reader).
- [Manually enter addresses](#) for your meters.

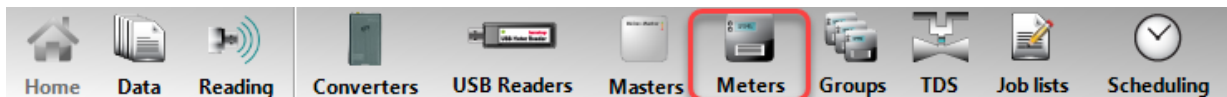
3.10.1.1 Importing addresses

Note An [Import/Export licence](#) for USB Meter Reader is required to import meter addresses.

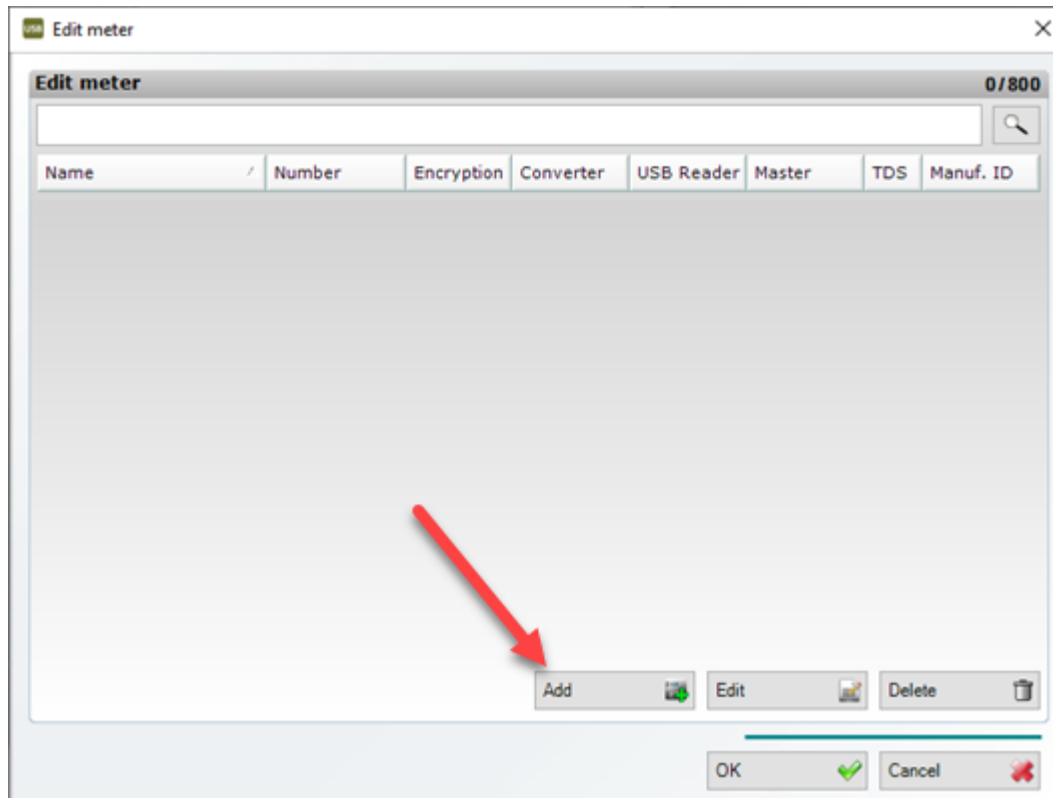
Prerequisite: A file with addresses and meter serial numbers in TXT or CSV format, e.g. from your billing system, must be created in advance. An example with house number, street name and meter serial number is shown below:



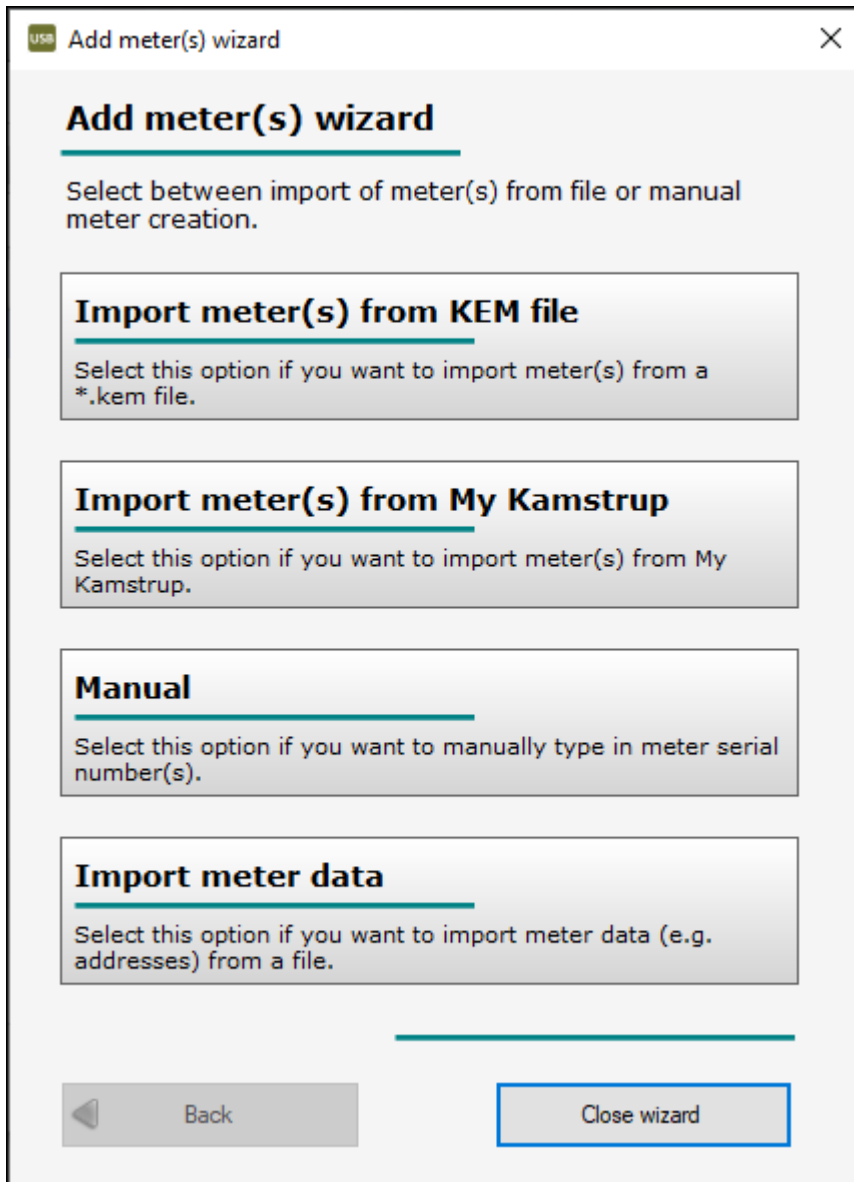
1. In the toolbar, select **Meters**:



2. In the **Edit meter** window that appears, select **Add**:

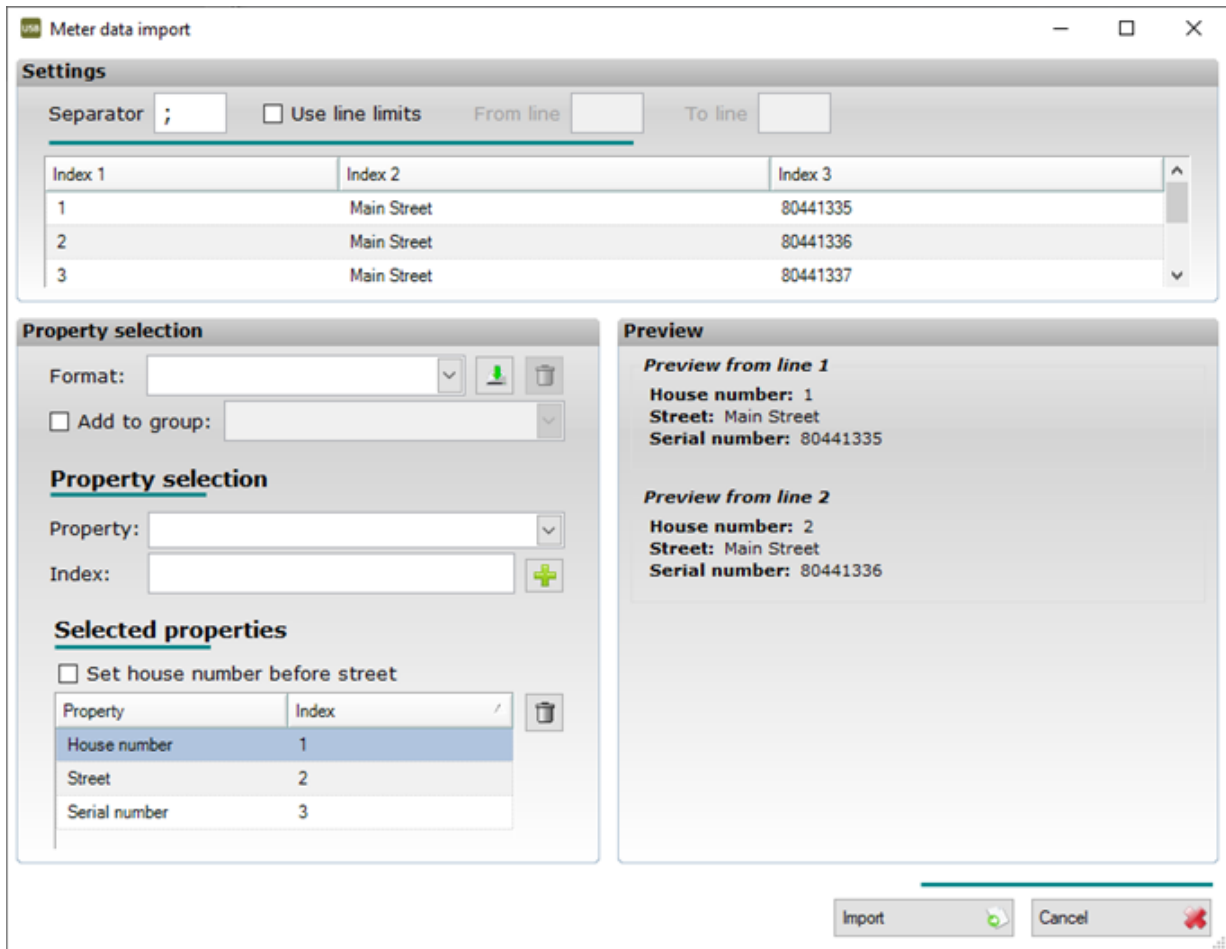




3. Select **Import meter data**:



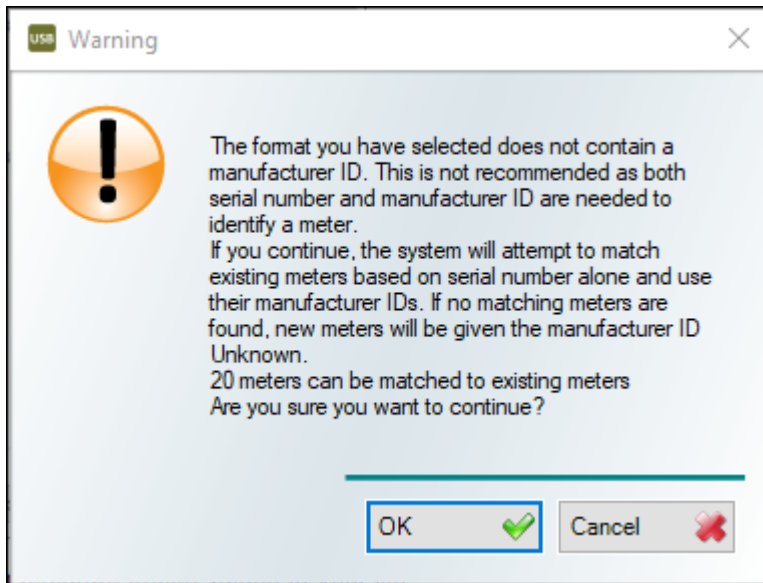
4. Browse to and select the TXT or CSV file with your meter addresses. Click **Open**.

The **Meter data import** window appears:

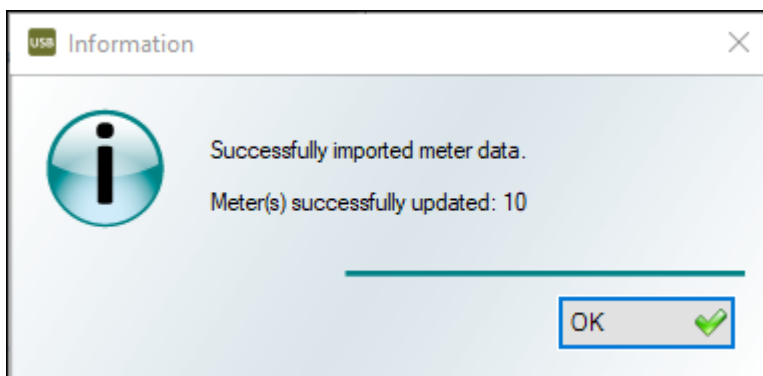


- In **Separator**, select the character (typically semicolon or comma) used to separate import values in your file.
- If you only want to import part of your file, select **Use line limits** and enter the line numbers to include in the **From line** and **To line** fields.
- In **Property**, select the first value in your file, e.g. 'House number', enter '1' in the **Index** field and click .
- In **Property**, select the second value in your file, e.g. 'Street', enter '2' in the **Index** field and click .
- Repeat step 8 for each value in your file.
- If you want the house number before the street name, select **Set house number before street**.
- Click **Import**.

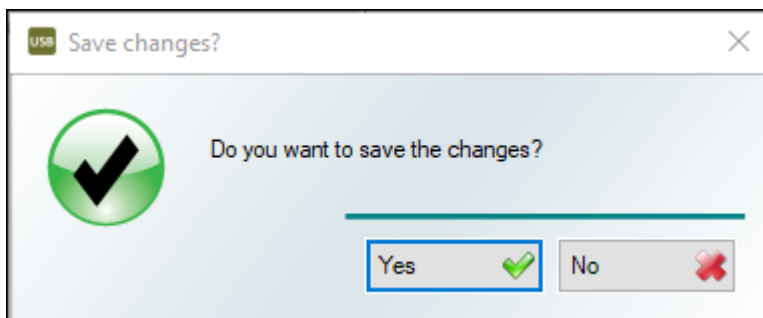
If your file does not contain a manufacturer ID, a warning message appears:



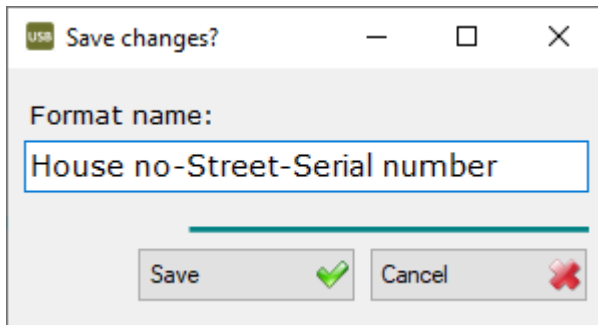
12. Click **OK** if your meter serial numbers are unique without the manufacturer ID or the ID has already been imported with the meter. Otherwise abort the import and add a manufacturer ID to your import file.
13. Click **OK** in the import result message that appears:



14. If you want to save the import format you have just created, click **Yes** and follow step 15. Otherwise click **No** and go to step 16:



15. Enter a name for your import format and click **Save**:

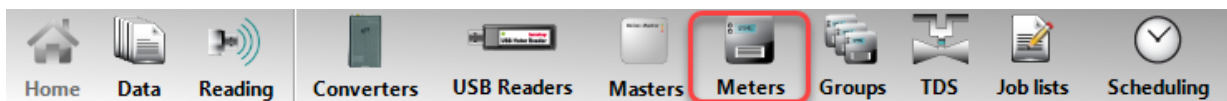


16. Click **Close wizard**.

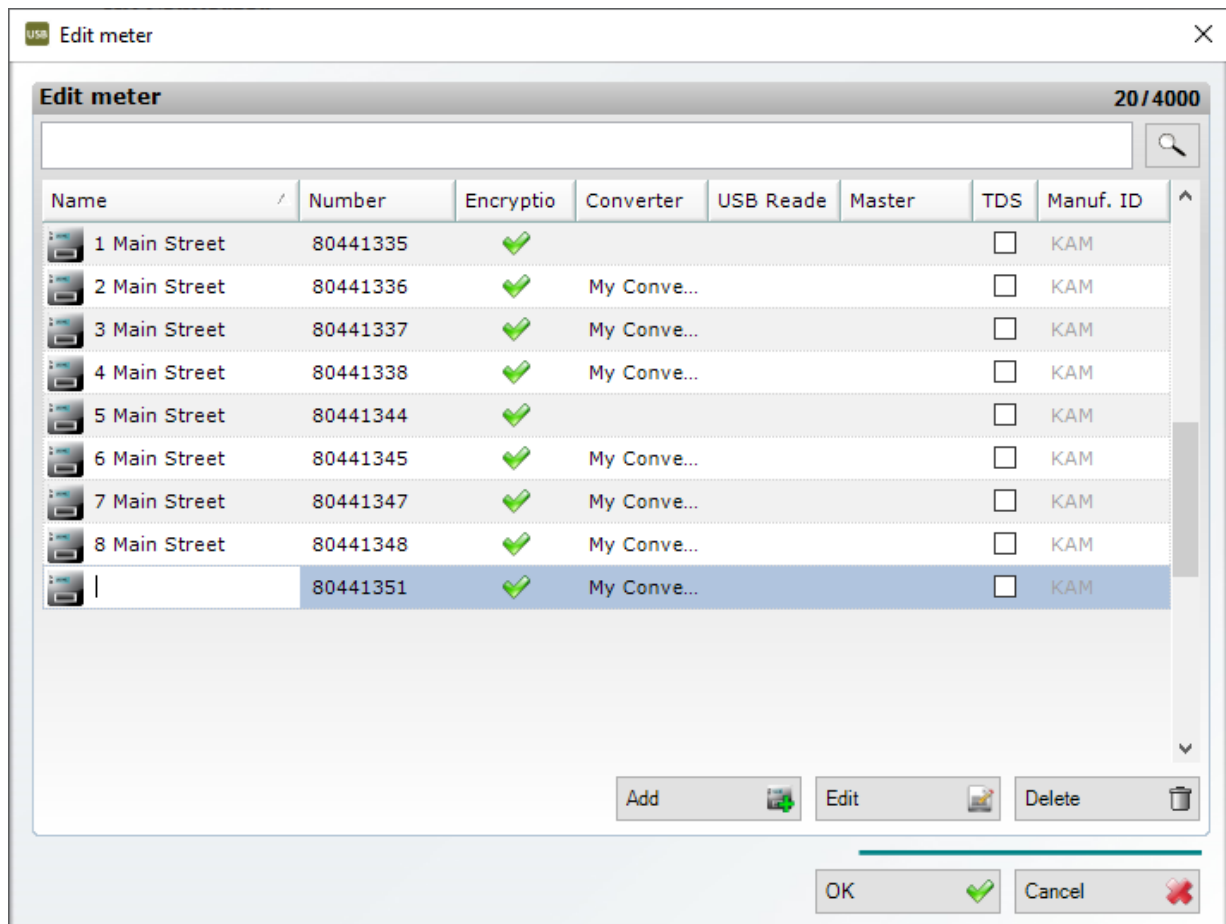
3.10.1.2 Entering addresses

Follow the steps below to manually enter meter addresses in USB Meter Reader:

1. In the toolbar, select **Meters**:



- In the **Edit meter** window that appears, double-click the meter to which you want to add an address:



- Enter the address and press the RETURN key.
- When you are done entering the desired addresses, click **OK**.

3.10.2 How to organise meters in groups

Meters can be organised in groups. Typically you would group meters according to geographical areas to create logical reading groups. In this way you can easily create [reading jobs](#) for your drive-by readings.

A meter can be part of more than one group, if desired.

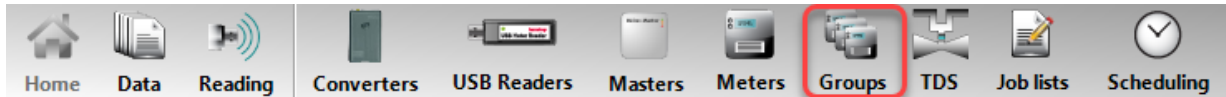
What do you want to do?

- [Create a meter group](#)
- [Change a meter group](#)
- [Delete a meter group](#)

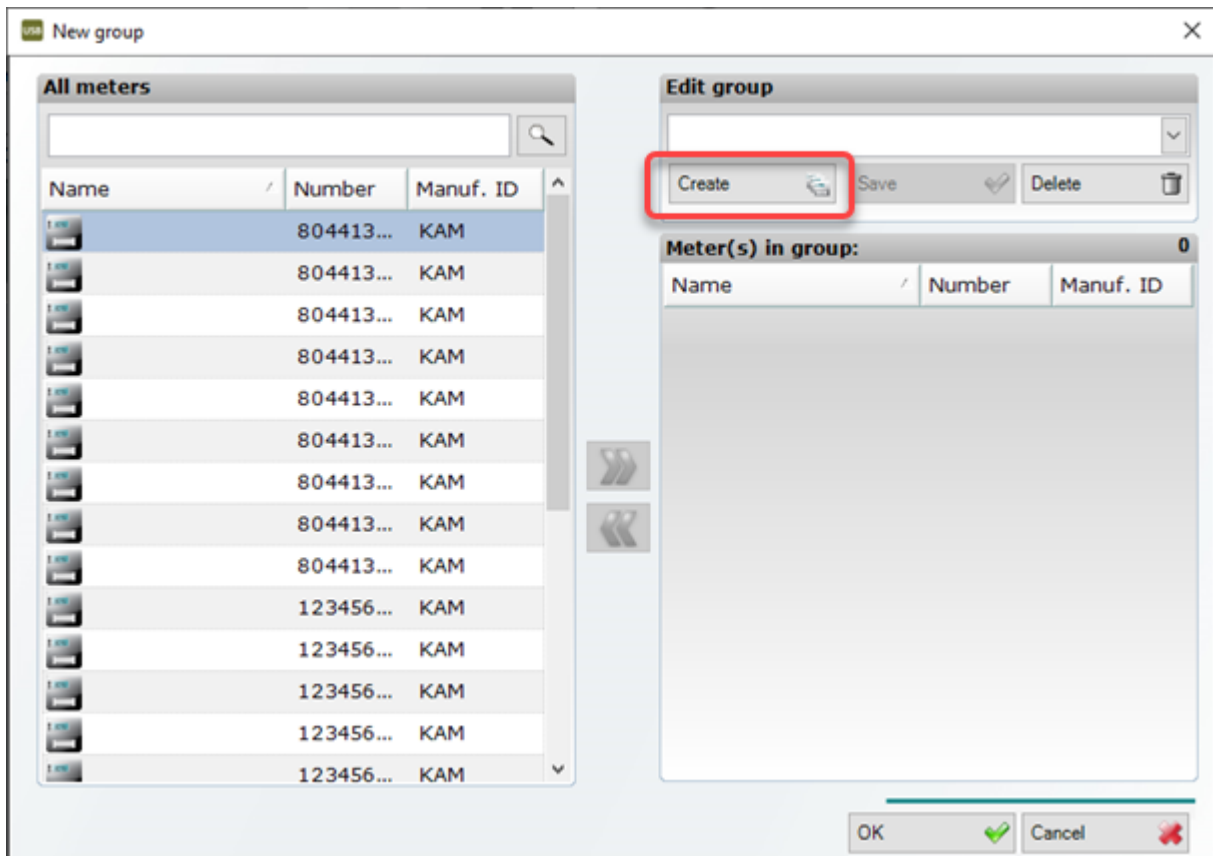
3.10.2.1 Creating a meter group

Follow the steps below to create a new group of meters:

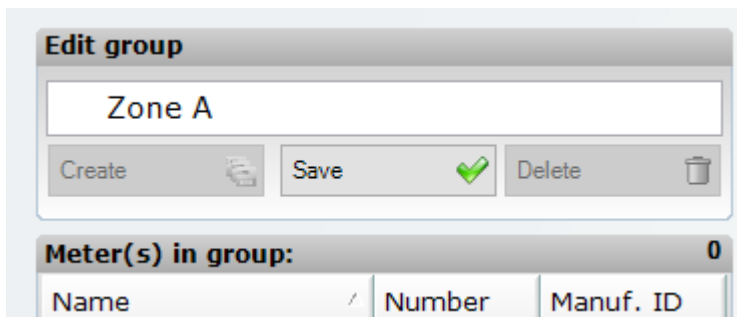
1. In the toolbar, select **Groups**:



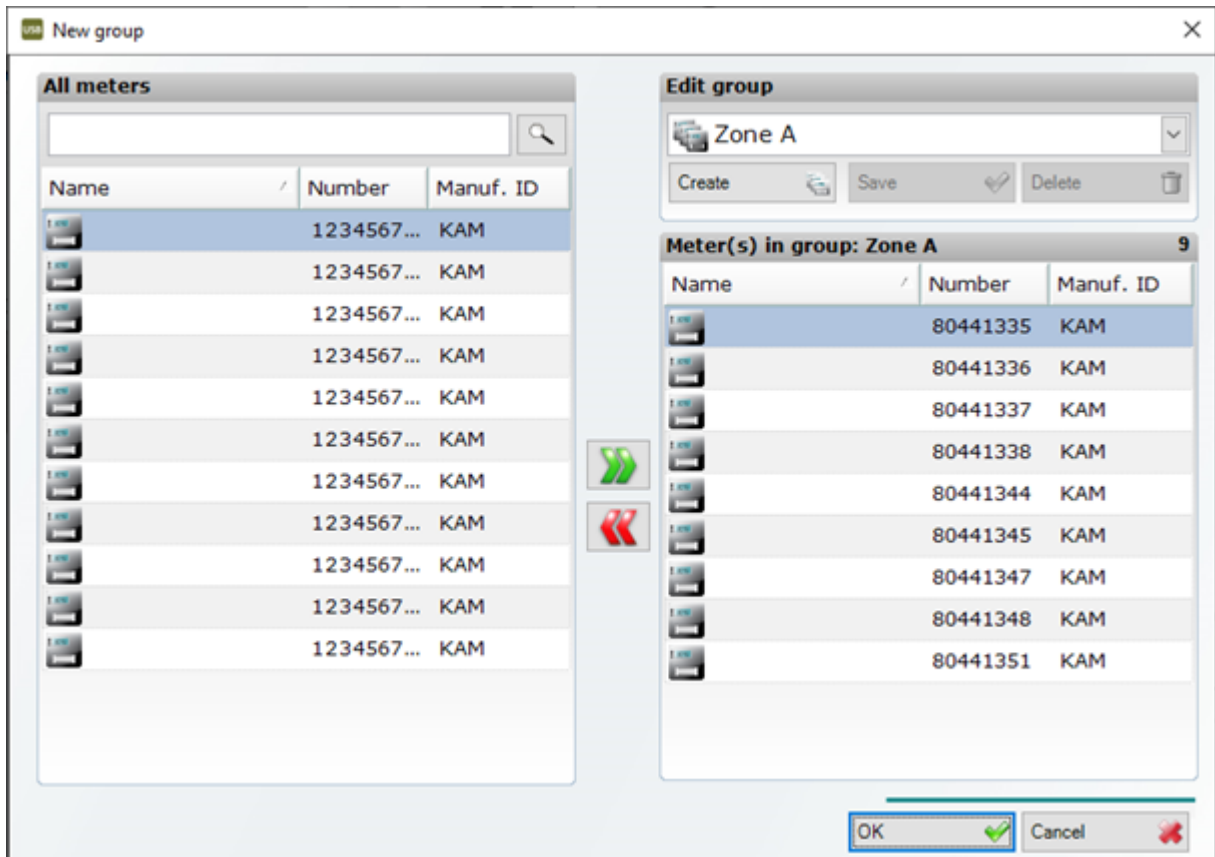
2. In the **New group** window that appears, Click **Create**:



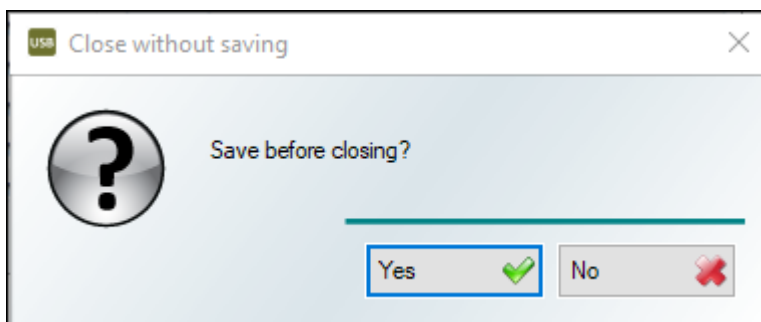
3. Enter a name for your new group, and click **Save**:



4. In the **All Meters** list to the left, select the meters you want to add to the group and click .



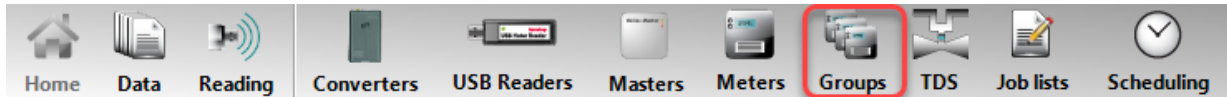
5. Click **OK**.
6. Click **Yes** to confirm saving the new group:



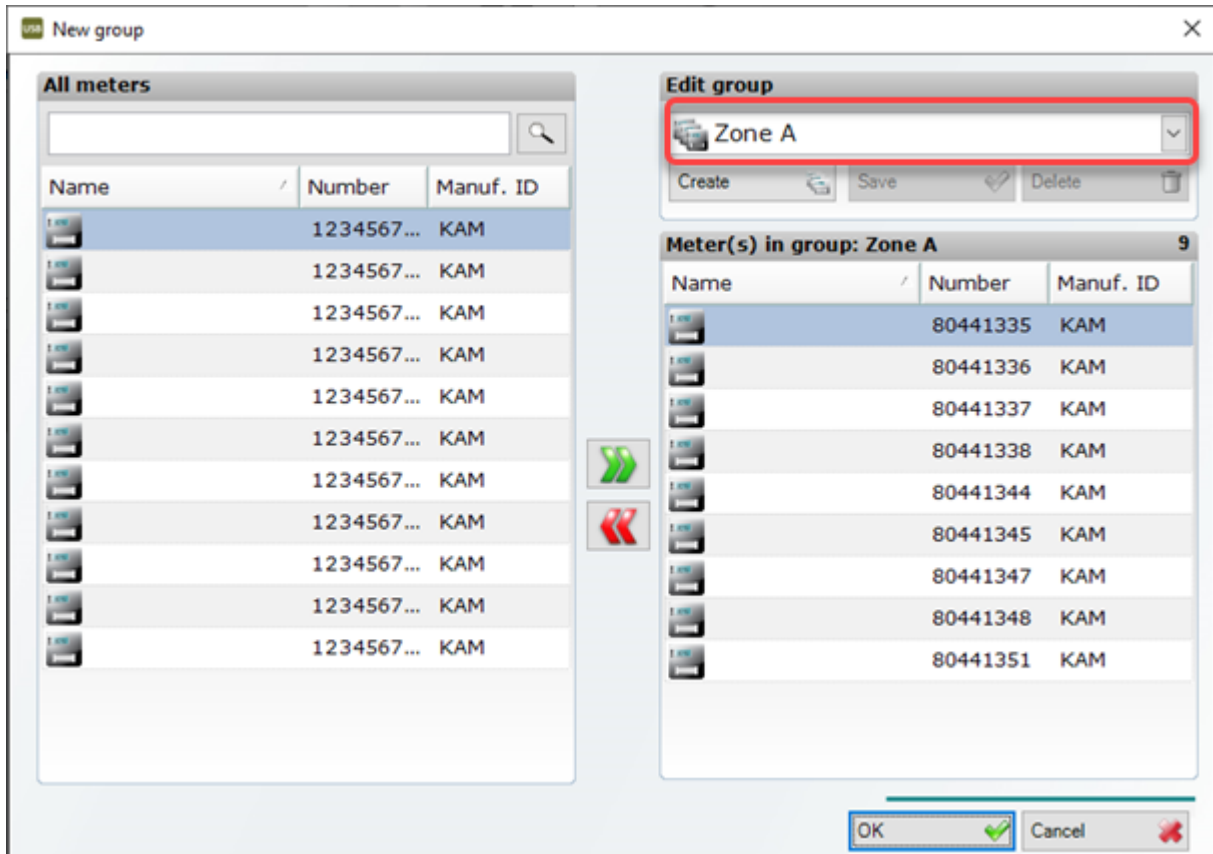
3.10.2.2 Changing a meter group



Follow the steps below to add meters to or remove meters from a meter group:

1. In the toolbar, select **Groups**:

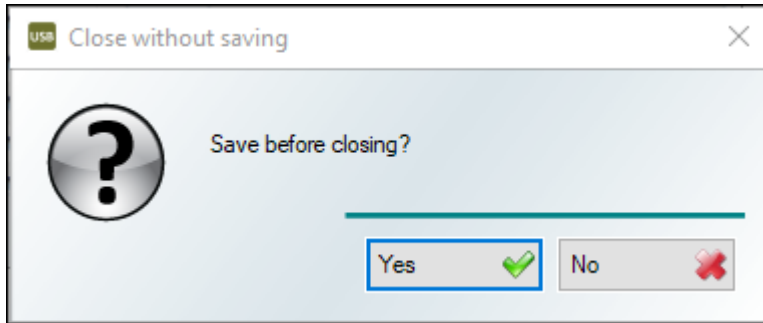


2. In the **New group** window that appears, select the group you want to change:



3. In the **All Meters** list to the left, select the meters you want to add to the group and click . To remove meters from the group, select the meters in the list to the right and click .
4. Click **OK**.

5. Click **Yes** to save your changes:

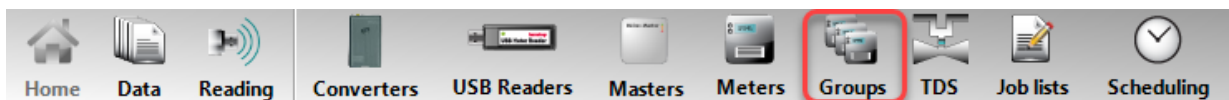


3.10.2.3 Deleting a meter group

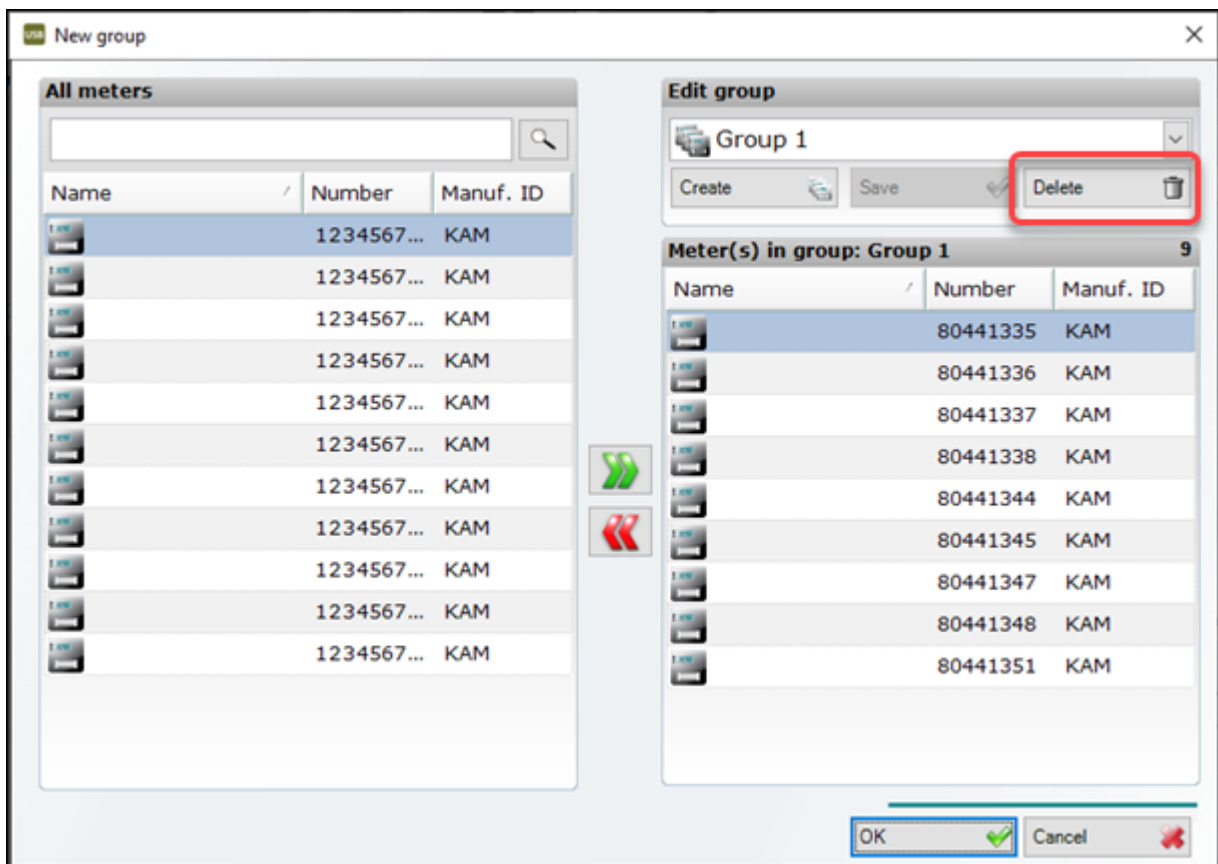
Follow the steps below to delete a meter group:

Note Only the group will be deleted. The meters in the group are not deleted. To delete meters, see [How to delete a meter](#).

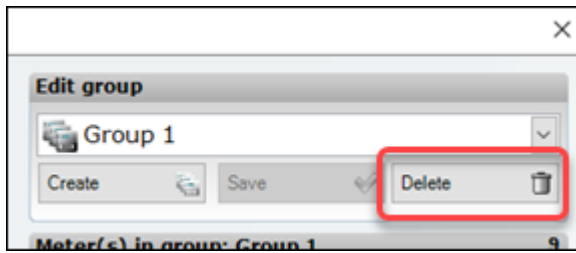
1. In the toolbar, select **Groups**:



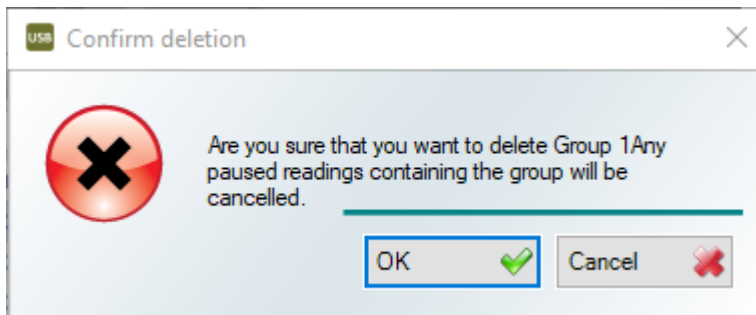
2. In the **New group** window that appears, select the group you want to delete:



3. Click **Delete**:



4. Click **OK** to confirm the deletion:

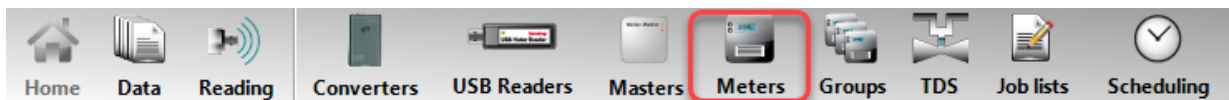


5. Click **OK** to close the **New group** window.

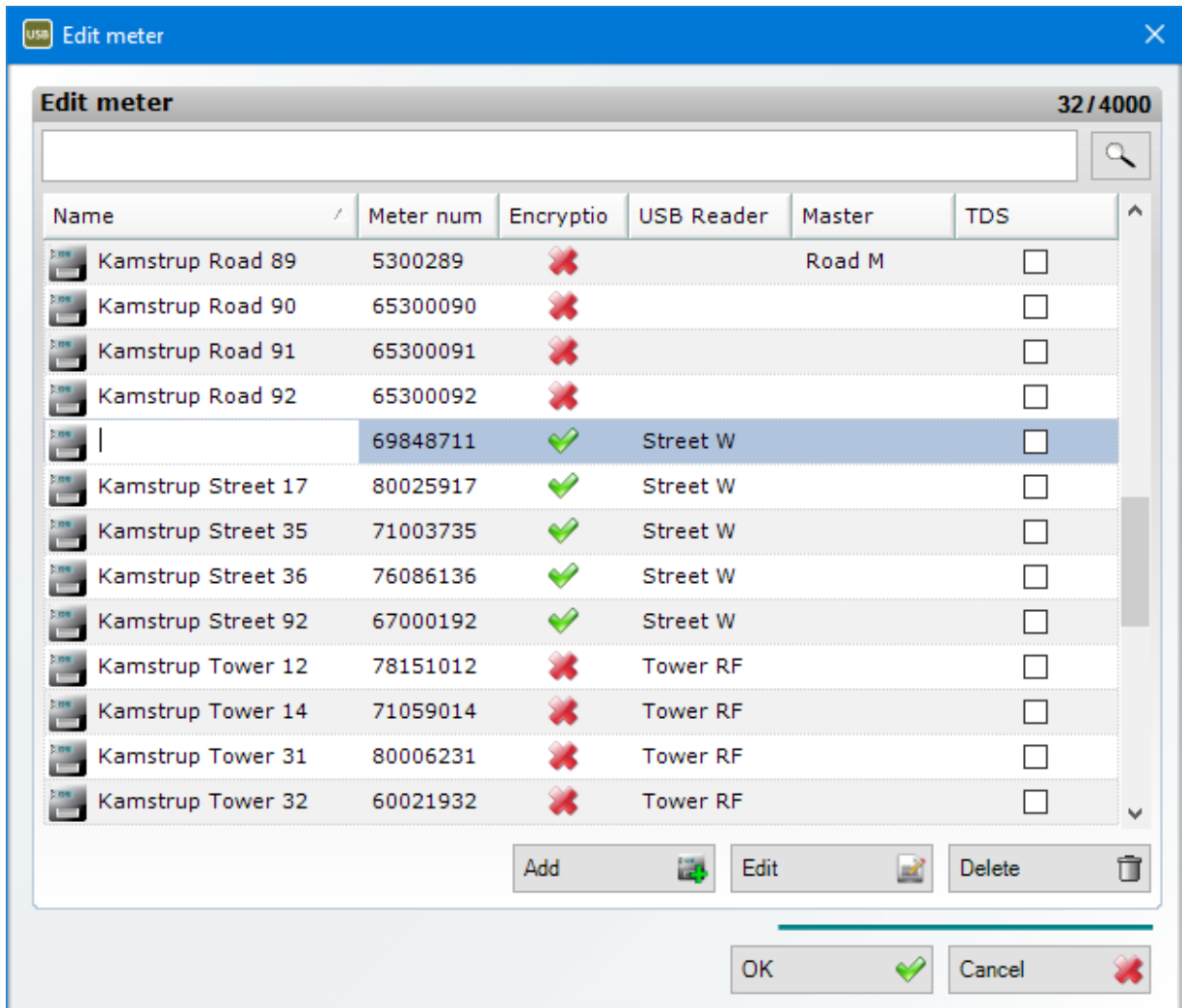
3.10.3 How to rename a meter

Follow the steps below to rename a meter:

1. In the toolbar, select **Meters**:



2. Double-click the meter you want to rename:

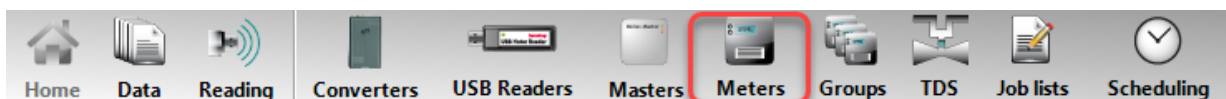


3. Enter the new name, and press the RETURN key on your keyboard.
4. Click **OK**.

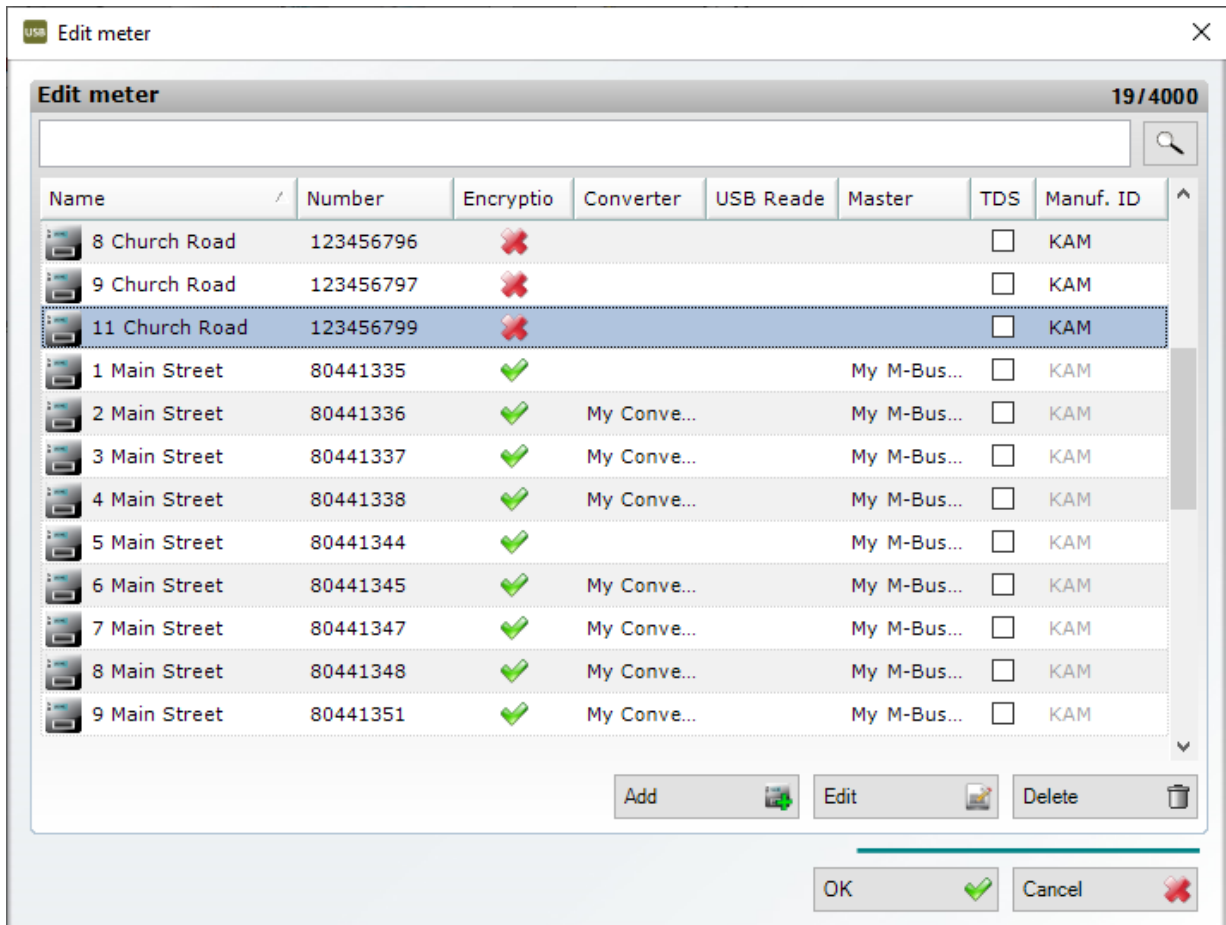
3.10.4 How to delete a meter

Follow the steps below to delete a meter:

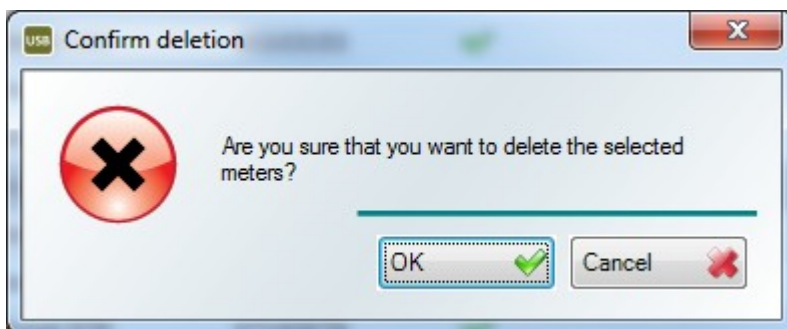
1. In the toolbar, select **Meters**:



- In the list of meters, select the meter you want to delete and click **Delete**:



- In the message that appears, click **OK** to confirm:



- Click **OK** to close the **Edit meter** window.

3.11 How to activate add-on features

It is possible to buy licences for add-on features in USB Meter Reader. Follow the steps below to activate an add-on features:

1. Choose **Help** menu > **Licence**.

The screenshot shows a dialog box titled "Add-on Features". It has a close button (X) in the top right corner. The dialog is divided into three main sections:

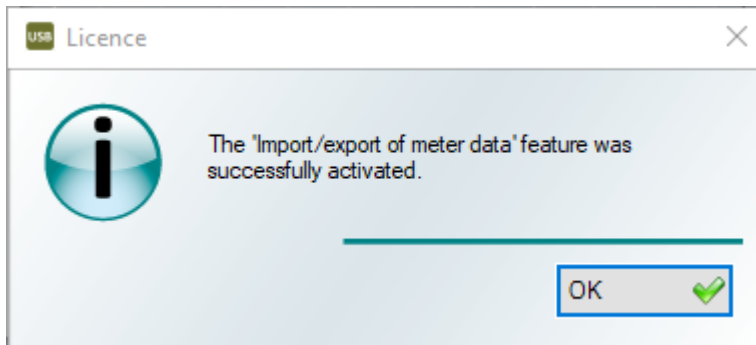
- Features:** A section with the instruction "In the box below, select a feature to install." Below this is a dropdown menu labeled "Feature" with "Import/export of meter data" selected. Below the dropdown is the text "Please select an activation method for enabling the feature".
- Choose activation type:** A section with the text "You can now activate your licence. How do you want to activate?". It contains two radio buttons: "Online activation. Use this if the computer is connected to the internet." (which is selected) and "Offline activation. Use this if the computer is not connected to the internet."
- Online activation:** A section with the text "If you want to register, please enter the activation code that you have received from Kamstrup A/S:". Below this is a row of eight empty text input boxes for entering the activation code. Below the input boxes is a button labeled "Activate licence now".

A "Close" button is located at the bottom right of the dialog box.

2. In **Feature**, select the add-on feature you want to activate:
 - Import/export of meter data: lets you import meter addresses and export readings for selected meters and selected periods.
 - M-Bus Master: lets you read meters wired to an M-Bus master
 - Metering points: lets you add up to 4,000 meters in USB Meter Reader.
 - Thermal Disconnect: lets you disconnect and reconnect the heat supply for MULTICAL® 403, 603 and 803 meters read in a wired M-Bus network. (Requires an M-Bus module HC-003-22 installed in the meter that is connected to a thermal actuator)
3. Make sure **Online activation** is selected.

If your computer with USB Meter Reader has no internet connection, click **Offline activation** and follow the on-screen instructions.
4. In **Online activation** enter the licence key received from Kamstrup.
5. Select **Activate licence now**.

6. Click **OK** in the message that appears:



4 Main window overview

This section describes the [menus](#), [toolbar](#), [views](#) and [windows](#) in USB Meter Reader.

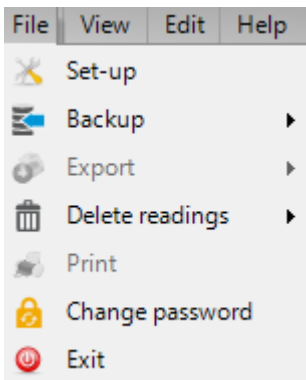
4.1 Menu bar

The menu bar consists of 4 menus: File, View, Edit and Help.

The menu File

The **File** menu contains 4 submenus. Click the links to see a detailed description.

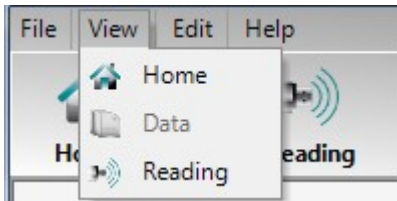
1. [Set-up](#) is used for changing settings such as language, definition of missing meters, etc.
2. Backup is used for making backup copies of all data and configurations or for restoring data. The function can also be used in connection with the replacement of a computer.
3. Export is only available if you are in the [Data](#) view in the toolbar (described briefly below) and is used for exporting all saved data to e.g. a PDF file.
4. Print is likewise only available if you are in the [Data](#) view in the toolbar (described briefly below). Clicking this opens the Print Preview window.
5. With Delete readings, reading data from all meters in the database can be automatically deleted when it exceeds a certain age. It is also possible to delete reading data for a single or multiple meters. Note that the latest reading is never deleted.
6. Exit closes the program.



The View menu

The **View** menu contains 3 submenus representing the three depending views that are used in Kamstrup USB Meter Reader. Click the links to see detailed information about each view.

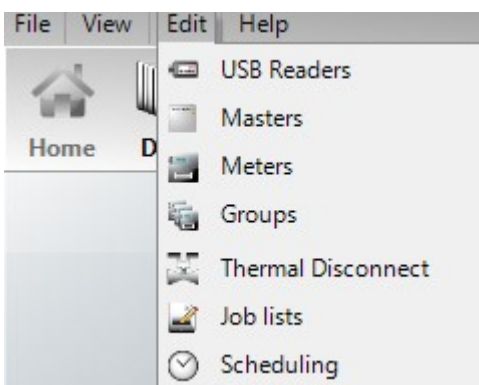
1. [Home](#) is the start window of Kamstrup USB Meter Reader
2. [Data](#) provides you with a detailed overview of all your meters
3. [Reading](#) is used for collecting data/reading meters.



The Edit menu

This menu contains 4 submenus. The menu is used for adding/editing or deleting USB Readers or meters in your system. Click the links below to get a detailed introduction to the windows.

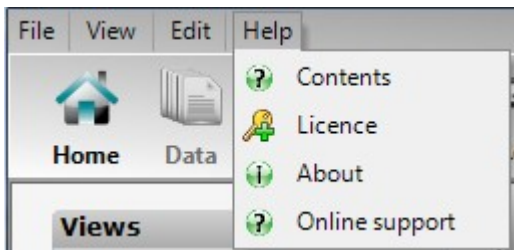
1. In [USB Readers](#), you can delete or change the name of a USB Reader in your system
2. In [Masters](#), you can edit the name of and configure connected M-Bus masters
3. In [Meters](#), you can add/edit and delete meters
4. In [Groups](#), you can create or delete a group of meters
5. In [Thermal Disconnect](#), you open and close a thermal actuator connected to M-Bus module HC-003-22
6. In [Job lists](#), you can select the meters to be read by a specific USB Reader.
7. In [Scheduling](#), you set at which times automatic meter reading must be carried out.



The Help menu

The **Help** menu contains 4 submenus: **Contents**, **Licence**, **About** and **Online support**. Click the links to see a detailed description.

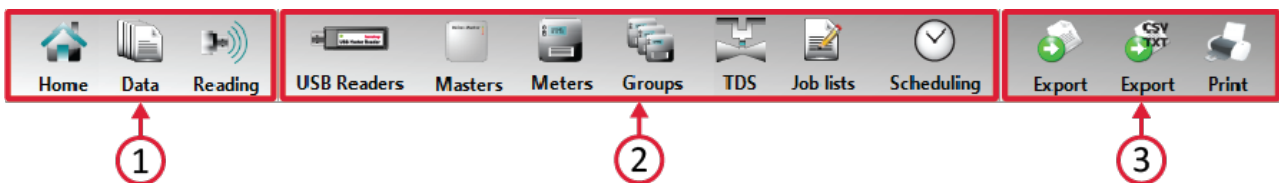
1. **Contents** opens the online help
2. Licence is used for installing further functionality
3. [About](#) opens a window where you can see the current software version and the product number of Kamstrup USB Meter Reader.
4. Online support is only used by Kamstrup Metering Service



4.2 Toolbar

The toolbar consists of the following three parts:

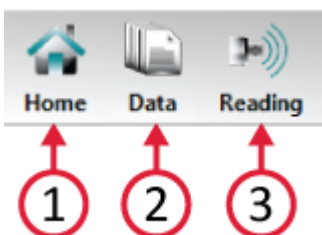
1. View
2. Edit
3. File



View

View consists of 3 buttons. The buttons symbolise the various views in Kamstrup USB Meter Reader. Click the links to see detailed information about each view.

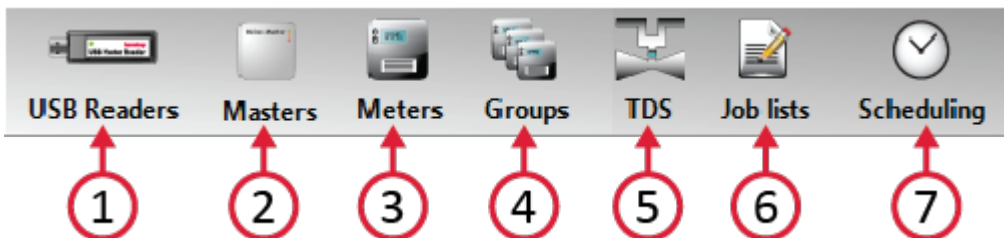
1. [Home](#) is the start window of Kamstrup USB Meter Reader
2. [Data](#) provides you with a detailed overview of all your meters
3. [Reading](#) is used for collecting data/reading meters.



Edit

This section contains 5 buttons used for adding/editing or deleting USB Readers or meters in your system. Clicking a button in this section opens a new window. Click the links below to get a detailed introduction to the windows.

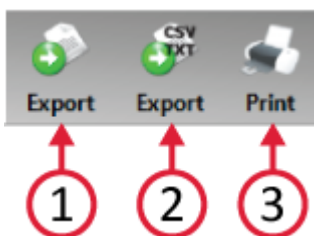
1. In [USB Readers](#), you can delete or change the name of a USB Reader in your system
2. In [Masters](#), you can configure, delete and change the names of M-Bus masters in the system.
3. [Meters](#) is the window where you can add/edit and delete meters
4. In [Groups](#), you can create or delete a group of meters
5. In [Thermal Disconnect](#), you open and close a thermal actuator connected to M-Bus module HC-003-22
6. In [Job lists](#), you can select the meters to be read by a specific USB Reader.
7. In [Scheduling](#), you set at which times automatic meter reading must be carried out



File

This section is only available in the **Data** view (see above). Here, you can export or print all your meters' data.

1. **Export** is used for exporting tables to either XLS, PDF or CSV formats. Select destination, file name and file type in the Save meter data in file window.
2. CSV TXT Export is used for exporting meter data in definable formats. This function requires that the corresponding licence key is installed.
3. Clicking Print opens the **Print Preview** window. You can also open this window by clicking **File > Print**.



4.3 Views

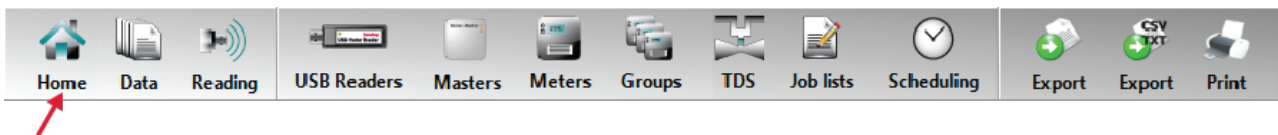
This section contains a detailed description of each view in Kamstrup USB Meter Reader:

- [Home](#)
- [Reading](#)
- [Data](#)

4.3.1 Home

The **Home** (or "live") view is the starting window of your Kamstrup USB Meter Reader program. The window includes an overview of the USB Readers, converters and M-Bus masters in your system. This section explains in detail what you can see and do in "live view".

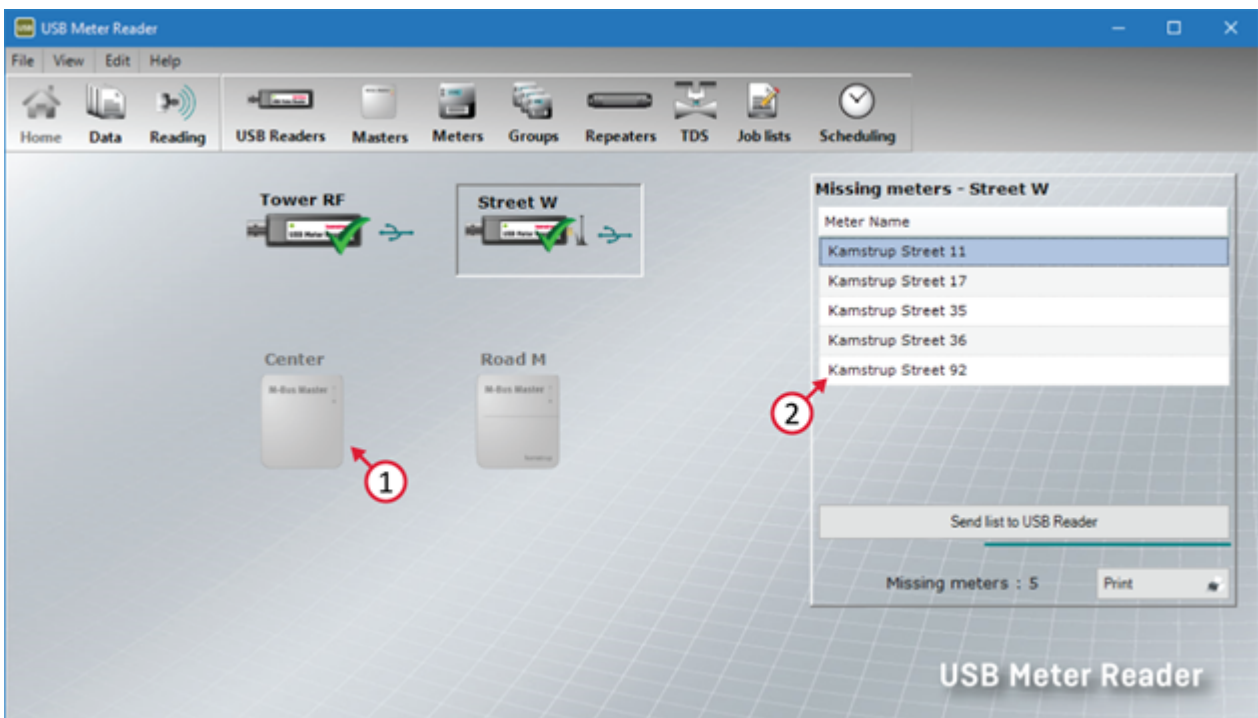
- Overview of **Home** ("live") view
- Missing meters



Overview

Every time you start the Kamstrup USB Meter Reader program you will see a "live view". The live view includes a list of USB Readers, converters and M-Bus masters (empty if none have been installed) and finally the **Missing meters** window. The two elements appear from the screen display below where

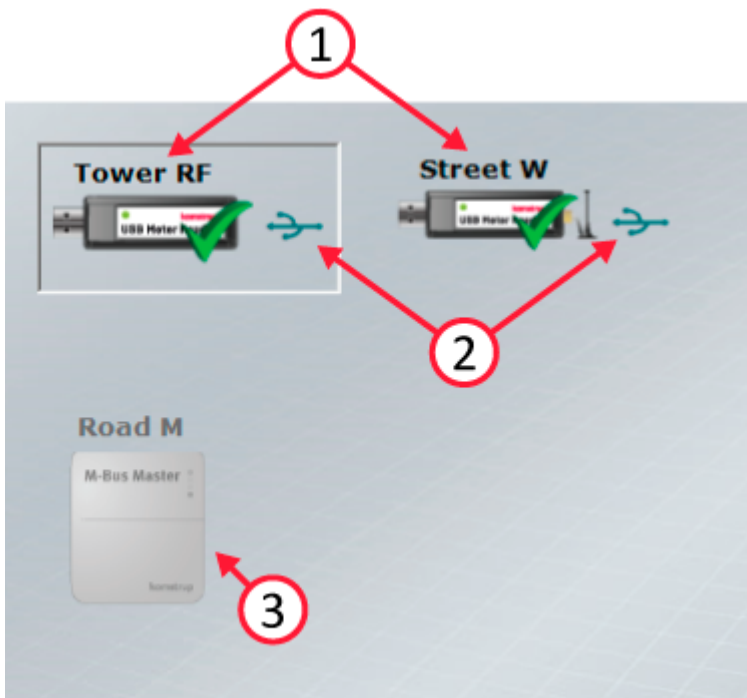
1. is the list of USB Readers, converters and M-Bus masters in the system.
2. to the right, shows the list of missing meters.



The list of USB Readers, converters and M-Bus masters

The list of USB Readers, converters and M-Bus masters can be seen in the middle of the screen display. The units which are not connected to the PC or out of reach will be grey. USB Readers, converters and M-Bus masters cannot be connected at the same time. The list includes various details on the connected units. Some of them are shown in the picture below where

1. These units are connected and active.
2. The signal strength is shown in the picture. If the USB icon is visible, it means that the USB Reader is directly connected to the PC via the USB port.
3. The M-Bus masters are grey as they are currently not connected to the PC.



USB Reader status icons

Each USB Reader has one or more status icons. These represent:

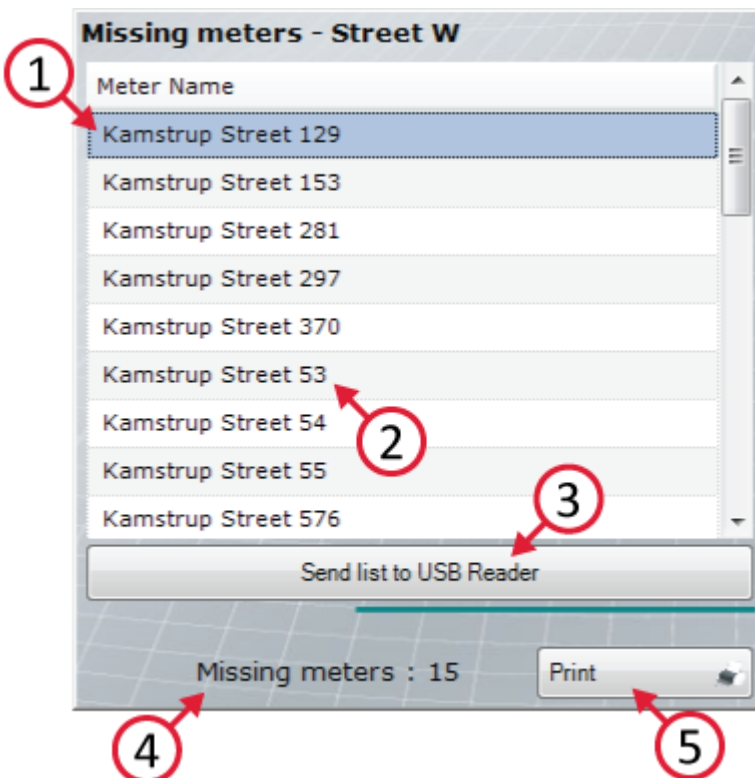
1. The USB Reader is updated. The job list is updated, and all meter data on the USB Reader has been collected and saved.
2. The job list on the USB Reader is too old and is being updated. Note that the list is updated automatically
3. The USB Reader contains new data. The system remembers this data continually. Note: This takes place automatically.
4. USB Reader with internal antenna
5. USB Reader with external antenna.



The Missing meters window

Missing meters are meters in a USB Reader or M-Bus master job list which are older than the specified number of days (the definition of "missing meters" is by default 2 days). If you click a USB Reader or an M-Bus master, the **Missing meters** window will be updated and show:

1. The name of the USB Reader/M-Bus master
2. A list of meters defined as missing (older than the specified number of days)
3. The Send list to USB Reader button which collects the missing meters and sends them to the USB Reader or M-Bus master, respectively. Note that the job list will be overwritten and subsequently only include missing meters.
4. The number of missing meters
5. The Print button that opens the **Print Preview** window. Here, you can print the list of missing meters.



4.3.2 Data

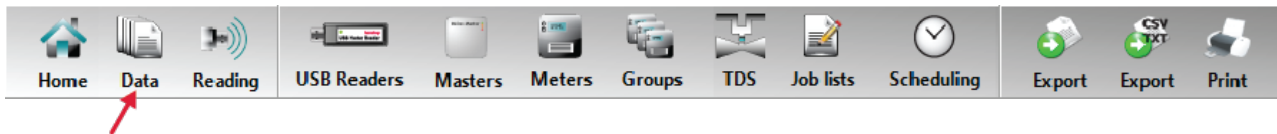
The **Data** view lets you can see the latest reading data for each meter. This section describes how to sort, filter and keep an eye on detailed information about the meters in your Kamstrup USB Meter Reader system.

Topics:

- Opening the **Data** view
- Overview of the Data view
- View modes
- Using the filter to sort data in USB Reader or in a meter group
- Getting more out of the Data view – sorting and adjusting columns
- Exporting data to a PDF or Excel file

Changing to the Data view

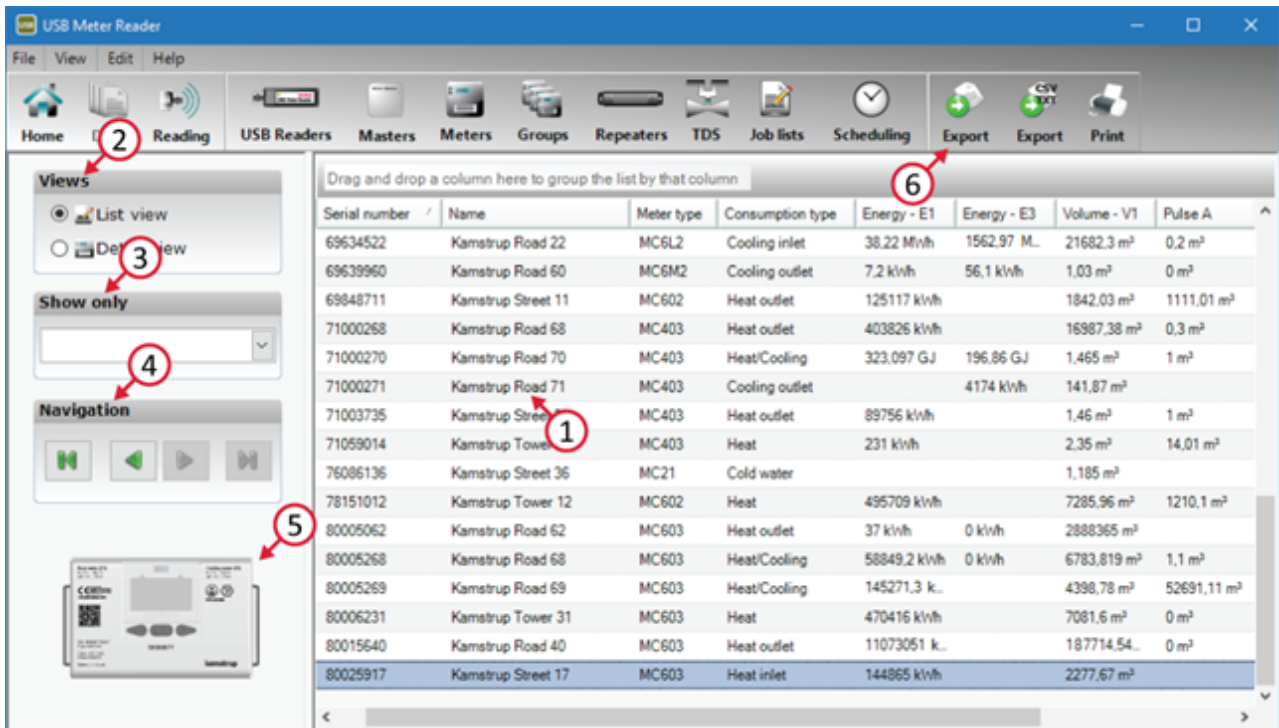
You can change to the **Data** view by clicking **Data** in the toolbar, as shown below, or via the menu **Show > Data**.



Overview

An image of the **Data** view is shown below. All the below items are described in more detail later.

1. A list of meters and the most common data
2. In the Views area, you can change between List view and Detail view
3. In the Show only area, you can change the list to include only the meter(s) belonging to a single job or a group of meters.
4. Use the navigation buttons to browse through the list. They are especially useful in Detail view.
5. An image of the meter type selected on the list. Note: The image is also updated in Detail view
6. All data can be exported and/or printed.

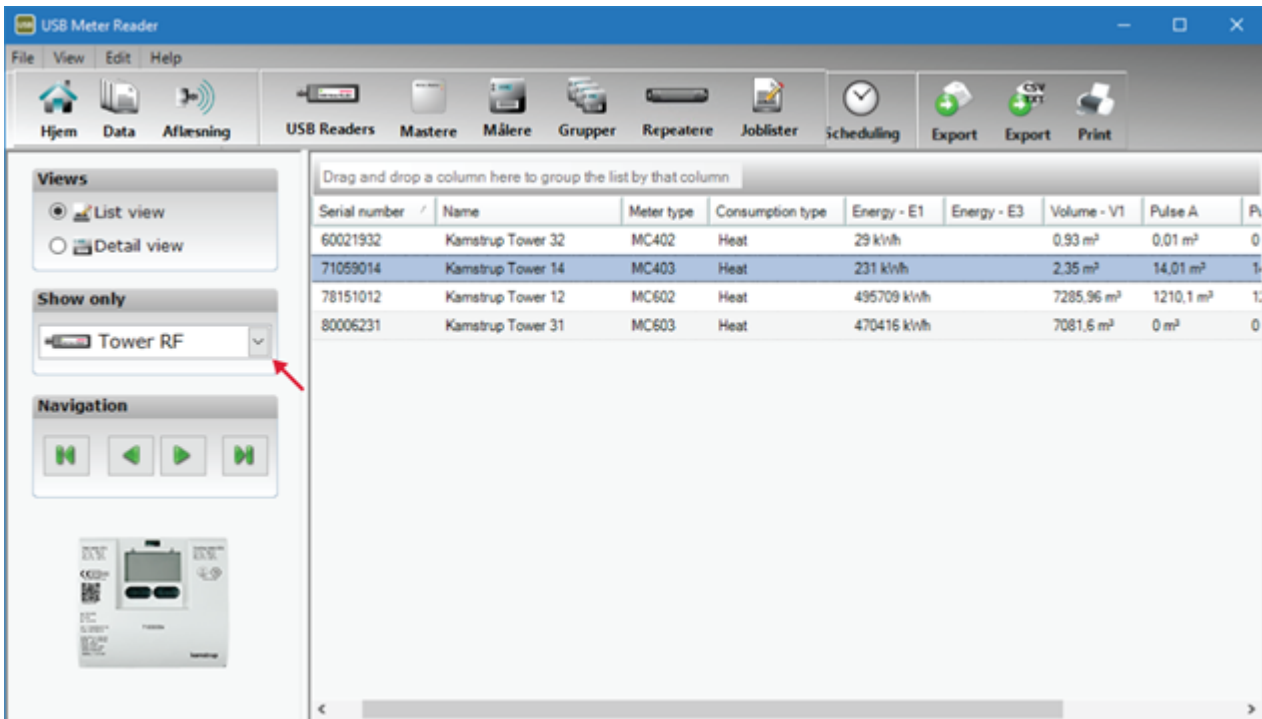


List view

You can change to **List view** in the area **Views** (see item 2 above). In **List view**, you can gain an overview of the meters in your Kamstrup USB Meter Reader system. Navigate through the meters on the list by using the arrow keys on your keyboard or in the **Navigation** area (item 4 above). Note: All changes in the list are saved and available after restart. The view can be reset under **File > Setup**.

Sorting the list according to jobs

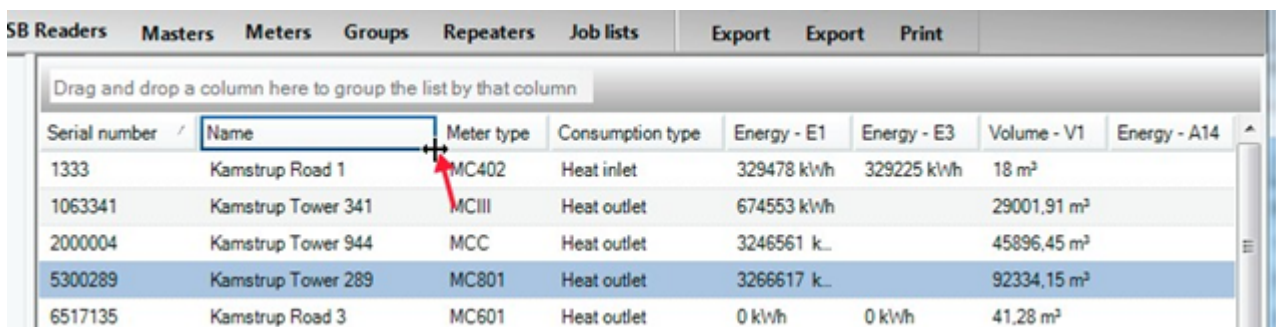
In the **Show only** area, you can change the list to only contain a specific "USB Reader" job list or the meters in a specific meter group. Note: The number of columns can change as only used columns are shown.



Adjusting columns

If you need to adjust the column width or change the order, you can do this in the following ways:

1. To make the column width fit the data width or the width of the heading, left-click with the mouse in the area between two columns as shown below.
2. To change the width of a column, click and hold down the left mouse button (between 2 columns as shown below). You can now change the width by moving the mouse to the right or to the left.



3. You can also move the columns around and place the ones you use most next to each other at the front. To do this, left-click the column heading and move the column to the wanted position while keeping down the button. This is shown below where the **Meter type** column is moved to the first position.

USB Readers Masters Meters Groups Repeaters Job lists Export Export Print

Drag and drop a column here to group the list by that column

Serial number / Meter type	Name	Meter type	Consumption type	Energy - E1	Energy - E3	Volume - V1	Energy - A14
	Kamstrup Road 1	MC402	Heat inlet	329478 kWh	329225 kWh	18 m³	
1063341	Kamstrup Tower 341	MCIII	Heat outlet	674553 kWh		29001.91 m³	
2000004	Kamstrup Tower 944	MCC	Heat outlet	3246561 k...		45896.45 m³	
5300289	Kamstrup Tower 289	MC801	Heat outlet	3266617 k...		92334.15 m³	
6517135	Kamstrup Road 3	MC601	Heat outlet	0 kWh	0 kWh	41,28 m³	

USB Readers Masters Meters Groups Repeaters Job lists Export Export Print

Drag and drop a column here to group the list by that column

Meter type	Serial number /	Name	Consumption type	Energy - E1	Energy - E3	Volume - V1	Energy - A14
MC402	1333	Kamstrup Road 1	Heat inlet	329478 kWh	329225 kWh	18 m³	
MCIII	1063341	Kamstrup Tower 341	Heat outlet	674553 kWh		29001.91 m³	
MCC	2000004	Kamstrup Tower 944	Heat outlet	3246561 k...		45896.45 m³	
MC801	5300289	Kamstrup Tower 289	Heat outlet	3266617 k...		92334.15 m³	
MC601	6517135	Kamstrup Road 3	Heat outlet	0 kWh	0 kWh	41,28 m³	

Sorting columns

To gain the full benefit from the **Data** view, you can sort the table according to one or more columns. This is very useful and enables you to group your meters as desired. To sort according to e.g. meter type, drag the **Meter type** column to the "column sorting area" and drop it as shown below.

USB Readers Masters Meters Groups Repeaters Job lists Export Export Print

⊟ Meter type a column here to group the list by that column

Meter type	Serial number /	Name	Consumption type	Energy - E1	Energy - E3	Volume - V1	Energy - A14
MC402	1333	Kamstrup Road 1	Heat inlet	329478 kWh	329225 kWh	18 m³	
MCIII	1063341	Kamstrup Tower 341	Heat outlet	674553 kWh		29001.91 m³	
MCC	2000004	Kamstrup Tower 944	Heat outlet	3246561 k...		45896.45 m³	
MC801	5300289	Kamstrup Tower 289	Heat outlet	3266617 k...		92334.15 m³	
MC601	6517135	Kamstrup Road 3	Heat outlet	0 kWh	0 kWh	41,28 m³	

USB Readers Masters Meters Groups Repeaters Job lists Export Export Print

Meter type /

Info	Serial number /	Name	Consumption type	Energy - E1	Energy - E3	Volume - V1	Energy - A14	Pulse A
⊕	Meter type : K382M (1 item)							
⊕	Meter type : MC21 (7 items)							
⊕	Meter type : MC302 (6 items)							
⊕	Meter type : MC402 (5 items)							
⊕	Meter type : MC403 (2 items)							

To sort according to another column, e.g. consumption type, drag the **Consumption type** column to the "column sorting area" as shown below.

USB Meter Reader

SB Readers Masters Meters Groups Repeaters Job lists Export Export Print								
Meter type /								
Info	Serial number /	Name	Consumption type	Energy - E1	Energy - E3	Volume - V1	Energy - A14	Pulse A
Meter type : MC402 (5 items)								
	1333	Kamstrup Road 1	Heat inlet	329478 kWh	329225 kWh	18 m³		25,8 m³
	60000161	Kamstrup Road 5	Cooling outlet	0 kWh	12,3 kWh	9,876 m³		0 m³
	60000219	Kamstrup Road 6	Heat outlet	0 kWh	0 kWh	0 m³		0 m³
	60075137	Kamstrup Road 7	Cooling inlet	0 GJ	0 GJ	0 m³		110,1 r

SB Readers Masters Meters Groups Repeaters Job lists Export Export Print								
Meter type / Consumption type /								
Info	Serial number /	Name	Energy - E1	Energy - E3	Volume - V1	Energy - A14	Pulse A	Pulse B
Meter type : (1 item)								
Consumption type : (15 items)								
Meter type : K382M (1 item)								
Meter type : MC302 (1 item)								
Meter type : MC402 (4 items)								
Meter type : MC403 (3 items)								
Meter type : MC601 (2 items)								

It is also easy to change the order of the sorting columns. Just place e.g. the **Consumption type** column in front of the **Meter type** column to sort according to name. This is shown below.

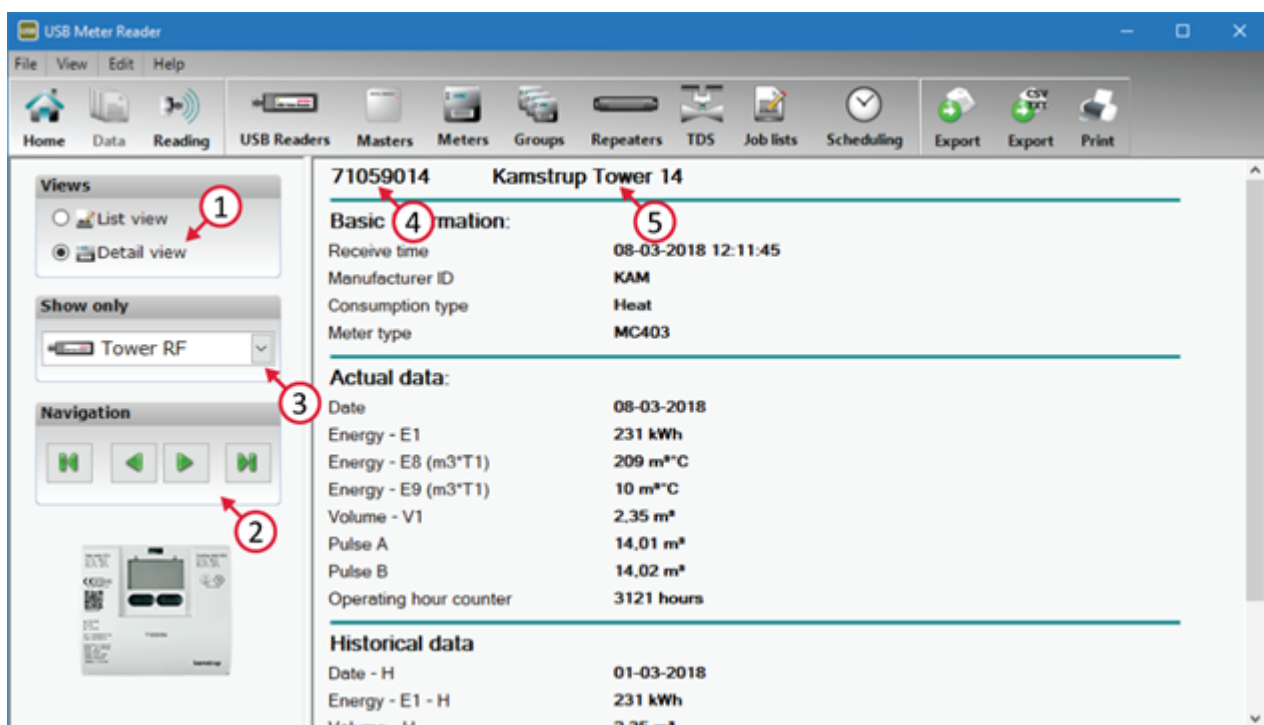
Readers Masters Meters Groups Repeaters Job lists Export Export Print								
Consumption type / Meter type /								
Info	Serial number /	Name	Energy - E1	Energy - E3	Volume - V1	Energy - A14	Pulse A	Pulse B
Meter type : (1 item)								
Meter type : K382M (1 item)								
Meter type : MC302 (1 item)								
Meter type : MC402 (4 items)								
Meter type : MC403 (3 items)								
Meter type : MC601 (2 items)								
Meter type : MC602 (3 items)								

Readers Masters Meters Groups Repeaters Job lists Export Export Print								
Consumption type / Meter type /								
Info	Serial number /	Name	Energy - E1	Energy - E3	Volume - V1	Energy - A14	Pulse A	Pulse B
Consumption type : (1 item)								
Meter type : (16 items)								
Consumption type : Cooling inlet (2 items)								
Consumption type : Cooling outlet (3 items)								
Consumption type : Electricity (1 item)								
Consumption type : Heat (4 items)								
Consumption type : Heat inlet (3 items)								

Detail view

You can change to **Detail view** in the **Views** area. In **Detail view**, you can see all data collected from a specific meter.

1. Select **Detail view** in the **Views** area.
2. In the **Navigation** area, you can shift between the meters. The buttons navigate to first, previous, next and last meter, respectively.
3. Note: If you have selected e.g. USB Reader in the **Show only** area, you only navigate in the filtered list.
4. Meter number
5. Meter name.



4.3.3 Reading

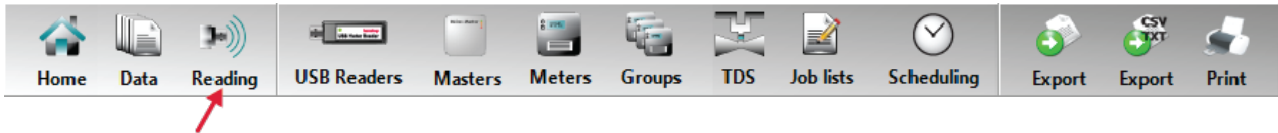
The **Reading** window is used for reading selected meters. It has two tabs: **Read meter(s) via USB Reader** or **Read meter(s) via M-Bus Master** and **Read selected meter(s)**. This section explains in detail what you can see and do in the **Reading** window.

Topics:

- Changing to the **Reading** view
- Overview of Reading
- Using Read meter(s) on USB Reader and Read meter(s) on M-Bus Master, respectively
- Using **Read specific meter(s)**.

Changing to the Reading view

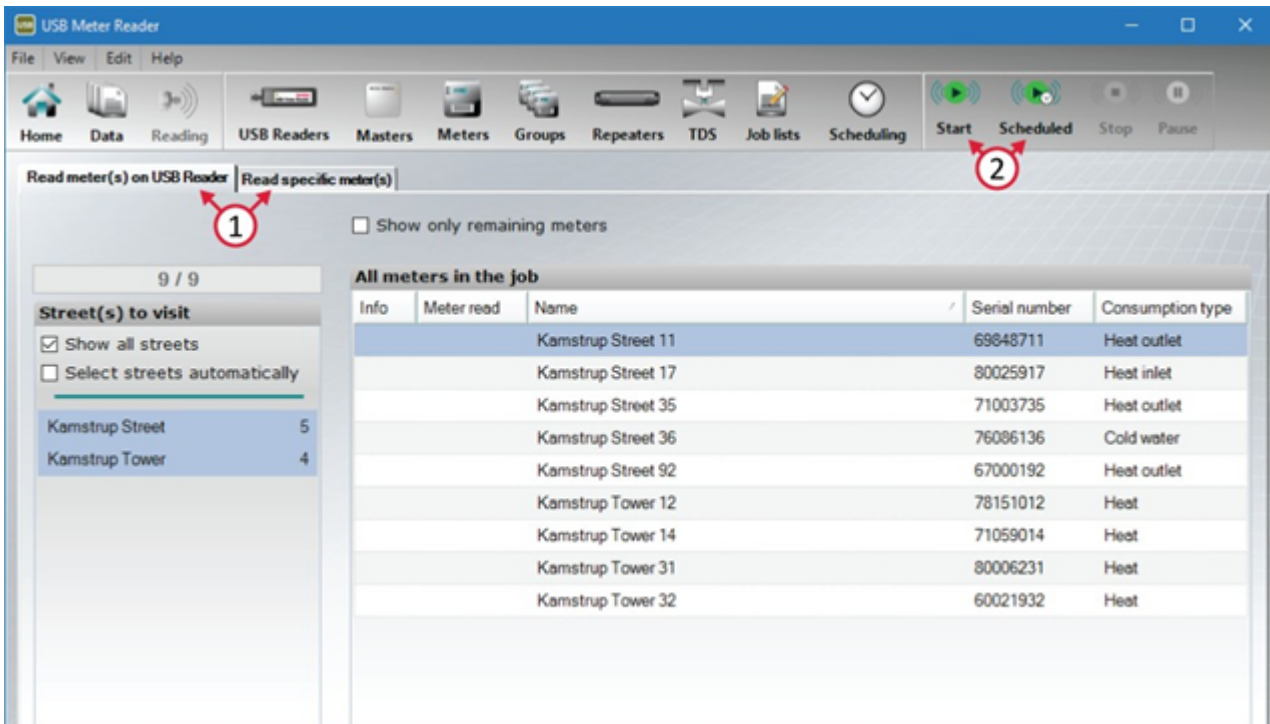
You can change to the **Reading** view by clicking **Reading** in the toolbar as shown below or via the menu **Show > Reading**.



Overview

In the **Reading** view, you can change between two tabs depending on type of reading. An illustration of a USB Reader or an M-Bus network reading data from meters is displayed during reading. The components are shown below.

1. The two tabs **Read meter(s) on USB Reader** or **M-Bus Master** and **Read specific meter(s)**.
2. The **Start** and **Stop** buttons.



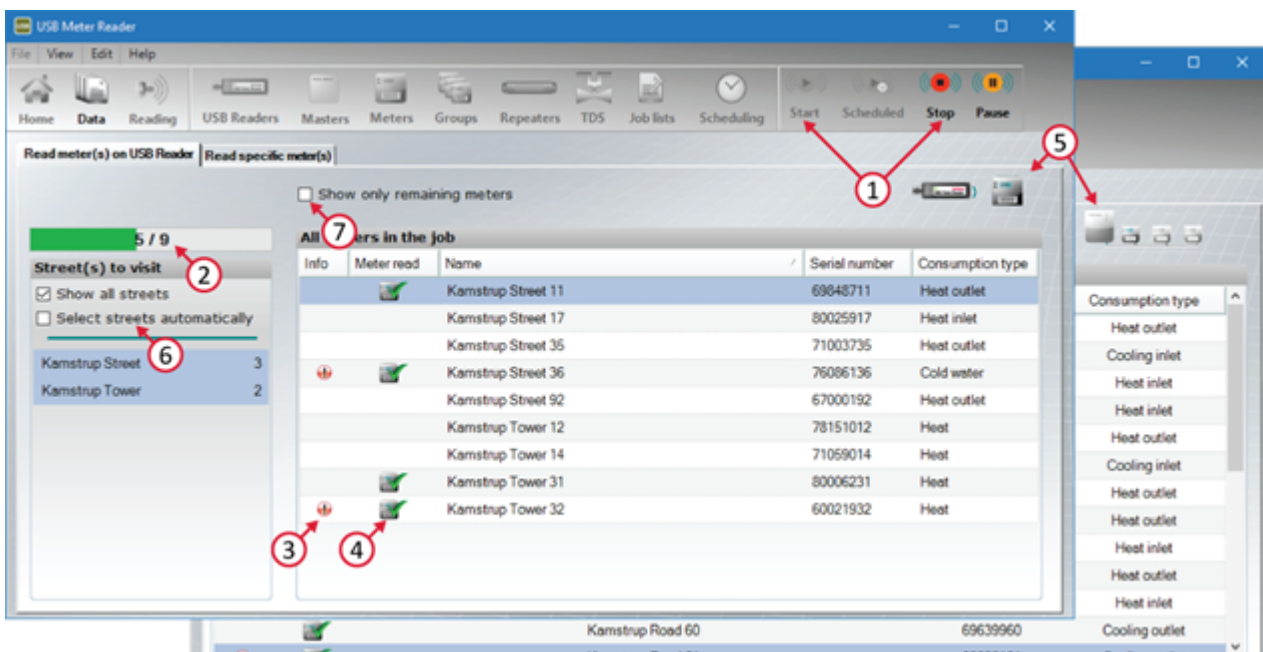
Collecting data from meters via USB Reader and M-Bus master, respectively (the tab Read meter(s))

Select the **Read meter(s)** tab when reading/collecting data from **Job lists** in **USB Reader** or **M-Bus Master** that is currently connected to the computer. In order to start reading, click **Start**. Note that the USB Reader does not necessarily read the meters in the same order as listed, but rather one at a time as the USB Reader obtains contact with them. The M-Bus master reads the meters that support the fastest communication speed first.

While you read, the window will continuously keep you updated on the process:

1. Click **Start** to start the reading. You can always stop a reading by clicking **Stop**.

2. The progress bar shows the number of meters that have not been read and the total quantity to be read.
3. **Info**: Displays the info codes of the read meters, if any. If you hold the mouse over the !, further details are displayed
4. The **Meter read** icon indicates that the meter has been read.
5. The picture is shown as long as the USB Reader or the M-Bus master reads meters.
6. **Street(s) to visit**: Select **Show all streets** or **Select streets automatically**.
If you select **Show all streets**, all meters to be read are displayed. If **Select streets automatically** is shown, only the meters on the street which has just been read or the street which is being read is displayed.
7. If you select **Show only remaining meters**, just the meters that have not yet been read are displayed. Otherwise, all meters, both those read and those not read, are displayed.



Info code(s) reported:

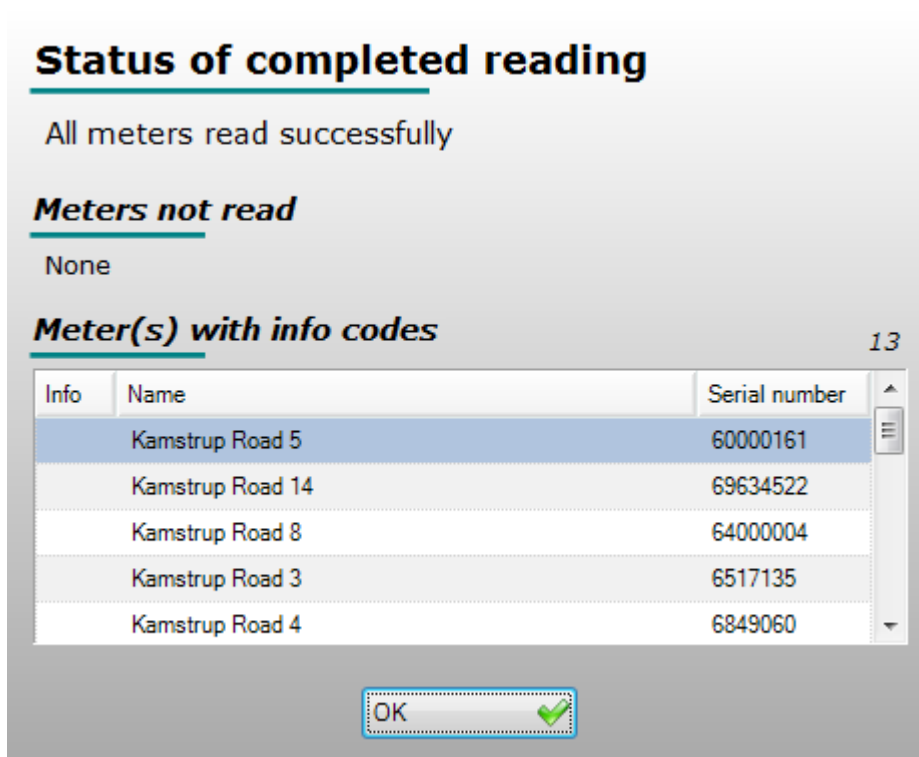
! Actual data:

Dry

! Historical data:

Dry has been recorded for more than 505 hours within the last 30 days

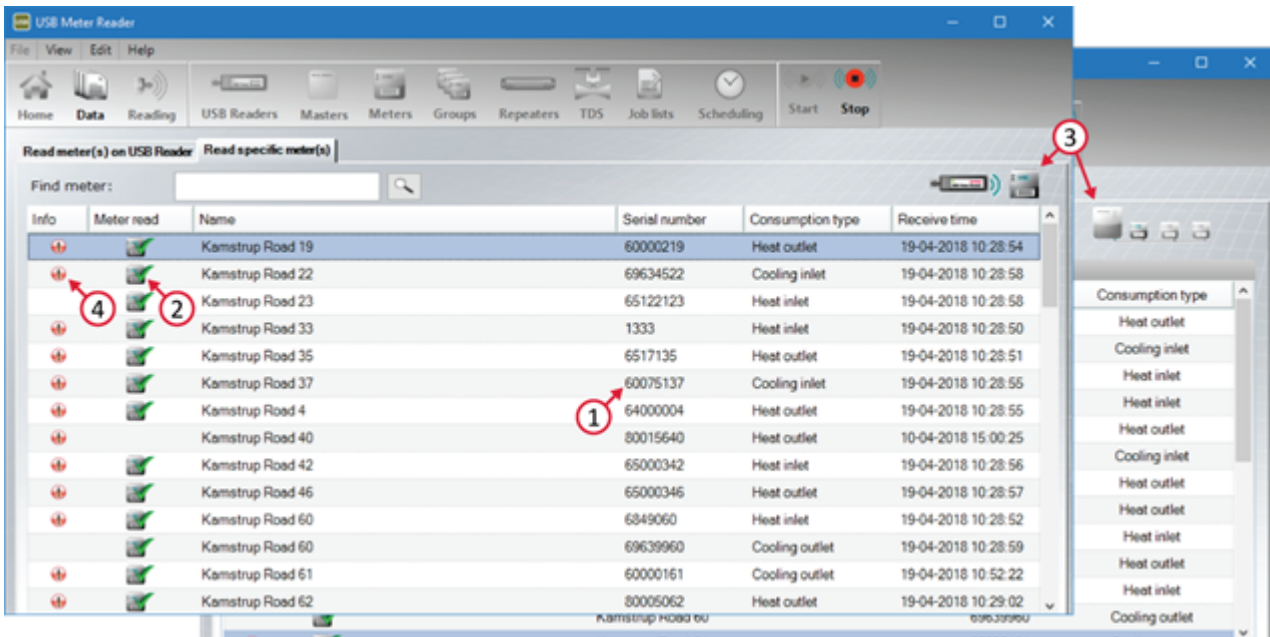
When you stop the reading by clicking **Stop**, or if the reading is stopped automatically when all meters have been read, the status of the reading is shown. Likewise, any meters which have not been read or meters with info codes are shown.



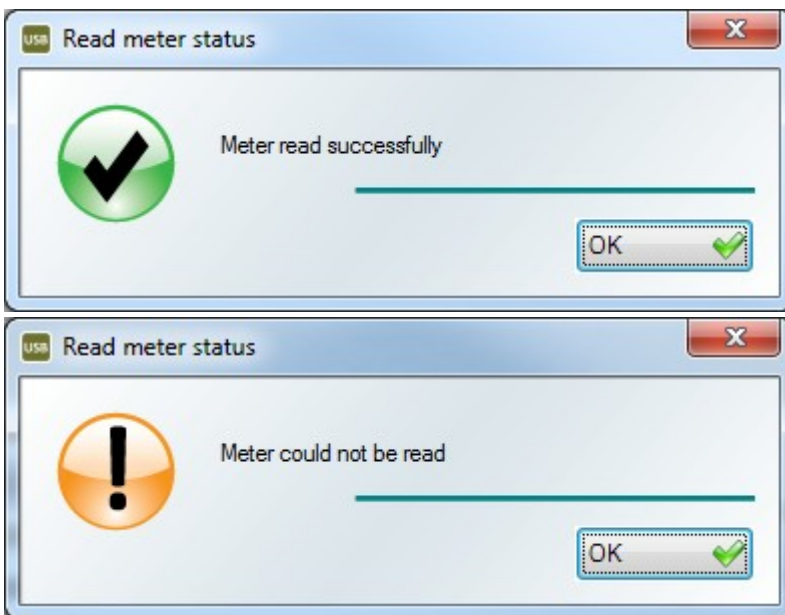
Reading of data from a specific meter (the 'Read specific meter(s)' tab)

Use the **Read specific meter(s)** tab if you want to read/collect data from a specific meter. To read data from a meter, select the meter to read from the list and click **Start**.

1. The meter, which you try to read/from which you try to collect data, is the one selected from the list.
2. The "meter read" icon shows that the meter is not a "missing meter". Therefore, the "meter read" icon is added to the meter if the reading succeeds
3. The picture is displayed while you attempt to read the meter.
4. Info. Displays the info codes of the read meters, if any. If you place the mouse over the individual meter's info, further details are shown.



Depending on the result of the reading, a message appears informing you that the reading succeeded or that the USB Reader could not read the meter.



4.4 Windows

This section describes in detail each window in USB Meter Reader.

- [The New USB Meter Reader window](#)
- [The New M-Bus Master window](#)
- [The Edit USB Meter Reader window](#)
- [The Edit M-Bus Master window](#)

- [The Edit Meter window](#)
- [The New group window](#)
- [The Import of meter data window](#)
- [The Export of meter data window](#)
- [The New job window](#)
- [The Setup window](#)
- [The About window](#)

4.4.1 The New USB Meter Reader window

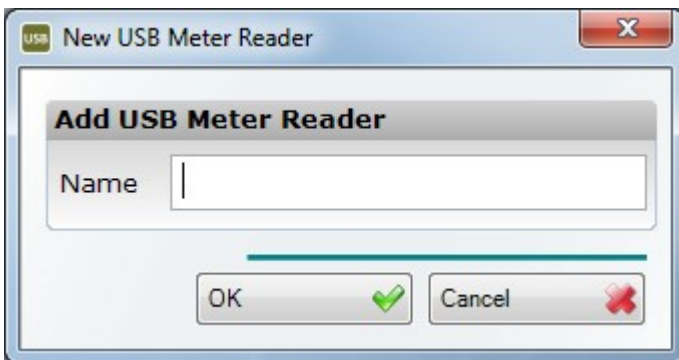
When you insert a new USB Reader into your PC, the **New M-Bus Master** window shown below will be displayed. This section describes how to add a new USB Reader to a system.

Topics:

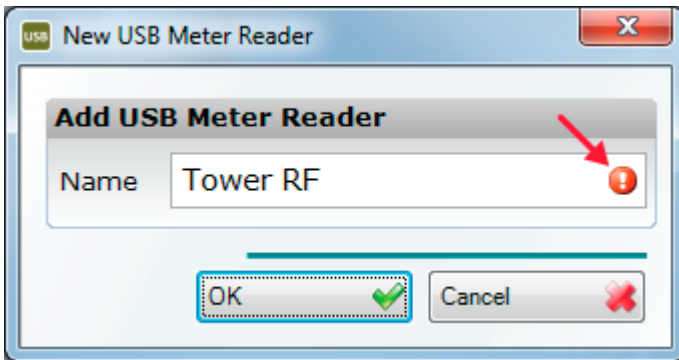
- Naming a USB Reader
- Cancelling changes
- Saving changes.

Naming a USB Reader

When the **New USB Meter Reader** window is shown (see below), enter a random name for the "USB Reader" in question.



If you enter a name that already exists, the red error icon shown below is displayed. To solve the problem, you can either choose a different name or remove the new USB Reader, delete the old one and reconnect the new USB Reader.



Cancelling changes

To cancel your changes, click **Cancel**.

Saving changes

To save your changes, click **OK**.

4.4.2 The New M-Bus Master window

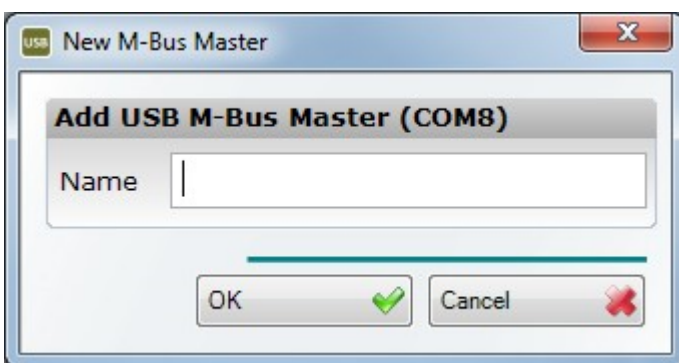
When you connect a new M-Bus master to your PC, the **New M-Bus Master** window shown below will be displayed. This paragraph describes how to add a new M-Bus master to a system.

Topics:

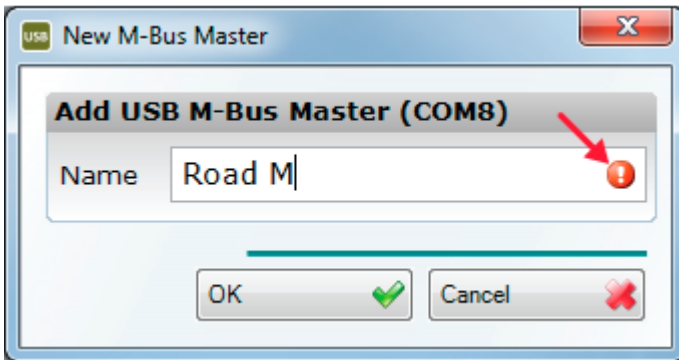
- Naming M-Bus master
- Cancelling changes
- Saving changes.

Naming an M-Bus master

When the **New M-Bus Master** window is shown (see below), enter a random name for the master in question.



If you enter a name that already exists, the red error icon shown below is displayed. To solve the problem, you can either choose a different name or remove the new M-Bus master, delete the old one and reconnect the new M-Bus master.



Cancelling changes

To cancel your changes, click **Cancel**.

Saving changes

To save your changes, click **OK**.

4.4.3 The Edit USB Meter Reader window

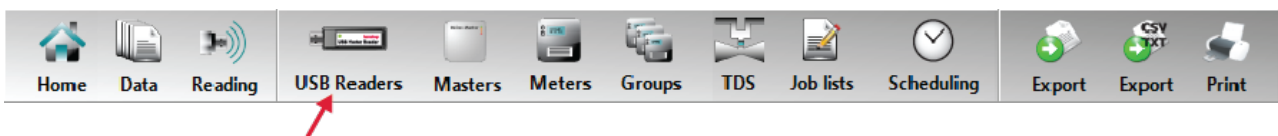
You can use the **Edit USB Meter Reader** window for either changing the name of a random USB Reader in the system or deleting a USB Reader. This section describes step-by-step how to change the name of or delete a USB Reader.

Topics:

- Opening the **Edit USB Meter Reader** window
- Changing the name of a USB Reader
- Deleting a USB Reader
- Cancelling changes
- Saving changes.

Opening the Edit USB Meter Reader window

You can open the window by clicking "USB Readers" in the toolbar or via the menu **Edit > USB Readers**.



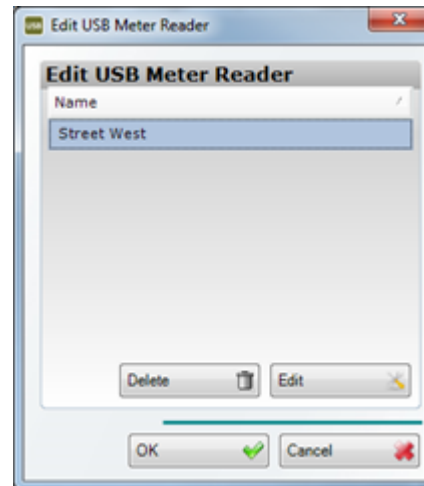
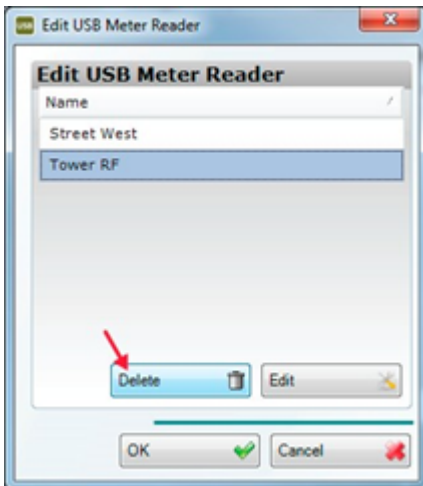
Changing the name of a USB Reader

In order to change a name, click **Edit** or double-click the name that you want to change. You can change the names of as many USB Readers as you want – to edit the next USB Reader, repeat the procedure.



Deleting a USB Reader

You can delete a USB Reader by selecting the one that you want to delete and clicking **Delete**.



Cancelling changes

To cancel your changes, click **Cancel**.

Saving changes

To save your changes, click **OK**.

4.4.4 The Edit M-Bus Master window

The **Edit M-Bus Master** window is used for changing the names of, configuring and deleting M-Bus masters in a system.

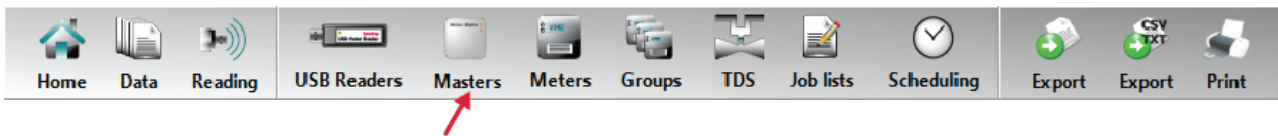
If Kamstrup M-Bus Master 250 is used via USB cable, the master is automatically detected and created. If other masters are used or Kamstrup M-Bus Master 250 is connected via RS-232, the master must be created manually.

Topics:

- Opening the **Edit M-Bus Master** window
- Changing the name of an M-Bus master
- Selecting maximum baud rate of an M-Bus master
- Using SND_NKE in an M-Bus master
- Showing whether an M-Bus master is connected

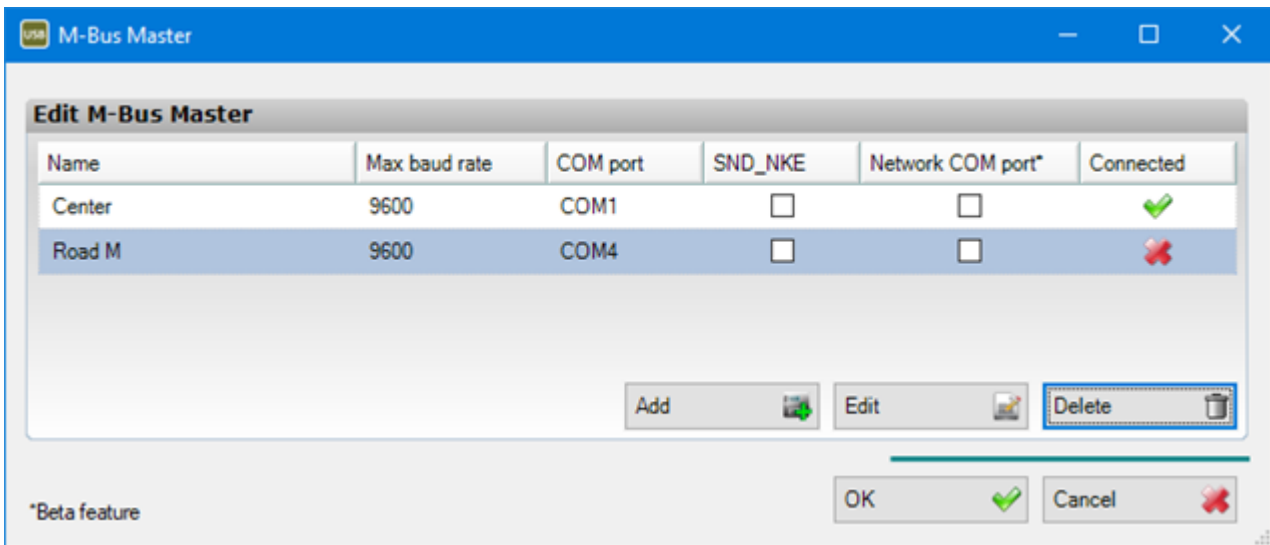
Opening the Edit M-Bus Master window

You can open the window by clicking **Masters** in the toolbar or via the menu **Edit > Masters**.



Changing the name of an M-Bus master

In order to change the name, click the **Edit** button and then the name you wish to change. You can change the names of as many M-Bus masters as you want – to edit the next M-Bus master, repeat the procedure.



Selecting maximum baud rate of an M-Bus master

The default maximum baud rate is 9600 Baud which can, however, be reduced to 2400 Baud or 300 Baud. This can be an advantage in installations with long cables where 9600 Baud may not provide stable readings or in systems in which none of the connected meters support 9600 Baud. In such cases, a lower maximum baud rate will reduce the reading time.

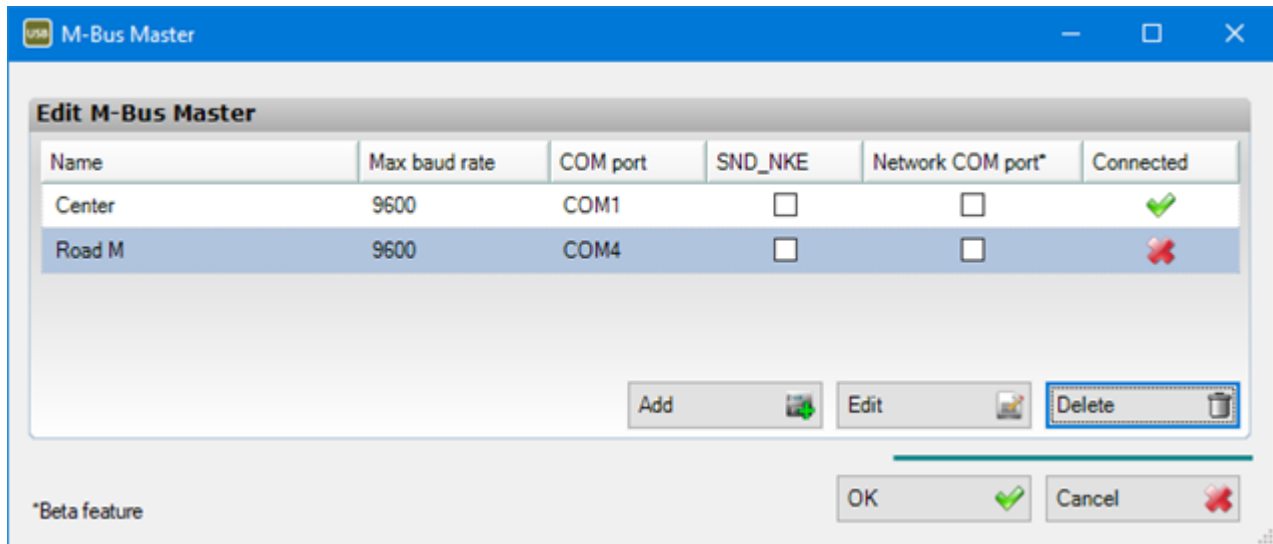
If 19200 or 38400 Baud are used, the selected M-Bus master and the connected meters must support these baud rates.

Using SND_NKE in an M-Bus master

In some M-Bus modules, data can be up to 15 minutes old when they are read. If you use the function SND_NKE (normalize M-Bus), all modules will supply current data.

Showing whether an M-Bus master is connected

This column shows whether an M-Bus master is connected to the PC via its USB cable. Masters connected via RS-232 COM port are not automatically selected. However, they are always shown as connected.

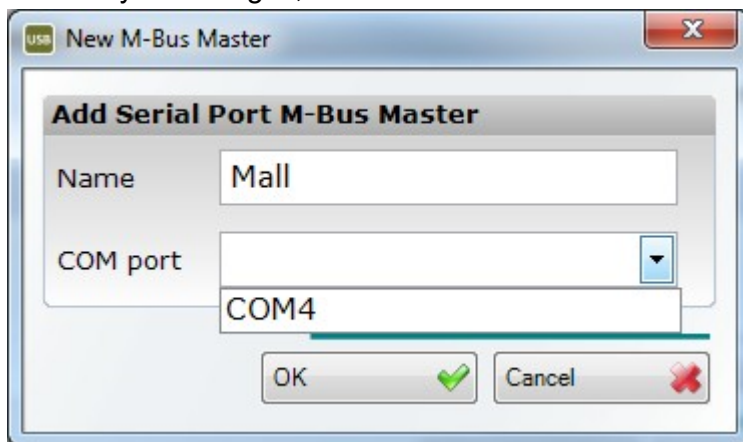


Cancelling changes

To cancel your changes, click **Cancel**.

Saving changes

To save your changes, click **OK**.



4.4.5 The Edit Meter window

In this window, you can add a new meter to your system, change the name of an existing meter and delete a meter from the system. This chapter shows you how to open the window and add a new meter as well as change the name of an existing meter.

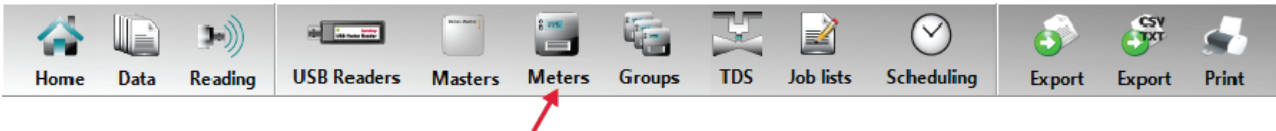
Topics:

- Opening the **Edit meter** window
- Adding meters

- Possible errors while importing meters
- Changing a meter name
- Deleting a meter
- Cancelling changes
- Saving changes.

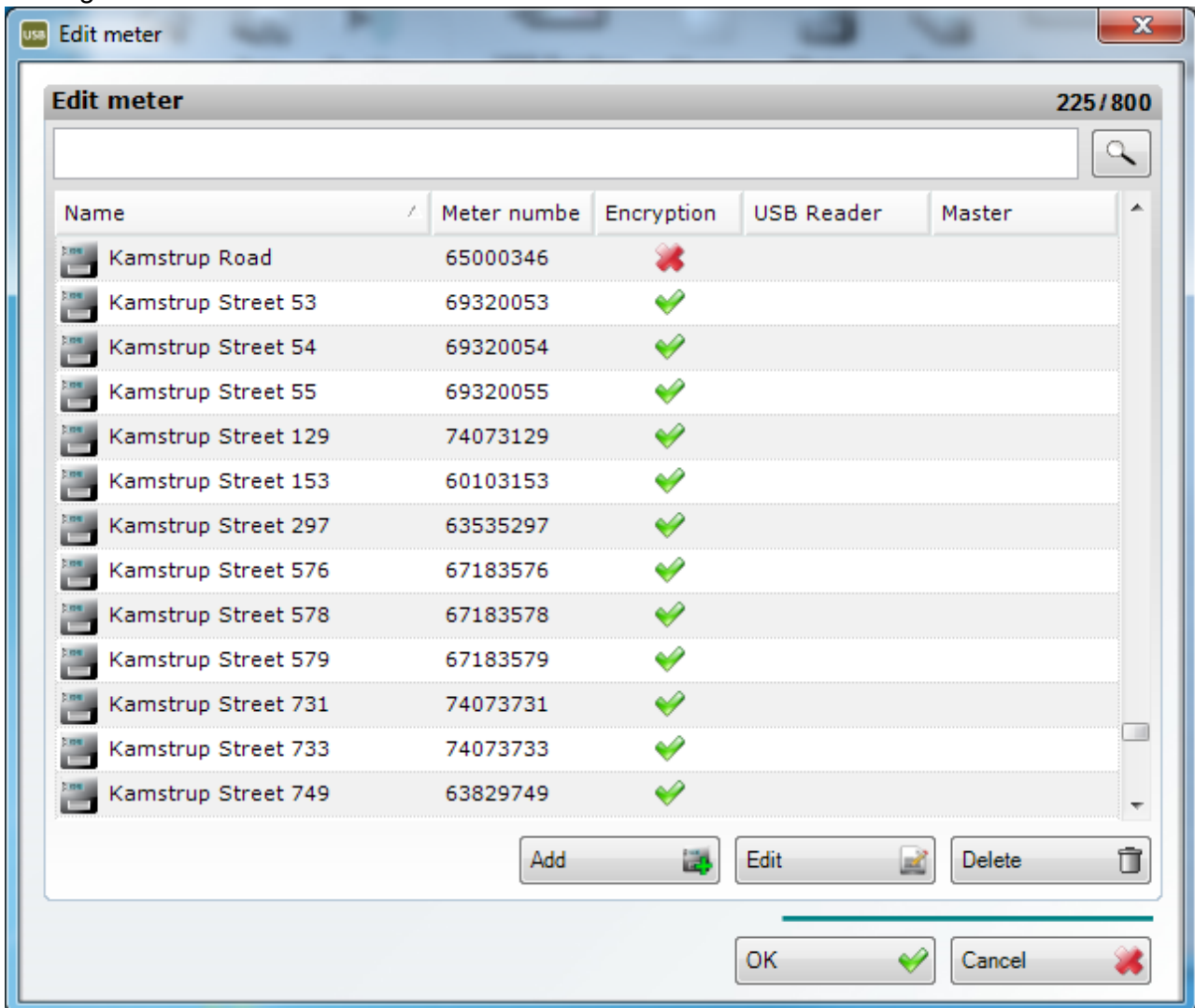
Opening the Edit meter window

You can open the window by clicking **Meters** in the toolbar, as shown below, or via the menu **Edit > Meters**.



Adding meters

Meters with wireless M-Bus can be delivered either with encrypted reading or with unencrypted reading.



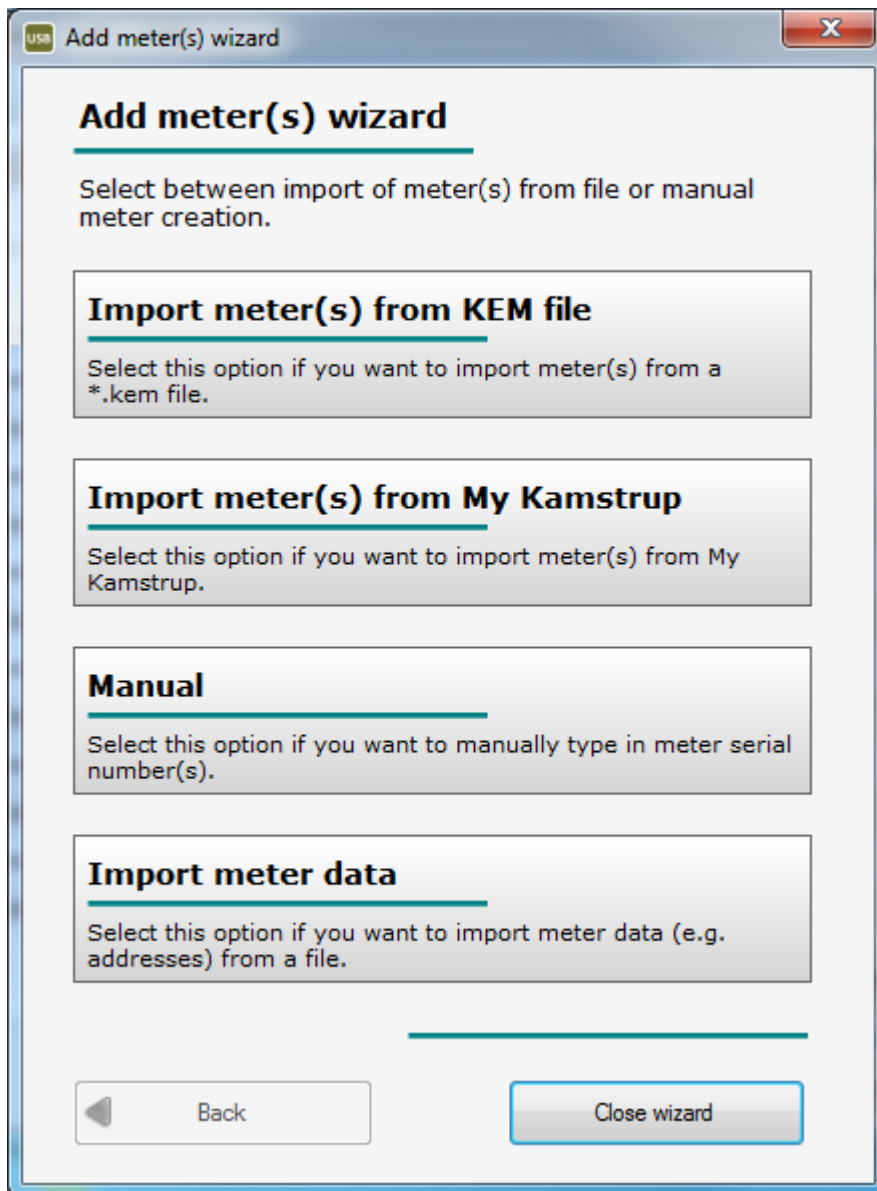
Adding meters with encrypted reading

In order to add meters to your system, the required information has to be imported first.

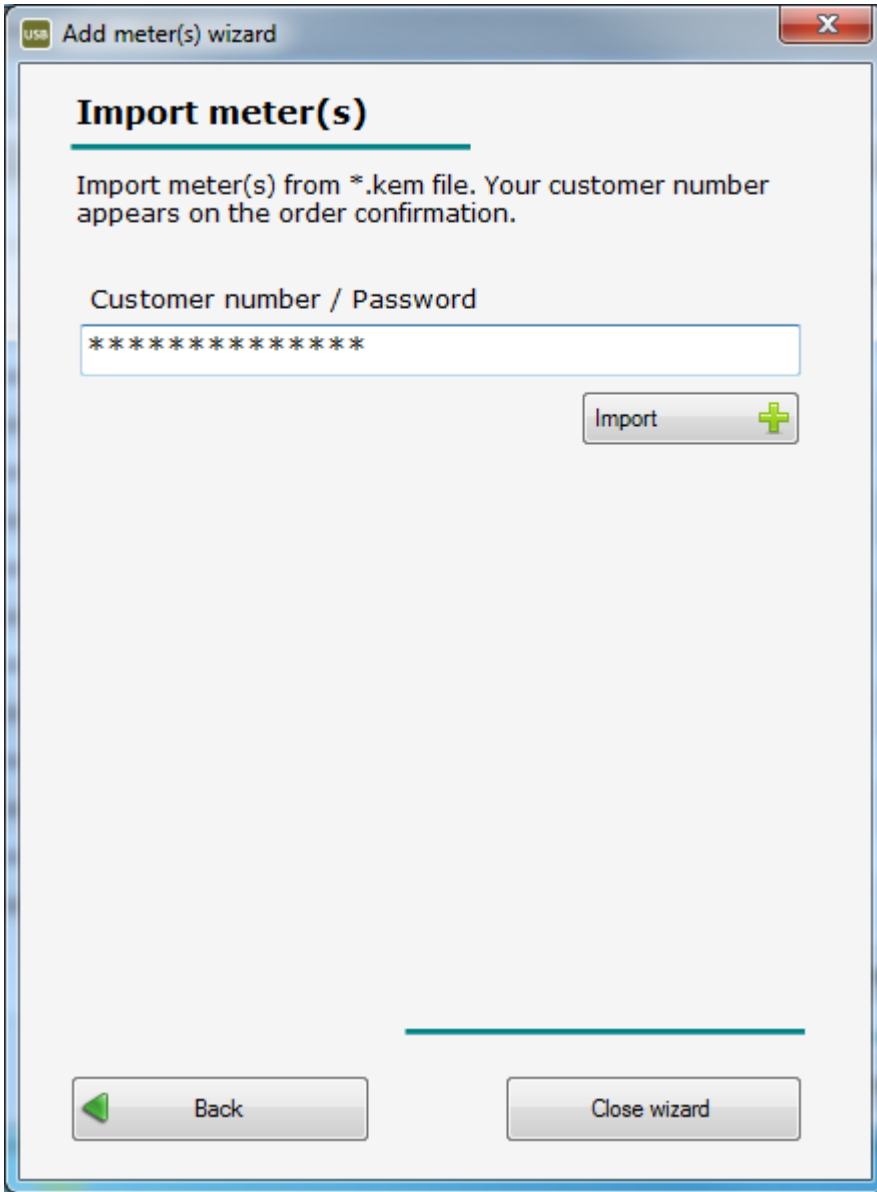
This can be done via **Import meter(s) from KEM file**: For this purpose, you receive an email from Kamstrup with a link to be used for downloading the KEM file.

You can also import meters from "My Kamstrup" which is a customer portal from which the program automatically collects the required information.

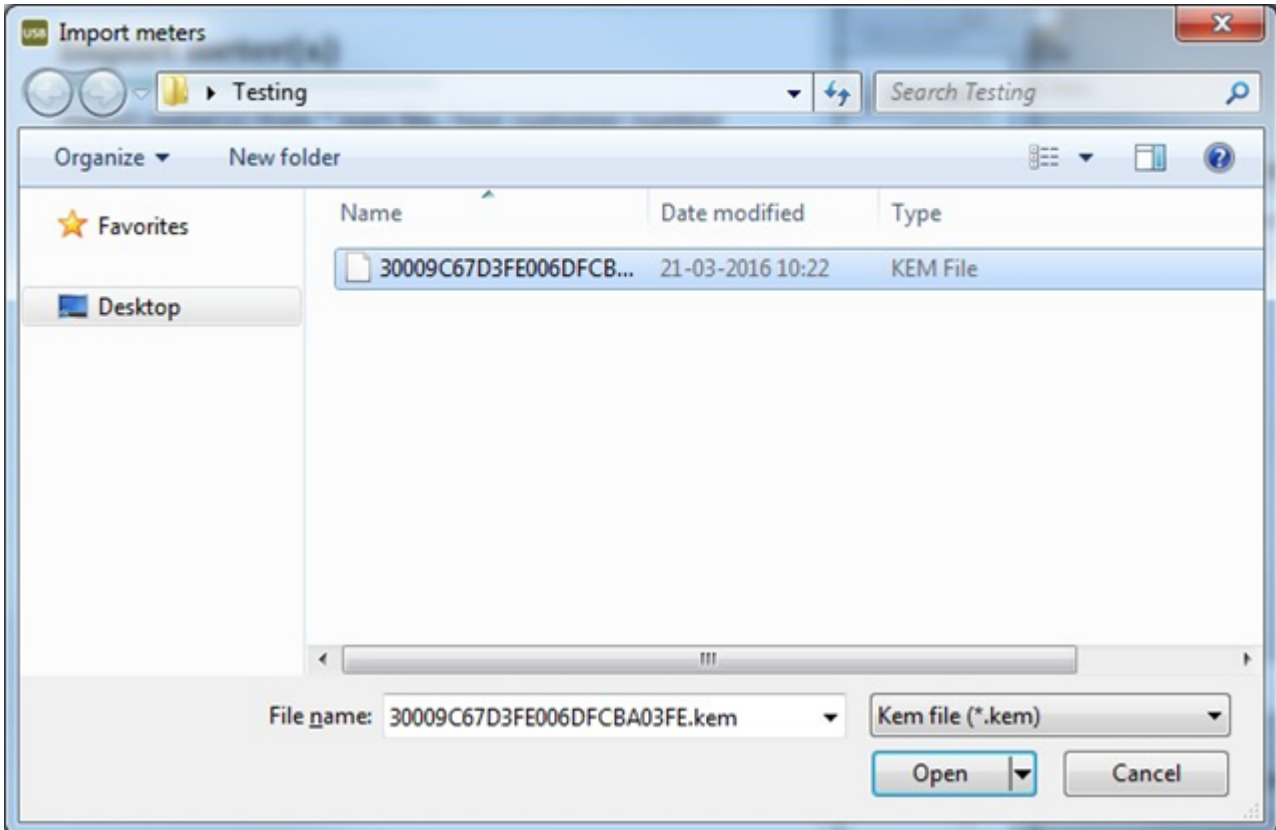
Click **Import meter(s) from KEM file**.



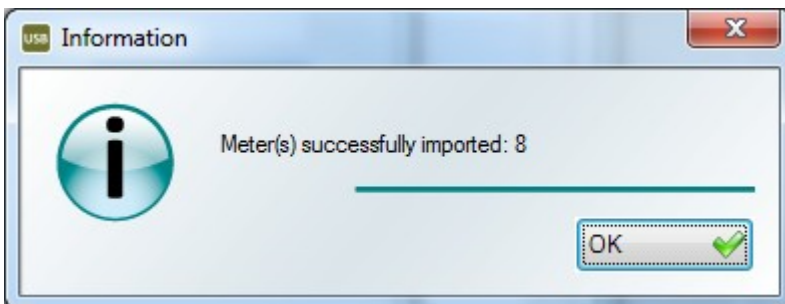
Enter your customer number (to be found in the top right part of your order confirmation), and click **Import**.



Select the file that you have downloaded. The file name consists of a long string of numbers and letters and ends with ".zip.kem".



The meters are then imported automatically.



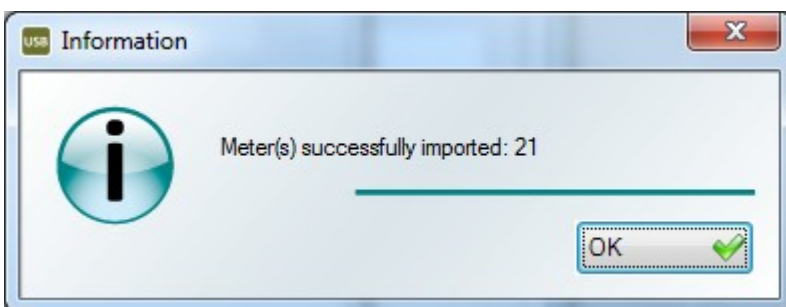
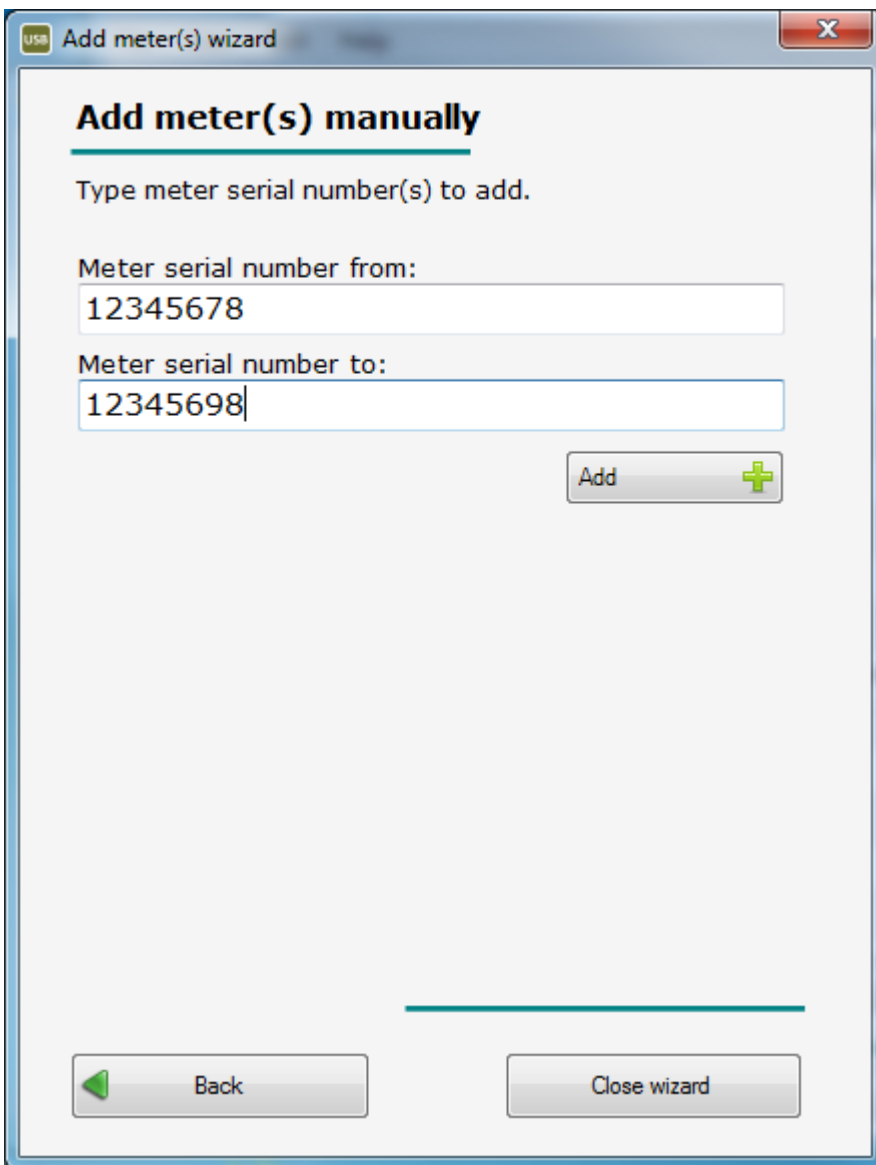
Adding meters with unencrypted reading

This function is primarily used for meters with wired M-Bus and Kamstrup 434 MHz radio.

Select **Manual** in the **Add meters** menu.

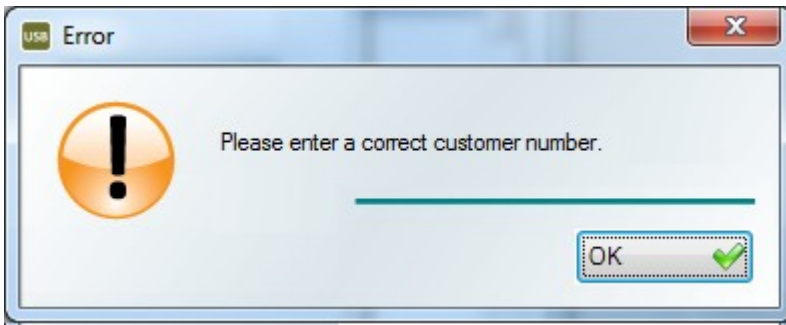
Enter the number of the meter with the lowest serial number in **Meter serial number from** and the number of the meter with the highest serial number in **Meter serial number to**.

Click **Add**.



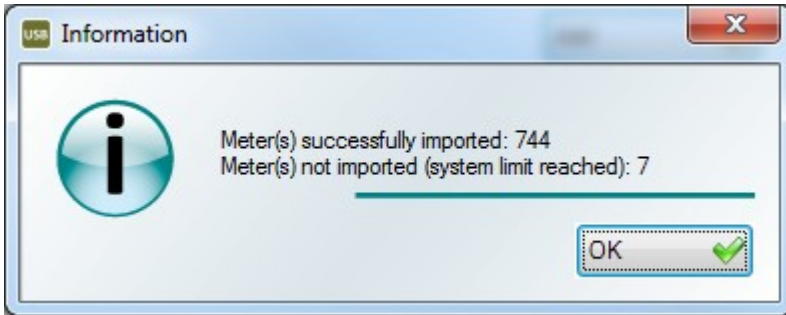
Errors while importing the KEM file

If you cannot import the KEM file, it could be due to one of the following errors:



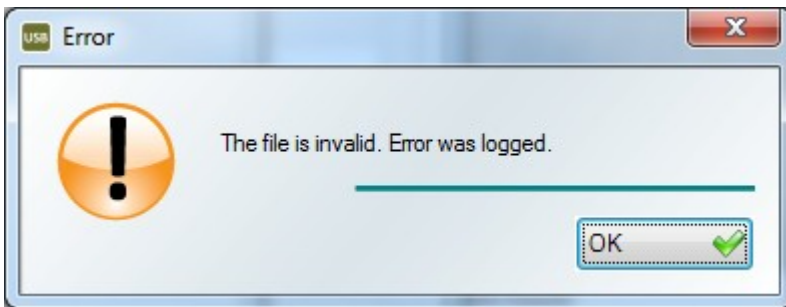
Wrong customer number

The customer number has been entered incorrectly. Check if the customer number has been entered correctly. If this is the case, please contact Kamstrup A/S.



Too many meters in the system

Note that the system can contain maximum 800 meters. If this limit is exceeded, the system will import up to 800 meters. The remaining meters will not be imported.

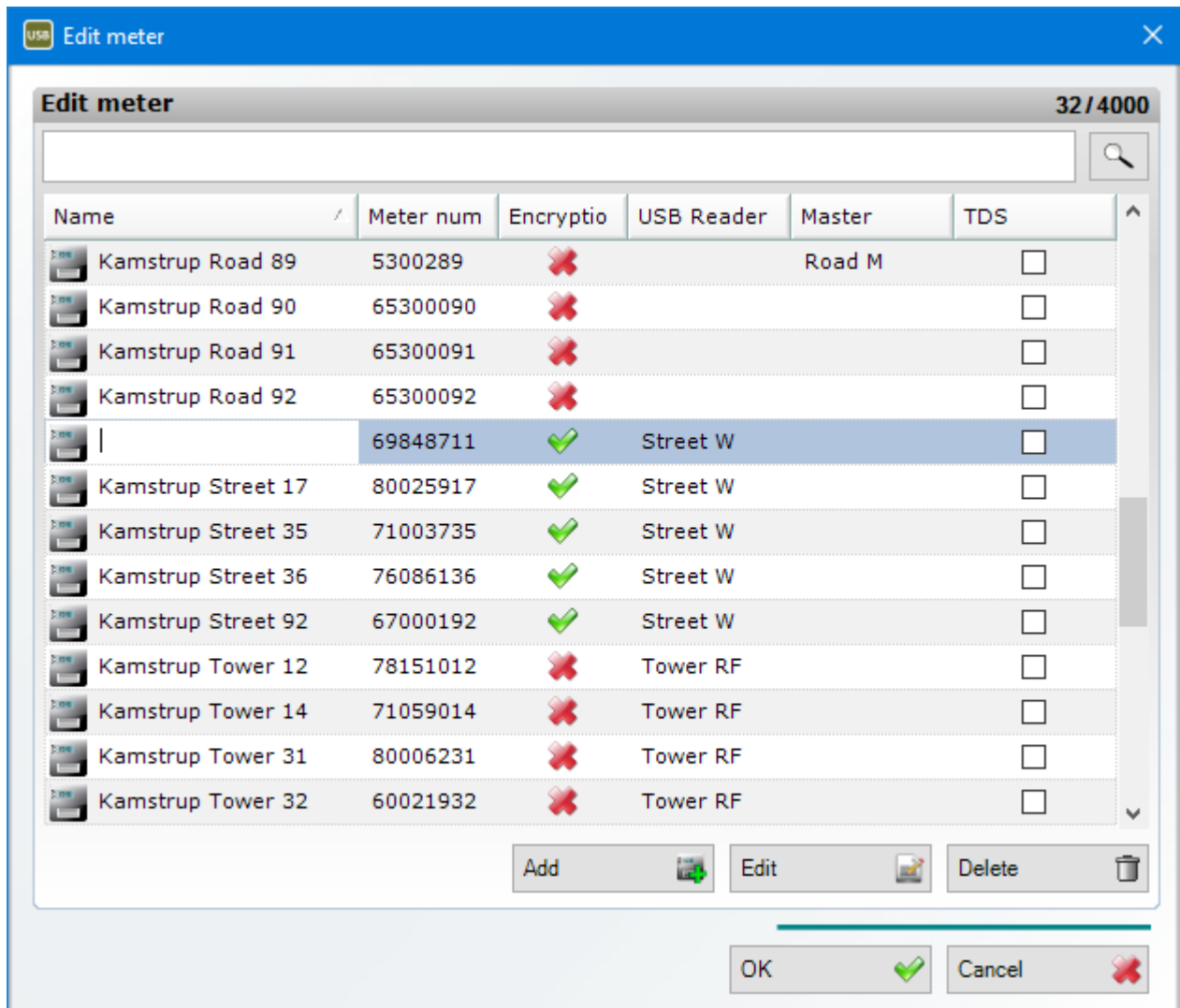


Unknown error

If an error has occurred while generating the file, or if the KEM file has been changed, the meters in this file cannot be imported. Please contact Kamstrup A/S to receive a new file.

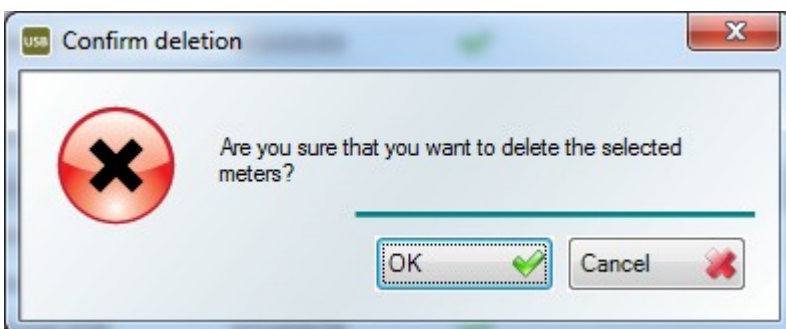
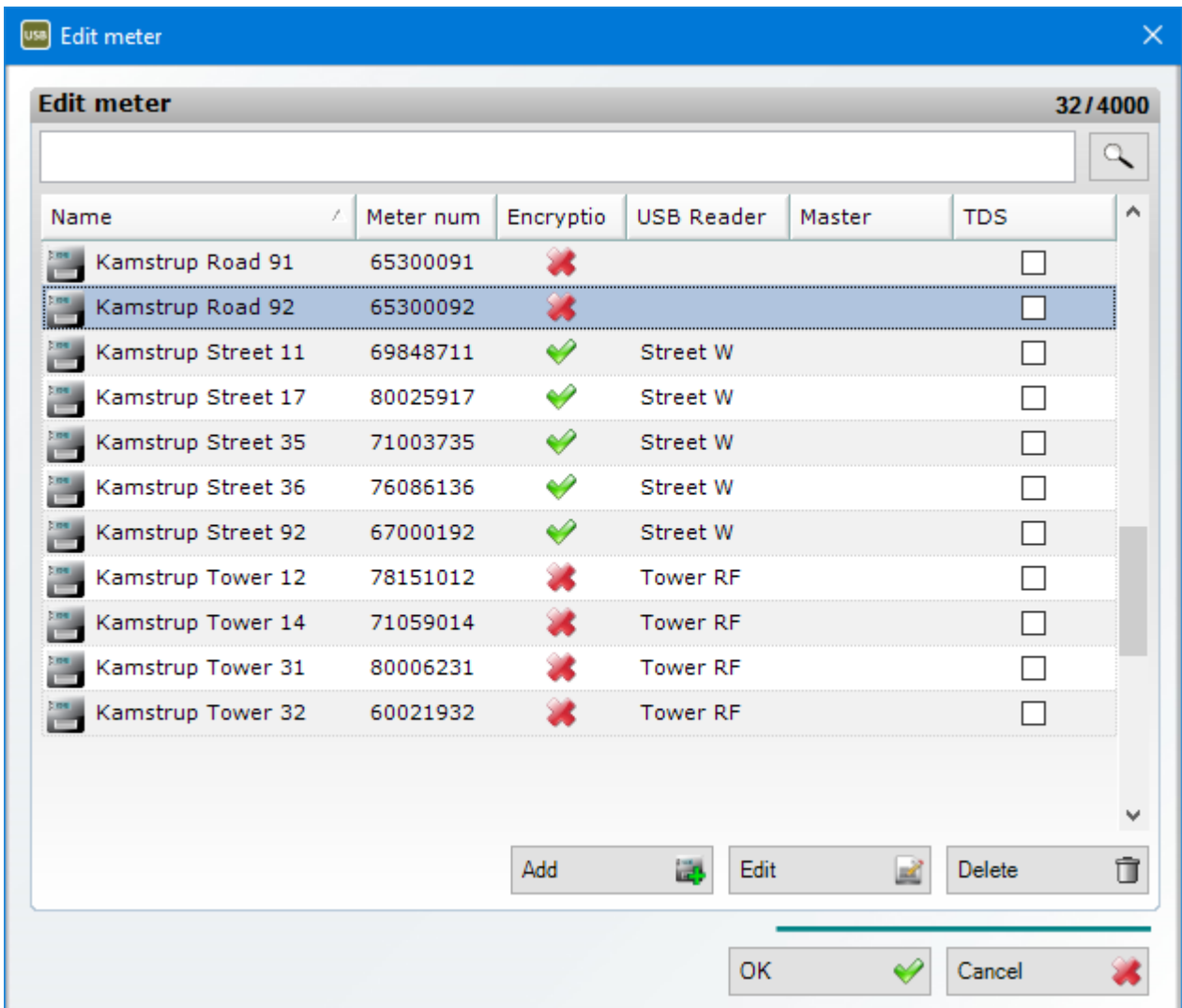
Changing a meter name

You can change the name of a meter by clicking **Edit** or by double-clicking the name that you want to change. Now, enter the new name, and either click **OK** (this will close the window) or press the "Enter/Return" key on the keyboard. Note that it is not possible to change a meter number. To do this, you must delete the meter that you want to change and then add a new meter.



Deleting a meter

You can delete a meter by selecting the meter that you want to delete, and click **Delete**.



Cancelling changes

To cancel your changes, click **Cancel**.

Saving changes

To save your changes, click **OK**.

Other details in the Edit meter window

Encryption	Shows whether the system includes an encryption key (KEM file) for the meter. Encryption keys are used for meters with wireless M-Bus and one-way radio.
USB Reader	Shows the USB Readers to which the meter is connected and which can thus read the meter.
Master	Shows the M-Bus masters to which the meter is connected and which can thus read the meter.

4.4.6 The New group window

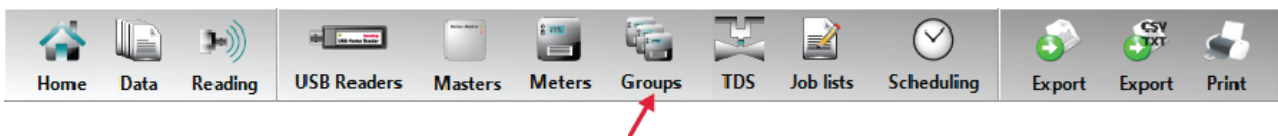
In this window, you can create or delete a meter group and add a meter to or delete a meter from a meter group. This section describes how to open the window and to carry out the various functions.

Topics:

- Opening the **New group** window
- Creating a meter group
- Adding meters to a group
- Removing meters from a group
- Deleting a group
- Cancelling changes
- Saving changes

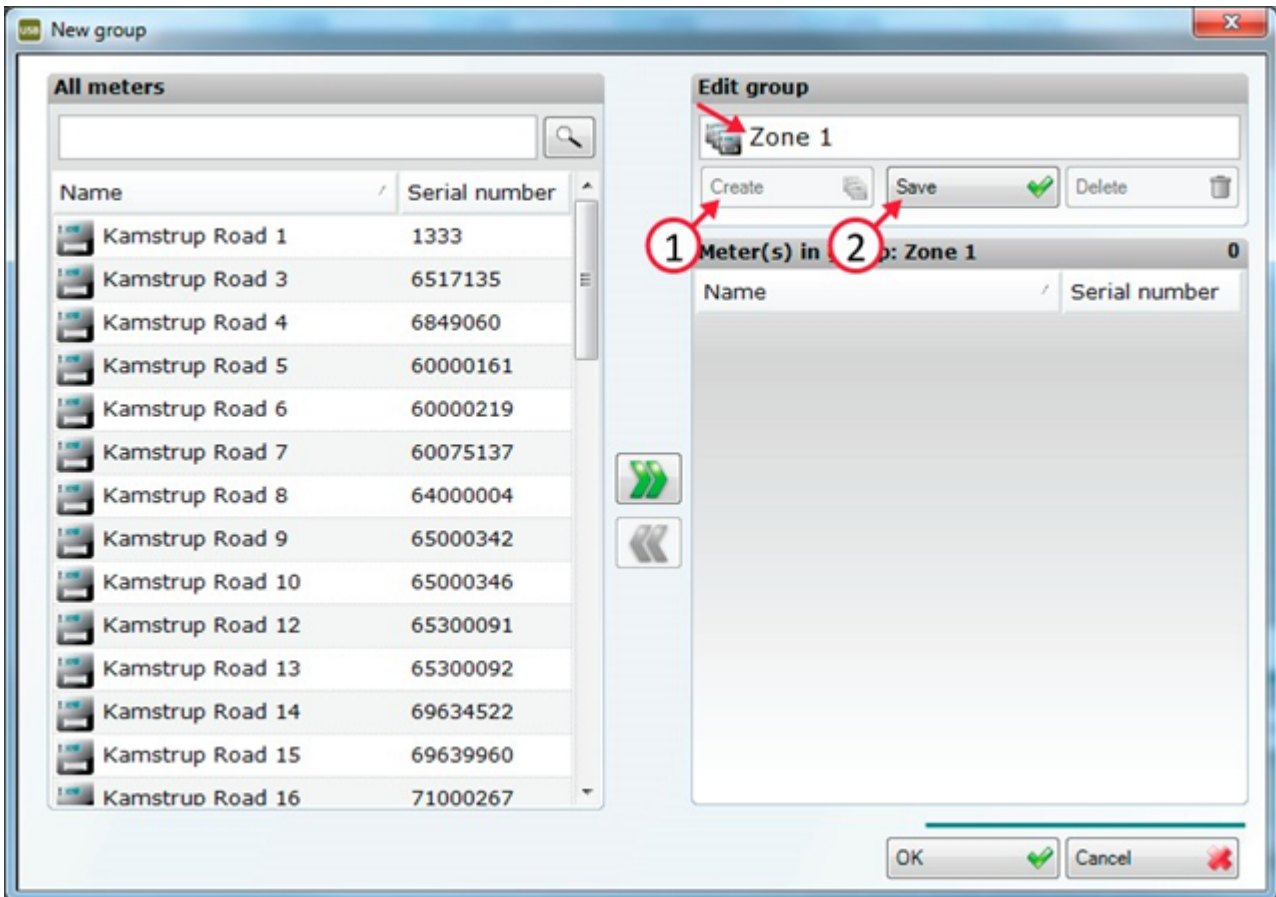
Opening the New group window

You can open the window by clicking **Groups** in the toolbar, as shown below, or via the menu **Edit > Groups**.



Creating a meter group

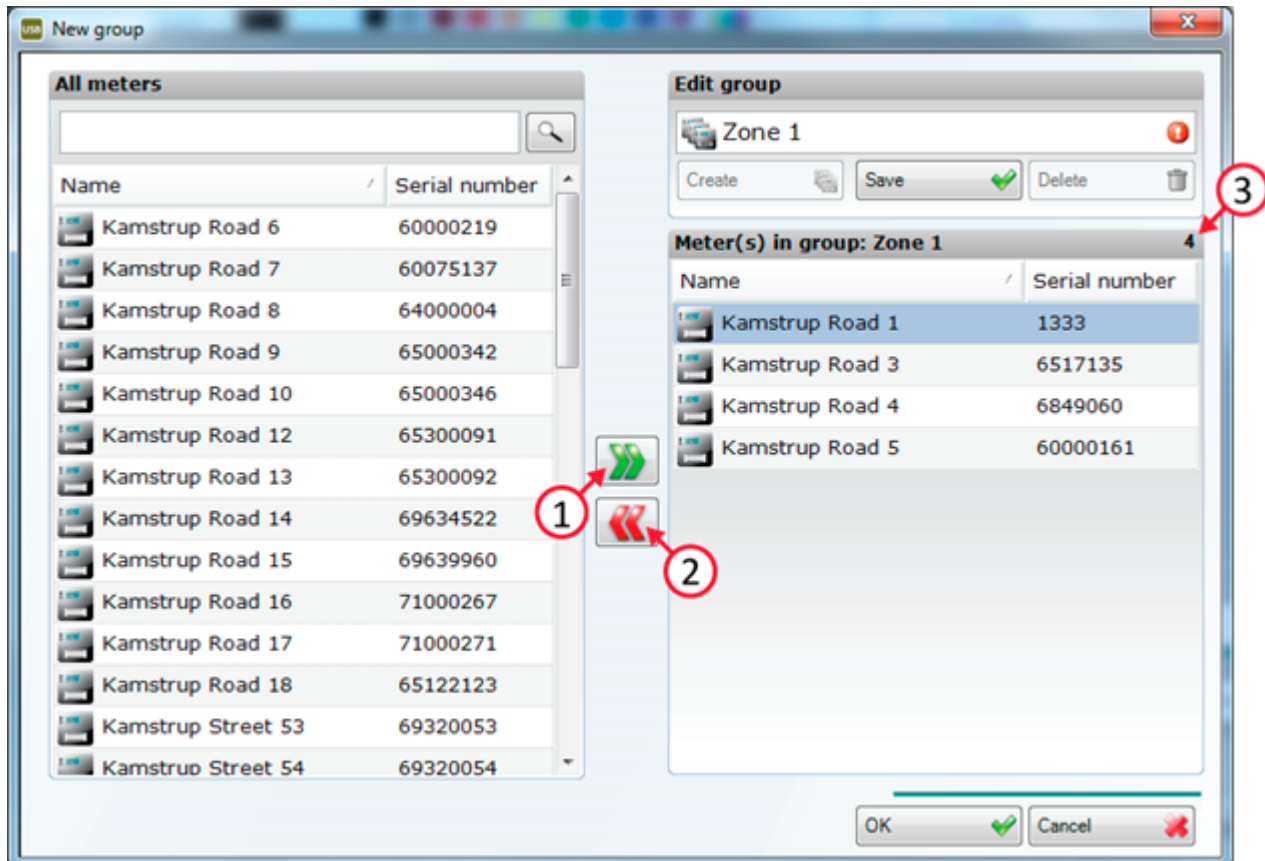
To create a new meter group, click **Create** (1). Enter a desired name (e.g. "Zone 1"), and click **Save** (2) or press the keyboard key "Enter/Return". The group has now been created, and you can add meters to the group as described in the next paragraph.



Adding meters to/removing meters from a group

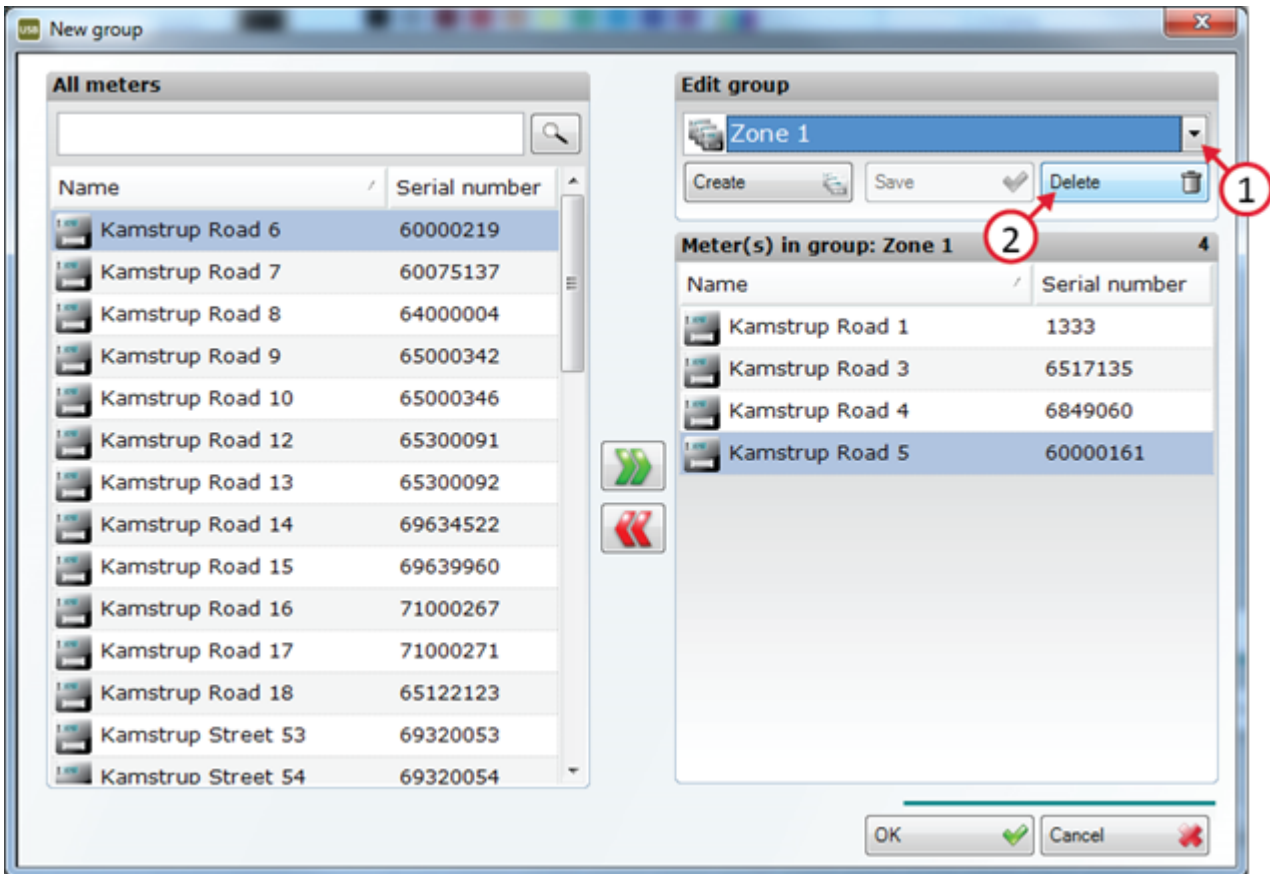
Select the group that you want to change. When you have selected a group, use the arrow buttons "Add" (1) or "Remove" (2) to add to or remove meters from a group.

1. The arrow button "Add" is used for adding a meter to a group
2. The arrow button "Remove" is used for removing a meter from a group
3. Here, the total number of meters in the group is shown. Note: A group can maximum contain 200 meters.



Deleting a meter group

To delete a group, select the group that you want to delete (1). Delete the group by clicking **Delete** as shown above (2). Before the group is deleted, you will be prompted to confirm. Note that only the group is deleted, not the meters in the group (see the **Edit meter** window to delete the meters).

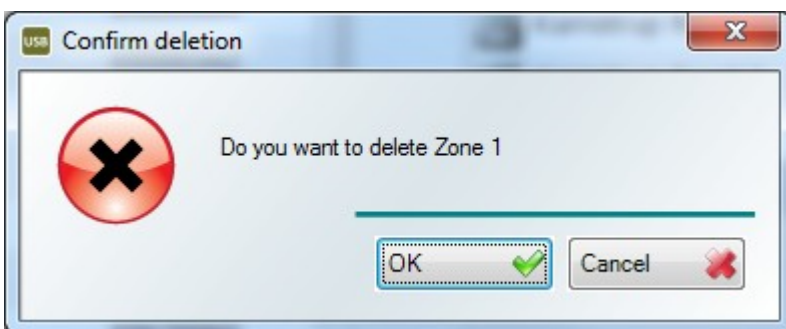


Cancelling changes

To cancel your changes, click **Cancel**. Note that deleted and saved groups cannot be cancelled.

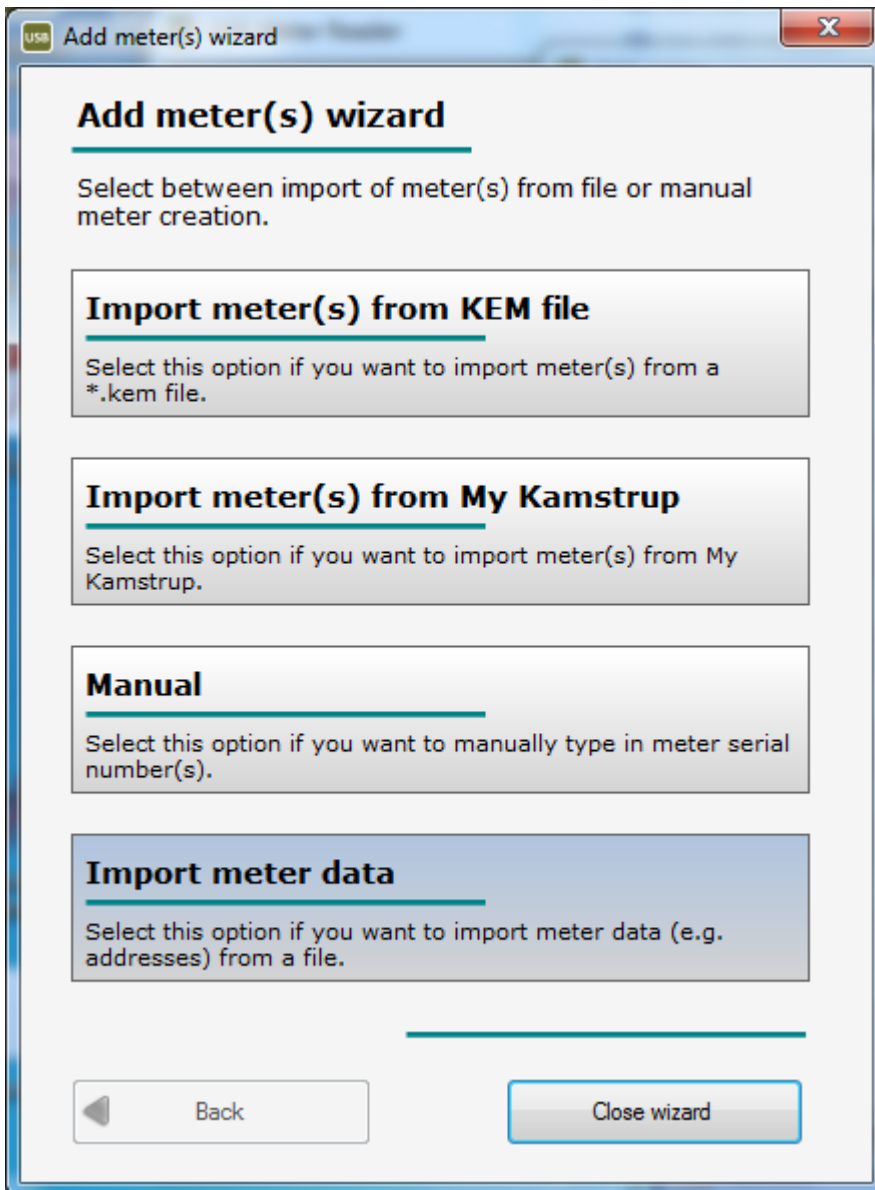
Saving changes

When clicking **OK**, you are prompted to save changes that have not already been saved. You will not be prompted in case of no changes or if the changes have already been saved.



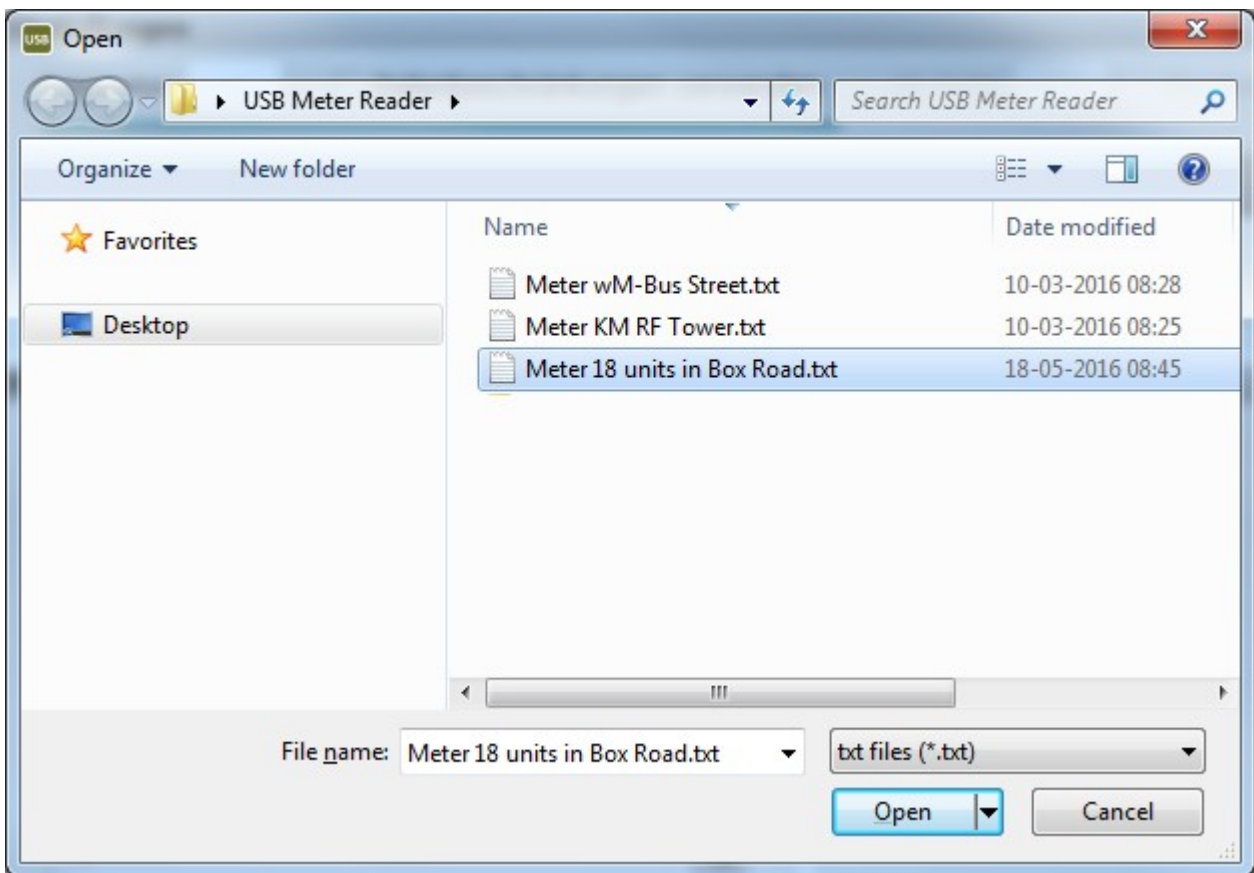
4.4.7 The Import of meter data window

If the function module "Import/Export" is installed by means of the corresponding licence key, it is possible e.g. to import installation addresses from a billing program.

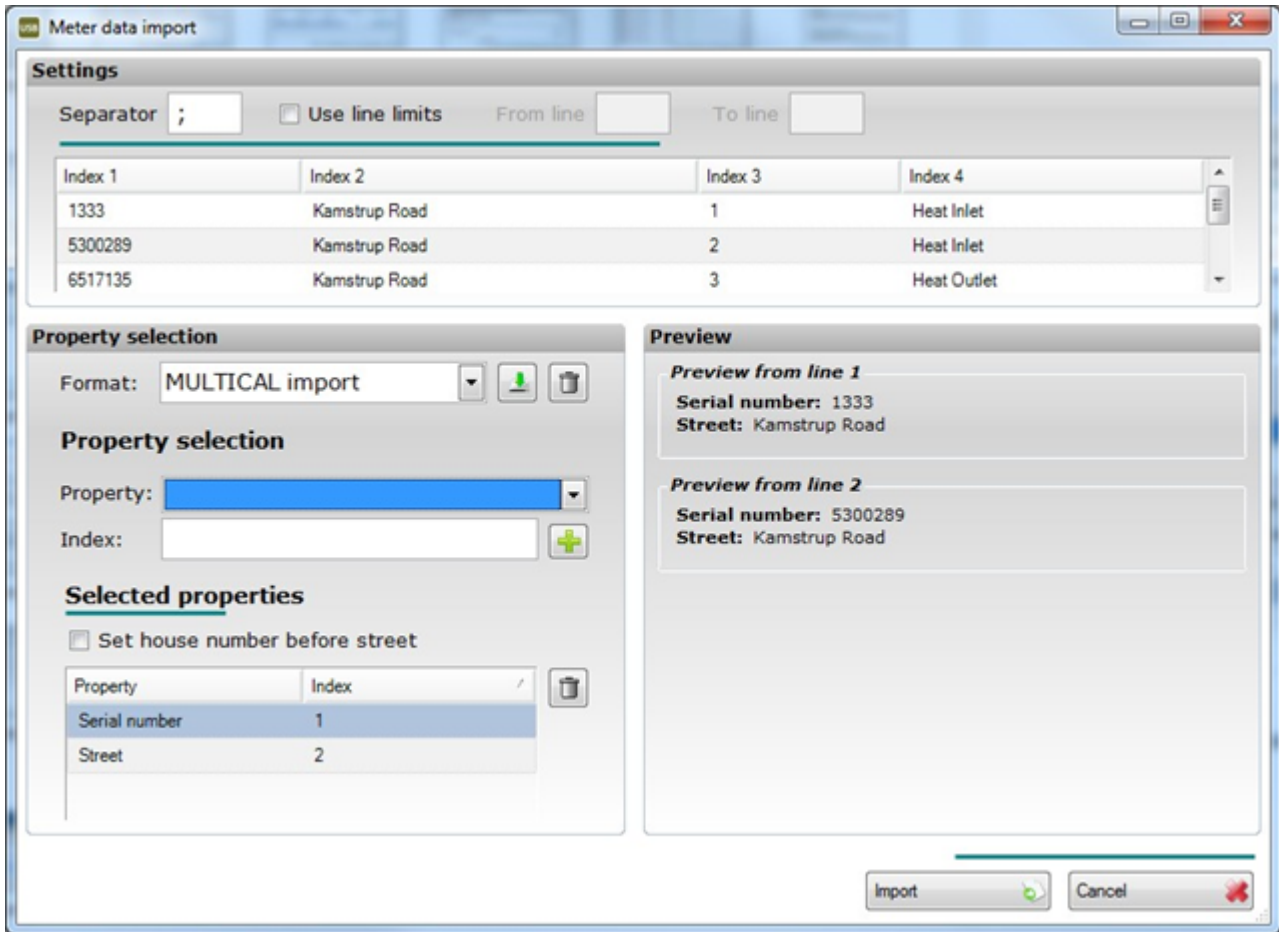


Select the file that contains the relevant meter information.
The file must be in the format TXT or CSV.

USB Meter Reader



Configuring format for import of meter data



SETTINGS

Separator

Enter the character that is used as separator in the file to be imported. Typically, characters such as semicolon or comma are used.

Use line limits

If you do not want to import all data from the import file, you can enter the lines that you want to import.

Index


Here the content of the import file and the order of the different meter values are shown. In the example, the meter number is placed at 1 and the address at 3.


Property selection

Here you select the meter values that you want to import and where in the import file each meter value is to be placed.

Format

If you have previously created and saved an import format, you can select it here for reuse.

If you want to save changes to an already created format, click .

If you want to delete an already created format, select the format, and click .

Property selection

Here you select in which order the meter values are to be placed.

Property

Select the meter value that is to be placed.


Index

Enter the number of the placement of the current meter value.

Selected properties

Here the result of the recent selection is shown.

If the house number in the import file is placed before the address, the **Set house number before street** check box must be selected.

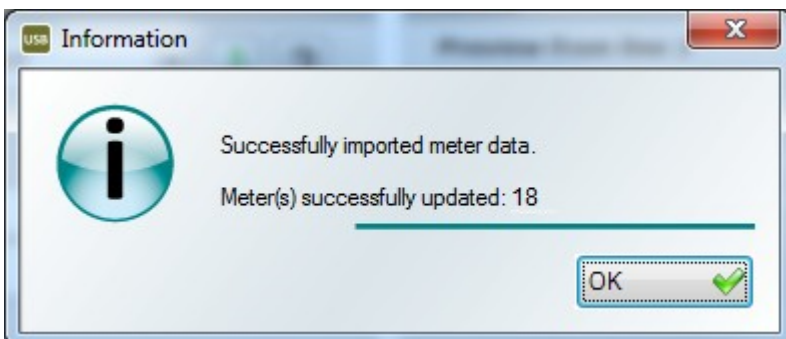
If you want to delete an already selected index, select the index, and click .

Preview

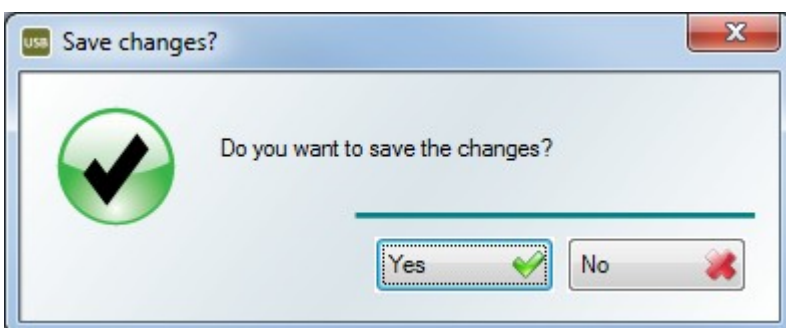
Here it is shown how the import format is interpreted with the recent selection.

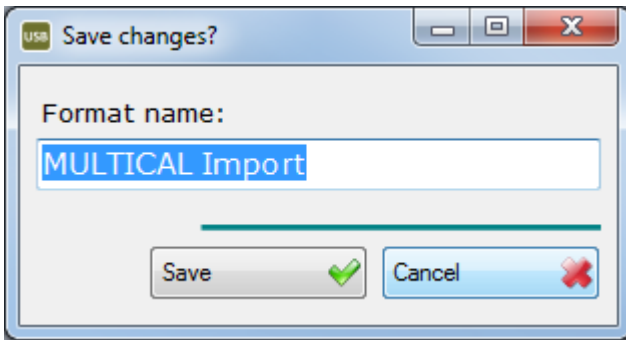
Import

When clicking this button, the result of the data import is shown.



After importing the data, it is possible to save the setup for reuse.

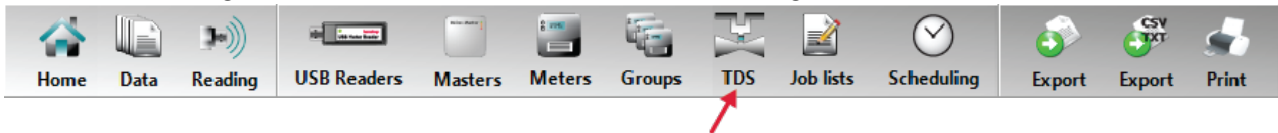




4.4.8 The Thermal Disconnect (TDS) window

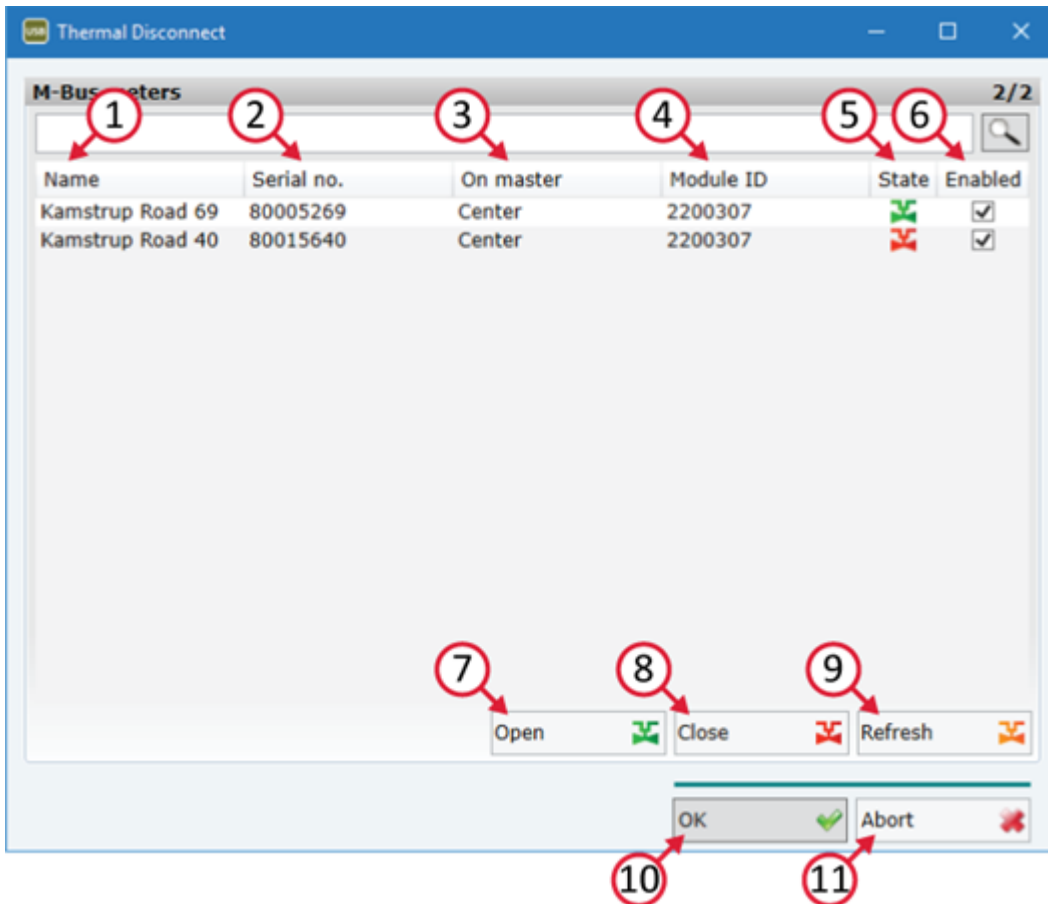
In the **Thermal Disconnect** menu, you can open and close a thermal actuator connected to M-Bus module HC-003-22, which can be mounted in MULTICAL® 403, 603 and 803.

Note: When using Thermal Disconnect, the meter's PP configuration must be set to 99.



Topics:

1. Name
2. Serial no.
3. On master
4. Module ID
5. Status
6. Enabled
7. Open
8. Close
9. Refresh
10. OK
11. Abort



Name

Shows the name of the meter.

Serial No.

Shows the serial number of the meter.

On master

Shows to which M-Bus master the meter is connected.

Module ID

Shows module type and its configuration.

Status

Shows whether the actuator is open or closed.

Enabled

Shows whether the meter is enabled for Thermal Disconnect.

Open

Opens the actuator of the selected meters.

Close

Closes the actuator of the selected meters.

Refresh

Retrieves the status of the actuators of the selected meters.

OK

Closes the window.

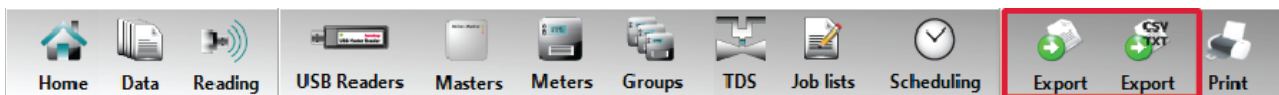
Abort

Stops initiated tasks.

4.4.9 The Export of meter data window

By default, reading data can be exported in the following fixed formats: XLS, XLM, TXT, CSV and PDF.

If the function module "Import/Export" is installed by means of the corresponding licence key, it is possible to create individual TXT and CSV export formats.



Individual export

Settings

Separator section

Enter the character to be used as separator between meter values in the file to be exported.

Typically, characters such as semicolon or comma are used.

Enter the total number of separators to be inserted in each row in the export format.

Meter selection

Select all meters, or select a meter on the basis of a user-defined list. The user-defined list is described further below in this paragraph.

Time limits


Choose the period from which the readings should be retrieved.


Property selection

Here, you select the meter values that you want to export and where in the export file each meter value is to be placed.

Format

If you have previously created and saved an export format, you can select it here for reuse.

If you want to save changes to an already created format, click .

If you want to delete an already created format, select the format, and click .

Property selection

Here, you select the meter values that you want to export and their order in the export format.

Property

Here, you select the individual meter values you want to export.

Index

Enter the number of the order placement in the export format.

Selected properties

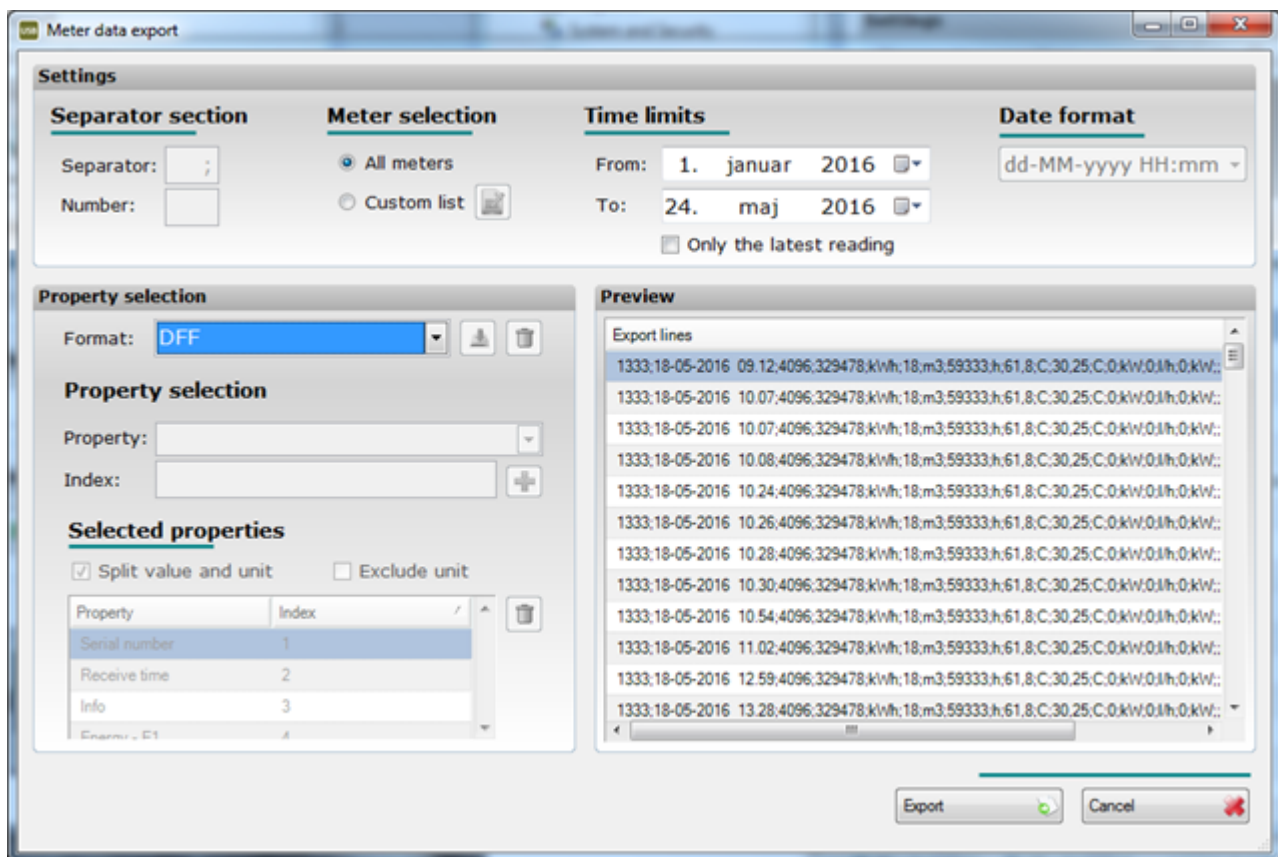
Here the result of the recent selection is shown.

If you want to separate values from units, select **Split value and unit**.

If you want to delete an already selected placement, select the meter value, and click .

Preview

Here, it is shown how the export format looks with the recent selection.



Custom meter list selection

This function is used if you do not want to export all meters in the database.

All meters

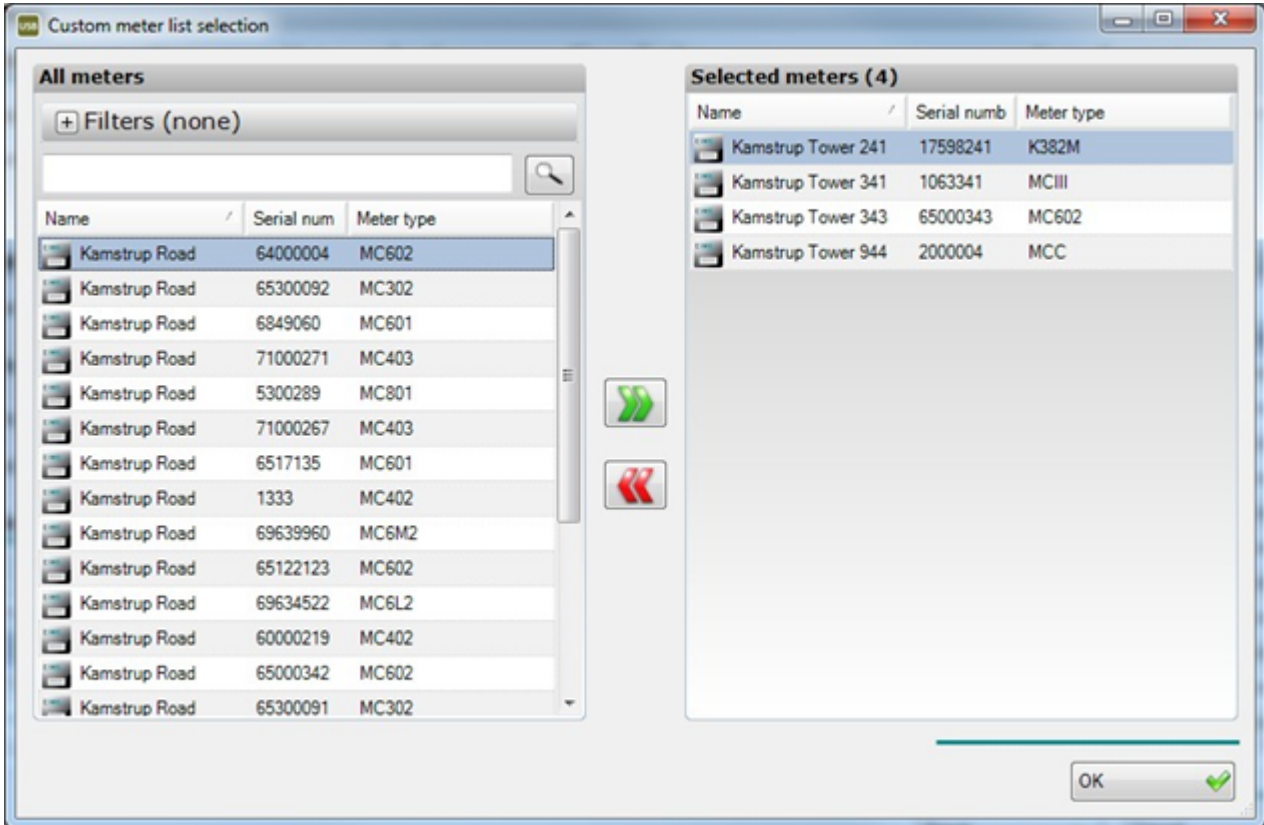
Here, the meters available in the database are shown.

Select the meters from which you want to export data, and move them to **Selected meters** by clicking the green arrow.

Selected meters

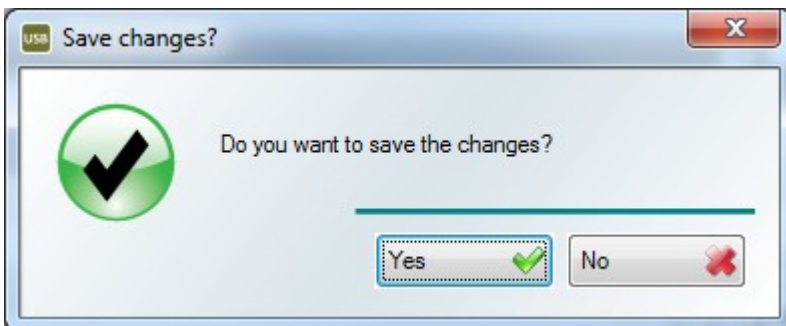
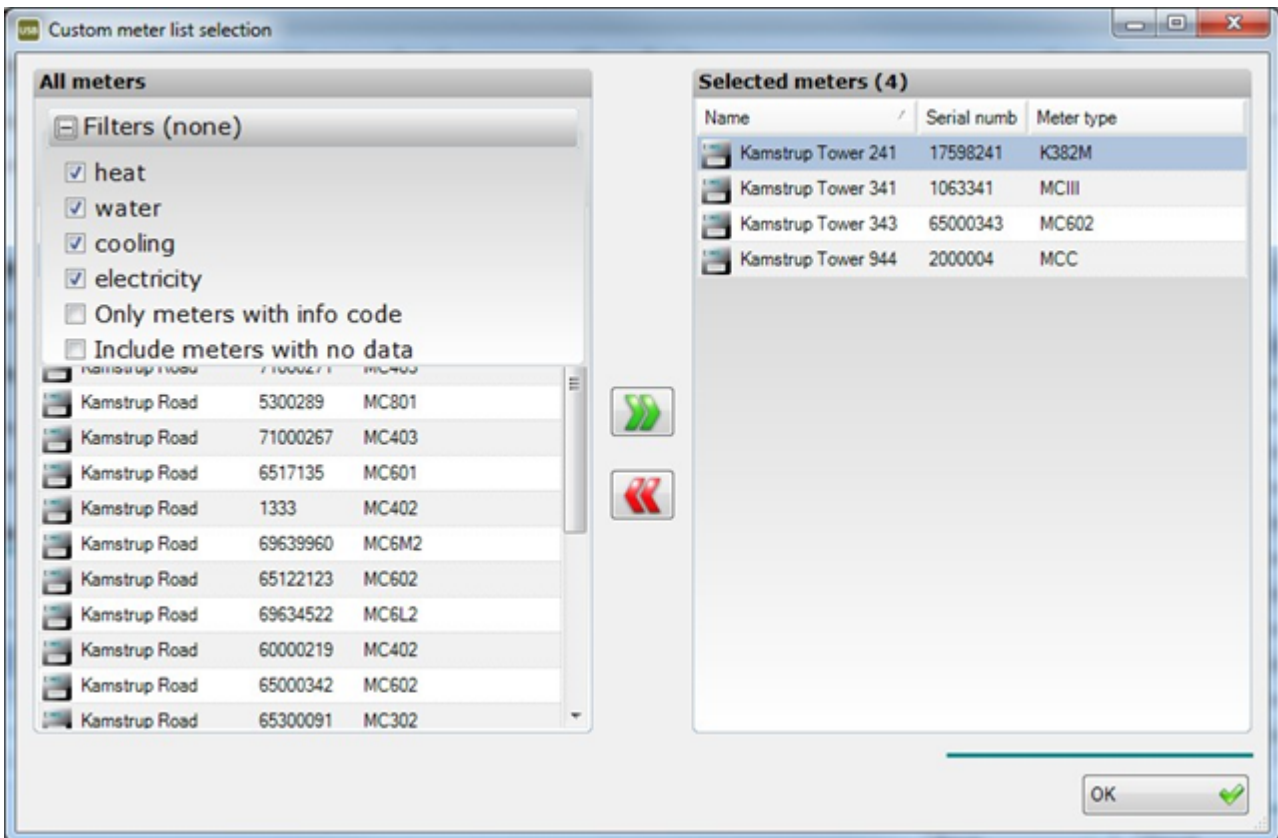
Here, the meters are shown from which data is exported.

Meters are removed by moving them back to **All meters** by clicking the red arrow.

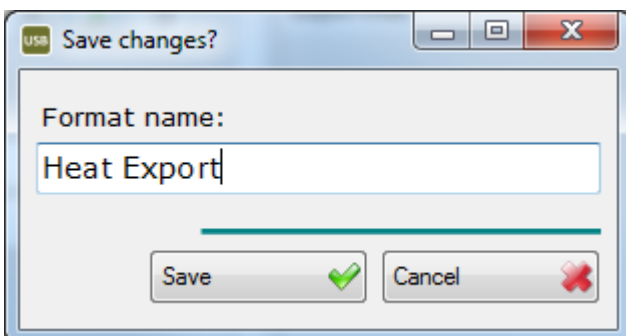


Filters in the All meters menu

Via the filter function, you can select and deselect the display of meters. If you e.g. only want to export heat meters, deselect all other meters than heat meters. Then, only heat meters are shown.



After exporting the data, it is possible to save the setup for reuse.



4.4.10 The New job window

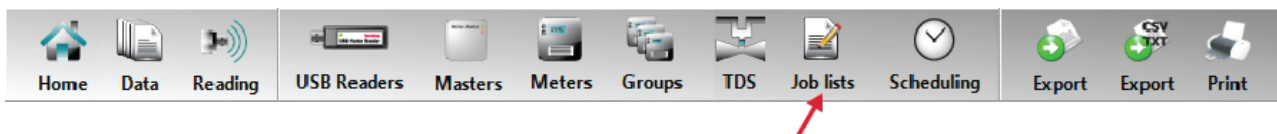
In this window, you can define a list of meters to be read by a specific USB Reader and M-Bus master, respectively. In the Kamstrup USB Meter Reader program, it is called a job. This section describes how to open the window and define a job (meter list) for a USB Reader and an M-Bus master, respectively.

Topics:

- Opening the **New job** window
- Adding a meter to a USB Reader and an M-Bus master, respectively
- Disconnecting a meter from a USB Reader and an M-Bus master, respectively
- Sending a job to a USB Reader and an M-Bus master, respectively
- Cancelling changes
- Saving changes.

Opening the New job window

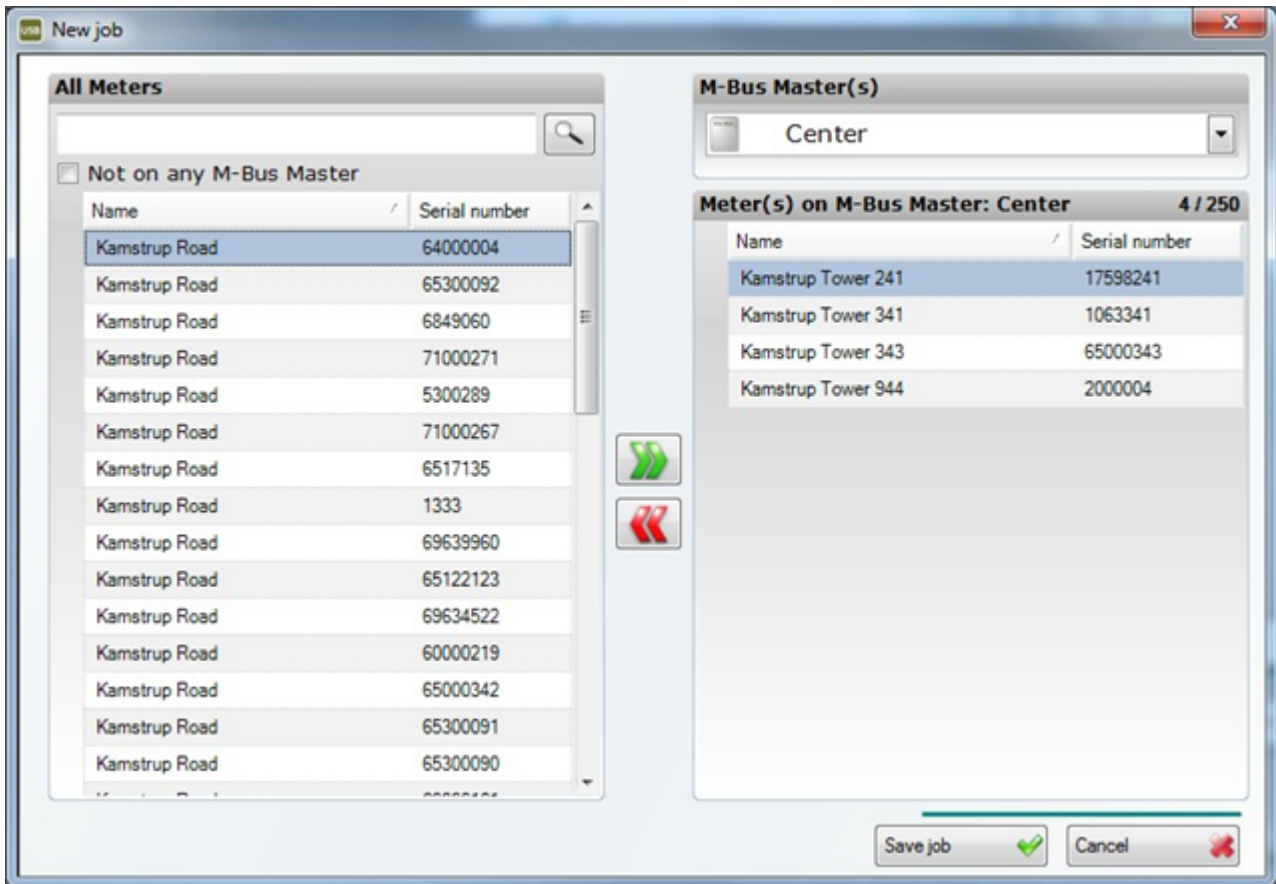
You can open the window by clicking **Job lists** in the toolbar, as shown below, or via the menu **Edit > Job lists**.



Overview

In the **New job** window, you can add meters or groups to a job. The window contains the following:

- A list of meters and groups not included in the job list
- A group. Note the group icon, and that you can expand the group by clicking +
- A meter. Note the meter icon
- The arrow buttons "Add" and "Remove"
- Drop-down menu listing all USB Readers and M-Bus masters in the system.
- Job list
- Number of meters in the job list. Note that a job can maximum contain 200 meters.



Creating/changing a job (Adding meters to/removing meters from a USB Reader and an M-Bus master, respectively).

First, select the USB Reader for which you want to create/change a job. When you have selected a USB Reader, use the arrow keys "Add" and "Remove" to add groups to and remove groups from the job, respectively. All changes that you make will be remembered, but not saved. Thus, you can change the job lists of as many USB Readers and M-Bus masters, respectively, as you want before saving the changes.

Sending a job to a USB Reader and an M-Bus master, respectively

See "Saving changes".

Cancelling changes

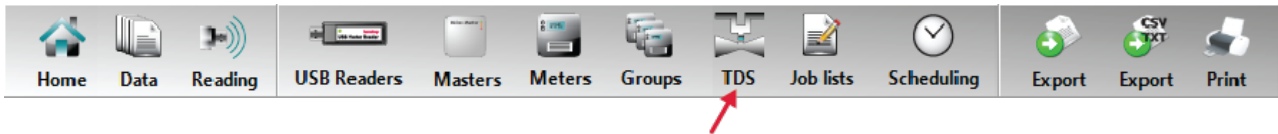
To cancel your changes, click **Cancel**.

Saving changes

To save your changes, click **OK**. When you have saved the changes, the new job will be sent to the USB Reader and M-Bus master, respectively, the next time the system obtains contact with the USB Reader and M-Bus master, respectively. Thus, you can define a new job for a USB Reader at any time, even without having contact to the USB Reader or M-Bus master in question.

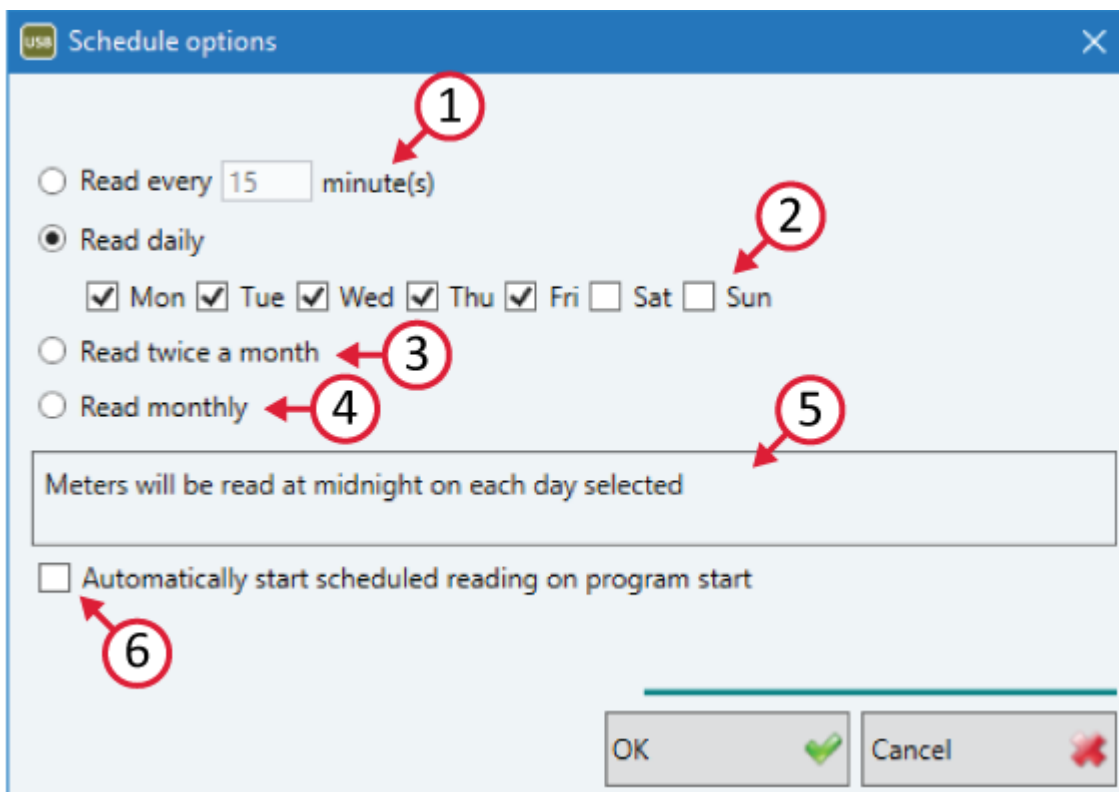
4.4.11 The Scheduling window

In the **Planning** menu, select how often you want to read the meters that are active in the **Job lists** menu.



Topics:

1. Read every XX minute
2. Read daily
3. Read twice a month
4. Read monthly
5. Info box
6. Automatically start scheduled reading on program start



Read every XX minute

Here, you can select a minute interval between 0 and 1440. If you select 0, a new reading starts as soon as the previous reading is completed.

Read daily

The meters are read at midnight on each of the selected days.

Read twice a month

The meters are read at midnight on the 15th and on the last day of each month.

Read monthly

The meters are read at midnight on the last day of each month.

Info box

Describes the function of the selected reading type.

Automatically start scheduled reading on program start

When selecting this function, USB Meter Reader automatically starts the scheduled reading when the program is started.

4.4.12 The Set-up window

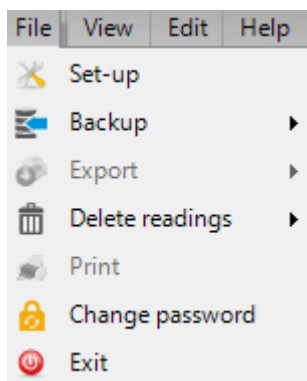
In this window, you can change the settings for your Kamstrup USB Meter Reader. This section describes how to open the window, to change the language, to define missing meters and to save data.

Topics:

- Opening the **Set-up** window
- Changing the language
- Changing the definition "Missing meters"
- Changing the data folder (path)
- Re-establishing the standard settings for viewing

Opening the Set-up window

You can open the window via the menu **File > Set-up**, as shown below.



The Set-up window

Here, you can change the following three settings in the Kamstrup USB Meter Reader system:

1. To change a language, select the desired language in the window below.

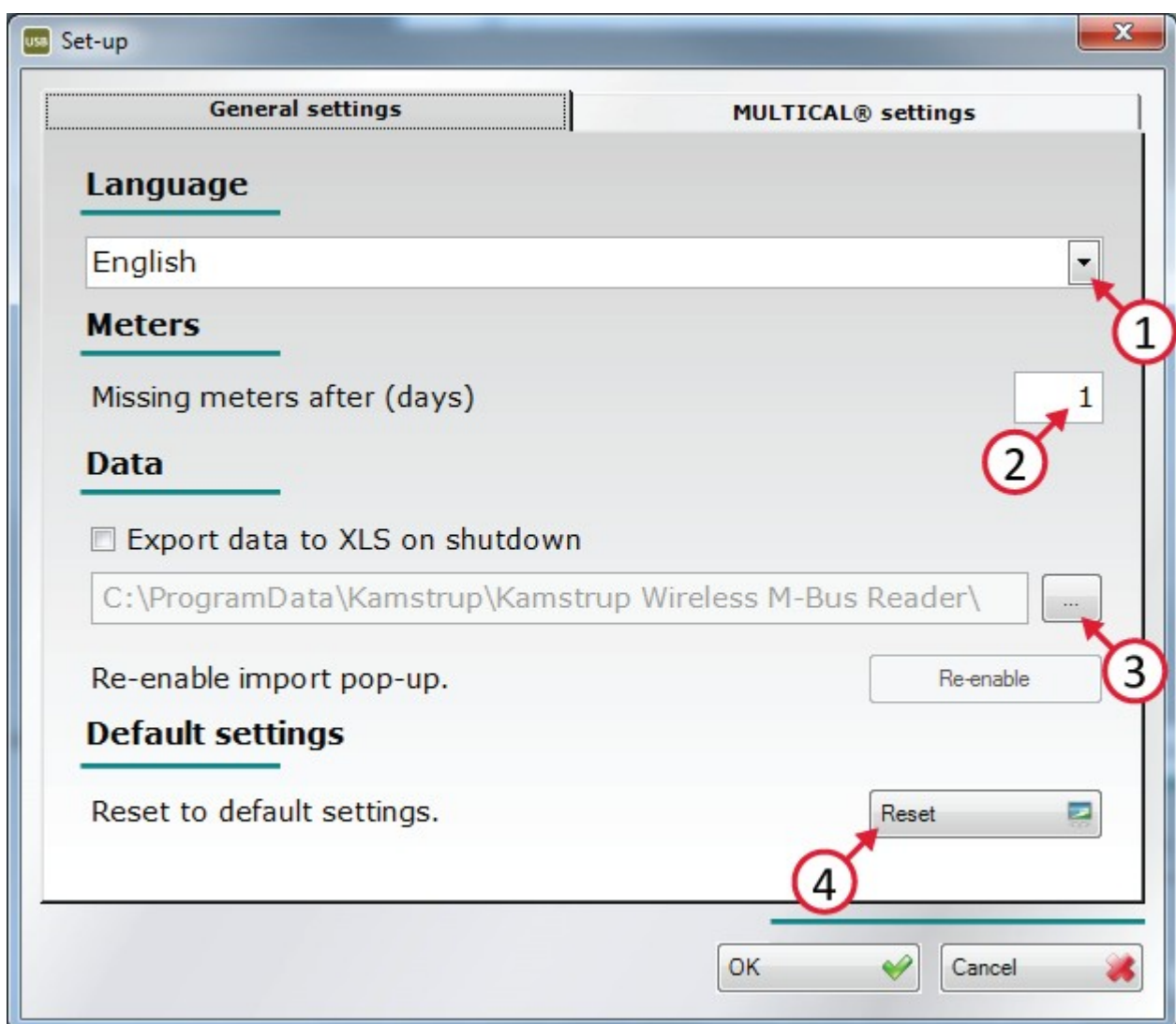
2. A change of the definition "Missing meters" means changing when data is considered to be obsolete. Number of days is an integer that is set in the text box below.
3. All data is by default saved in the folder:

XP: "\Documents and Settings\All Users\Application Data\Kamstrup\Kamstrup USB Meter Reader\Data".

Win7/Win10: "\ProgramData\Kamstrup\Kamstrup USB Meter Reader\Data".

This can be changed by means of the "folder browser". Note that a change of placement does not cause the current data to be moved to the folder in question.

4. Click the **Reset** button if you, for example, have changed the table/list in the **Data** view and want to re-establish the standard settings.



Cancelling changes

To cancel your changes, click **Cancel**.

Saving changes

To save your changes, click **OK**.

4.4.13 The About window

In this window, you can see the current software version and the product number of your Kamstrup USB Meter Reader system. This section describes how to open the window.

Topics:

- Opening the **About** window

Opening the About window

You can open the window via the menu **Help > About**, as shown below.

