

At first you have to set up your Mbus line settings (Bode, Parity, Data bits, Stop bits).

CommunicationMBus devicesOther parametersModbus register groupingStart

Interface	Bode	Parity	Data bits	Stop bits
RS232/RS485	<div><div></div>300<div></div>600<div></div>1200<div></div>2400<div></div>4800<div><div></div>9600</div><div></div>19200<div></div>38400</div>	<div><div></div>Even<div></div>Odd<div></div>Mark<div></div>Space<div><div></div>None</div></div>	<div><div></div>5<div></div>6<div></div>7<div><div></div>8</div></div>	<div><div><div></div>1</div><div></div>2</div>

Modbus address

1

Timeout (msec.)

2000

Number of repeats

1

Set

Get

Then you have to perform the Mbus meters searching. Before searching, you have to choose, what type the Mbus meter will be searching, primary or secondary addressing. if you know the address of the Mbus meter, you can enter it in the Address field.

CommunicationMBus devicesOther parametersModbus register groupingStart

ConfigurationCurrent values

Amount of meters

1

Read period

15

Period dimension

sec.min.h

Max packet of answers

10

Wait Mbus answer (ms)

100

Delay between reads (ms)

100

Enable "Appl. Reset"

Count of repeats

3

Set

Get

Meters search

Search begins

From the least significant digit in the address

From the most significant digit in the address

Addressing mode

Primary address.

Secondary address.

From

1

To

250

Search devices

In succession

Pos No	Type	Addressing mode	Address	Data position	Device number	Manufacturer	Medium	
1	Unknown	<div><div></div>Prim<div></div>Secon</div>	0026350001061507	1	00263500	APA	Water	<div></div>

Load from CSV

Save to CSV

Req: 132

Answ: 130

TOut: 0

Except: 2

After a successful search, a new window will open showing the Mbus meters found. You have to push “Include new found” then “Delete missing” and “Finish and send”. This will transfer the new meters to the converter.

New founded devices

Pos No	Address	Primary address
1	00000001496AFE0C	0
2	00000002496AFE16	0
3	00000003496AFE06	0

Previuos founded devices

Pos No	Address	Primary address	Data position
1	0026350001061507	0	1

Include newly found

Merge all

Delete missing

Restore previous

Cancel

Finish and send

Finish without sending

Then, you have to create the meter Type. At first you have to push “Read available parameters”, a new window will open.

Communication

MBus devices

Other parameters

Modbus register grouping

Start

Configuration

Current values

Amount of meters

3

Read period

15

Period dimension

☒ sec.
☐ min.
☐ h

Max packet of answers

10

Wait Mbus answer (ms)

100

Delay between reads (ms)

100

Enable "Appl. Reset"

☐

Count of repeats

3

Set

Get

Meters search

Search begins

☒ From the least significant digit in the address
☐ From the most significant digit in the address

Addressing mode

☒ Primary address.
☐ Secondary address.

From

1

To

250

Search devices

Status

Completed

Stroked devices

3

Load from CSV

Save to CSV

In succession

Pos No	Type	Addressing mode	Address	Data position	Device number	Manufacturer	Medium
1	Unknown	<input type="radio"/> Prim. <input checked="" type="radio"/> Secon	00000001496AFF0C	1	00000001	ZRI	Hot Water Mode 2
2	Unknown	<input type="radio"/> Prim. <input checked="" type="radio"/> Secon	00000002496AFF16	2	00000002	ZRI	Hot Water
3	Unknown	<input type="radio"/> Prim. <input checked="" type="radio"/> Secon	00000003496AFF06	3	00000003	ZRI	Hot Water

View/Edit list of parameters

Read available parameters

Read current data

Req: 299

Answ: 296

TOut: 0

Except: 3

The table on the left shows all possible this Mbus meter parameters. In the table on the right, you have to select the parameters you want to read from the Mbus meter. The parameters you want to read are selected by listing the indexes next to the required parameter name in the rows and in the required number format column. Double float - 64bit, Float - 32bit, Double long - 64bit integer, Long - 32bit integer. It is important to note that indexes in the same column (e.g. Float) cannot be repeated and must go in sequence 1,2,3,4 ... We recommend deleting unfilled rows with indexes using the right mouse button. After all the steps - save with the right name for you.

Type Unknown 44138299

Parameters in device

Pos No		Storage number	Tariff	SubUnit	Type of parameter
1	HD: Identification Nr.	1	1	1	Instantaneous
2	HD: Manufacturer	1	1	1	Instantaneous
3	HD: Version	1	1	1	Instantaneous
4	HD: Medium	1	1	1	Instantaneous
5	HD: Status	1	1	1	Instantaneous
6	Fabrication No	1	1	1	Instantaneous
7	Energy(Wh)	1	1	1	Instantaneous
8	Time Point(date)	9	1	1	Instantaneous
9	Time Point(date)	10	1	1	Instantaneous
10	Energy(Wh)	9	1	1	Instantaneous
11	Energy(Wh)	10	1	1	Instantaneous
12	Time Point(date)	21	1	1	Instantaneous
13	Energy(Wh)	21	1	1	Instantaneous
14	Volume(m3)	1	1	1	Instantaneous
15	Flow Temperature(C)	1	1	1	Instantaneous
16	Return Temperature(C)	1	1	1	Instantaneous
17	Temperature Difference(K)	1	1	1	Instantaneous

Selected parameters

Pos No		Storage number	Tariff	SubUnit	Type of parameter	Double float index	Double long index	Float index	Long index
1	HD: Identification Nr.	1	1	1	Instantaneous				1
2	HD: Manufacturer	1	1	1	Instantaneous				
3	HD: Version	1	1	1	Instantaneous				
4	HD: Medium	1	1	1	Instantaneous				
5	HD: Status	1	1	1	Instantaneous				
6	Fabrication No	1	1	1	Instantaneous				
7	Energy(Wh)	1	1	1	Instantaneous			1	
8	Time Point(date)	9	1	1	Instantaneous				2
9	Time Point(date)	10	1	1	Instantaneous				3
10	Energy(Wh)	9	1	1	Instantaneous			2	
11	Energy(Wh)	10	1	1	Instantaneous			3	
12	Time Point(date)	21	1	1	Instantaneous				
13	Energy(Wh)	21	1	1	Instantaneous			4	
14	Volume(m3)	1	1	1	Instantaneous			5	
15	Flow Temperature(C)	1	1	1	Instantaneous			6	
16	Return Temperature(C)	1	1	1	Instantaneous			7	
17	Temperature	1	1	1	Instantaneous				

Select all

Save As

Close

Select the type of Mbus device you created earlier, sort the Mbus devices in sequence "In succession" and transfer the information to the data logger by pressing the SET button.

Communication
MBus devices
Other parameters
Modbus register grouping
Start

Configuration
Current values

Amount of meters
3
Read period
15
Period dimension
sec. min. h
Max packet of answers
10
Wait Mbus answer (ms)
100
Delay between reads (ms)
100
Enable "Appl. Reset"
Count of repeats
3

Set
Get

Meters search
Search begins
From the least significant digit in the address
From the most significant digit in the address
Addressing mode
Primary address.
Secondary address.
Search algorithm
Standard
Metz Connect
Complete(Weser)
Search devices
Status
Completed
Stroked devices
3

Load from CSV
Save to CSV

In succession

Pos No	Type	Addressing mode	Address	Data position	Device number	Manufacturer	Medium
1	Zenner1	Prim. Secon.	01138299496A8816	4	01138299	ZRI	Hot Water
2	Zenner1	Prim. Secon.	02138299496A8806	5	02138299	ZRI	Hot Water
3	Unknown	Prim. Secon.	44138299496A880C	6	44138299	ZRI	Hot Water Mode 2

Unknown
KAM
zenner1
Unknown
IEM3135
WFH21
Zenner1

Req: 783
Answ: 780
TOut: 0
Except: 3

Mbus data are compiled in modbus registers, which are presented in gray fields. You have to read these registers through RS485/RS232 modbus interface.

Communication

MBus devices

Other parameters

Modbus register grouping

Start

Configuration

Current values

Device/Parameter	Storage number	Tariff	SubUnit	Type of parameter	Double float		Double long		Float		Long	
					Value	Register	Value	Register	Value	Register	Value	Register
1 - Zenner1 (01138299)												
HD: Identification Nr.	1	1	1	Instantaneous value							1138299	7059,7060
Energy(Wh)	1	1	1	Instantaneous value					0.000	7019,7020		
Time Point(date)	9	1	1	Instantaneous value							1609455600	7061,7062
Time Point(date)	10	1	1	Instantaneous value							1577833200	7063,7064
Energy(Wh)	9	1	1	Instantaneous value					0.000	7021,7022		
Energy(Wh)	10	1	1	Instantaneous value					0.000	7023,7024		
Energy(Wh)	21	1	1	Instantaneous value					0.000	7025,7026		
Volume(m3)	1	1	1	Instantaneous value					234.560	7027,7028		
Flow Temperature(C)	1	1	1	Instantaneous value					0.000	7029,7030		
Return Temperature(C)	1	1	1	Instantaneous value					0.000	7031,7032		
2 - Zenner1 (02138299)												
HD: Identification Nr.	1	1	1	Instantaneous value							2138299	7158,7159
Energy(Wh)	1	1	1	Instantaneous value					0.000	7118,7119		
Time Point(date)	9	1	1	Instantaneous value							1609455600	7160,7161
Time Point(date)	10	1	1	Instantaneous value							1577833200	7162,7163
Energy(Wh)	9	1	1	Instantaneous value					0.000	7120,7121		
Energy(Wh)	10	1	1	Instantaneous value					0.000	7122,7123		
Energy(Wh)	21	1	1	Instantaneous value					0.000	7124,7125		
Volume(m3)	1	1	1	Instantaneous value					178.940	7126,7127		
Flow Temperature(C)	1	1	1	Instantaneous value					0.000	7128,7129		
Return Temperature(C)	1	1	1	Instantaneous value					0.000	7130,7131		
3 - Zenner1 (44138299)												
HD: Identification Nr.	1	1	1	Instantaneous value							44138299	7257,7258
Energy(Wh)	1	1	1	Instantaneous value					353452992.00	7217,7218		
Time Point(date)	9	1	1	Instantaneous value							1609455600	7259,7260

Req: 1255

Answ: 1251

TOut: 0

Except: 3

Connecting to device

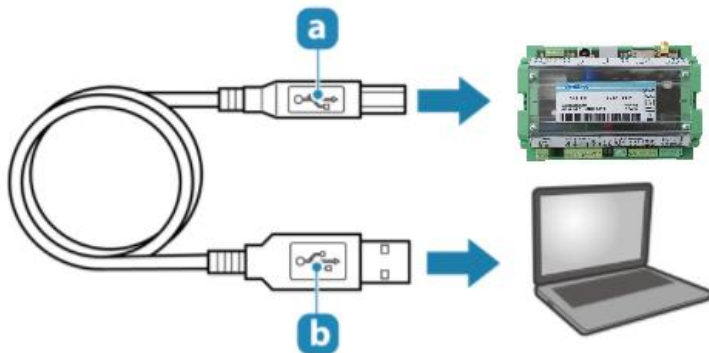
Overview

USB port is used for local configure of device. Also it is possible configure device via Ethernet, 3G modem or any of UARTS if them are used as Modbus slaves. All configuration is made using Modbus protocol and using device configuration tool software which can be downloaded from manufacture website.

Connecting over USB

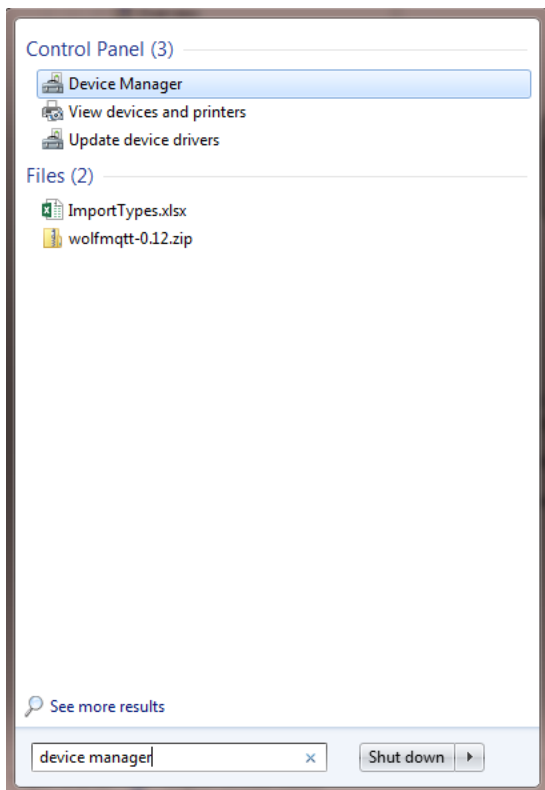
Use USB Type-A to Type-B cable to connect device to computer.

- a) To device USB Type-B
- b) To computer USB Type-A

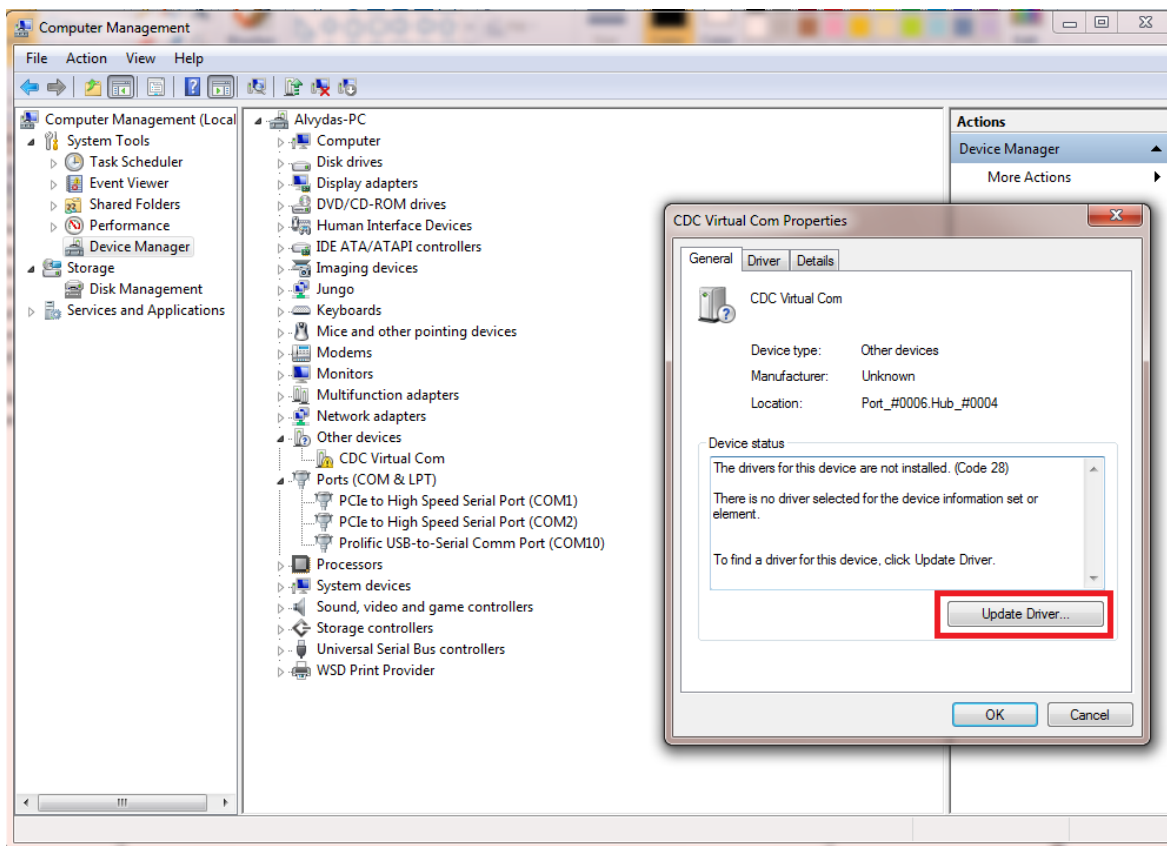


If USB drivers not installed automatically you need to install them manually. Follow this steps:

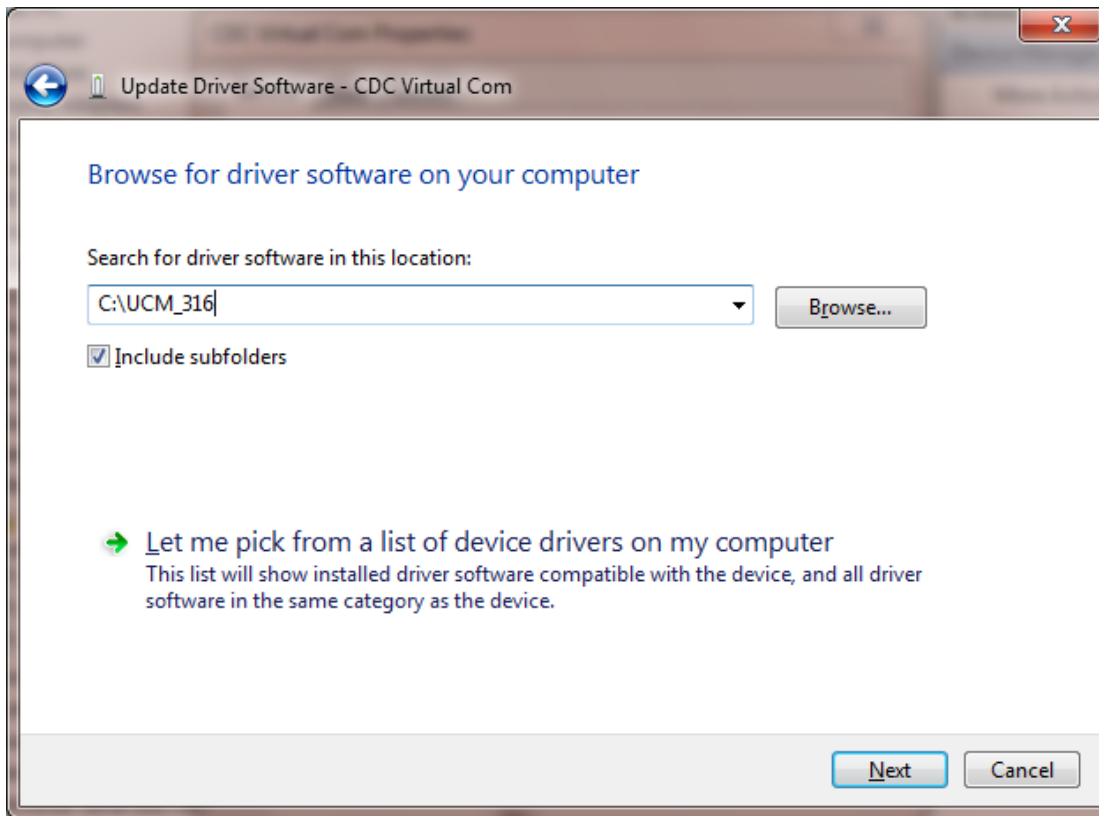
1. In the search box type into and then click **Device Manager**.



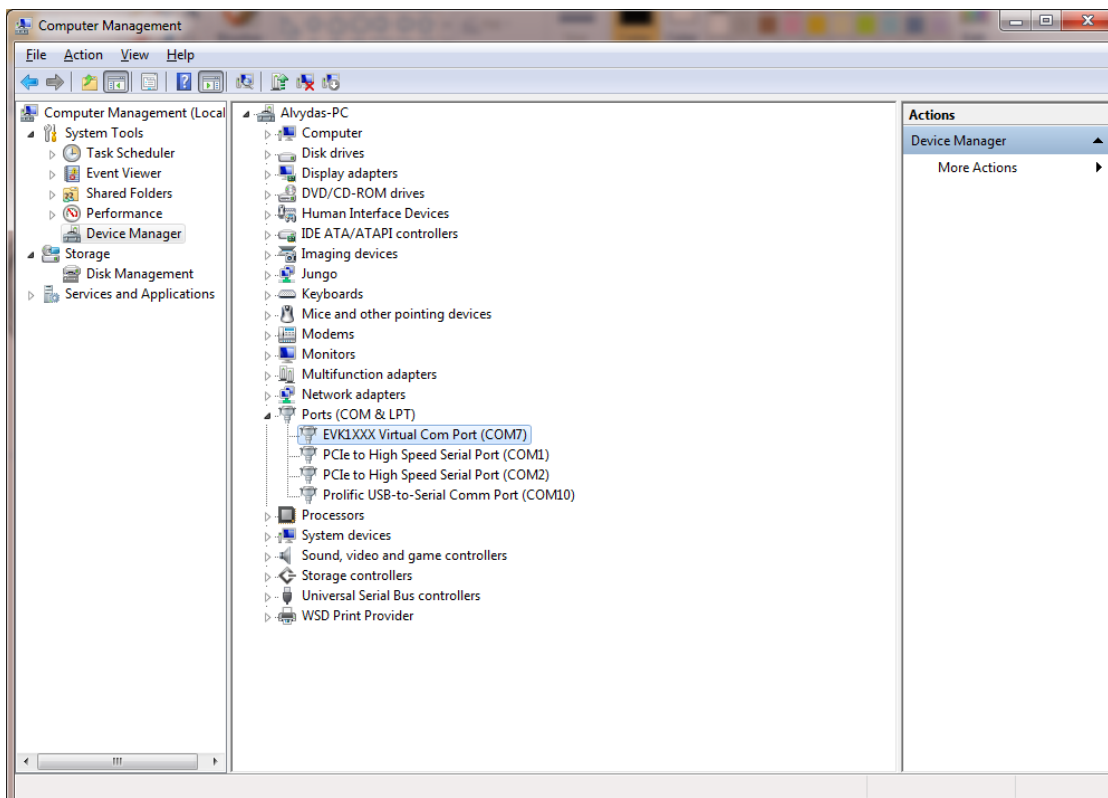
2. Double-click the device category, and then double-click the device you want.
3. Click Update Driver, and follow the instruction



4. Select "Browse my computer for driver software", click "Browse" and select configuration software folder.
5. Click "Next".



6. Wait while Windows installs driver. If you see message "Windows can't verify the publisher" select "Install this driver software anyway".
7. After installation you will see something like "EVK1XXX Virtual Com Port" and com port number. Use this com port for connection with configuration tool.





On some Windows versions (Windows 8, windows 10) you will need to disable third party driver signature checking before installing device driver. Please check on Internet how to do this.