

M-Bus Master

Manual

Version 2.0

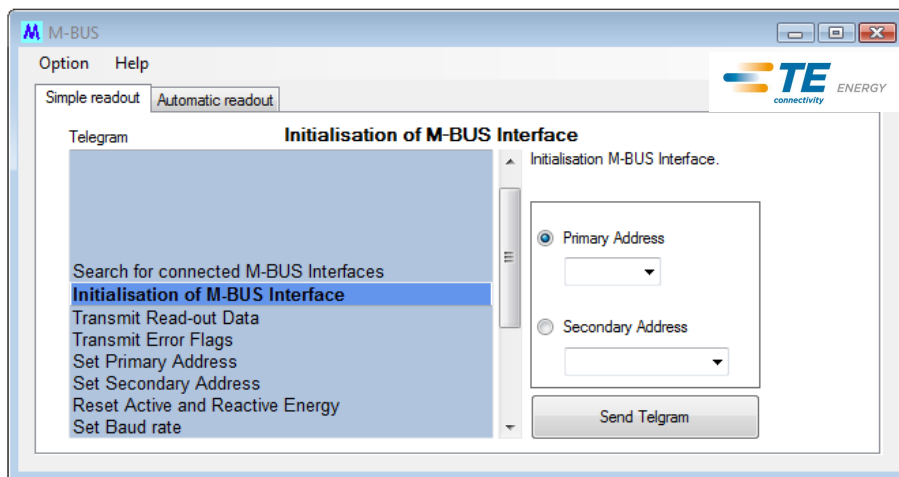
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1 General outline of program

The M-BUS Master software is a simple application, designed to configure M-Bus communication module and to read data from the module itself.

2 Functions



Two sections can be chosen on the main window:

- **Simple readout**

The “Simple readout” section is for configuring and reading an M-Bus communication module.

Under the entry Telegram at the left an M-Bus telegram (control) can be chosen. On the right, either “Primary Address” or “Secondary Address” can be chosen.

Selecting “Send Telegram”, will send the selected control to the M-Bus module.

- **Automatic readout**

The "Automatic readout" section is for continuous reading of the defined M-Bus communication modules. The M-Bus modules for continuous reading can be defined and the relative reading cycle set.

The read data is saved in an Excel file with .csv extension.

3 Options

The parameters for the M-Bus Master software can be defined in the entry "Options".

Com port

Set the serial com port of the PC connected to the M-Bus converter.

Baud rate

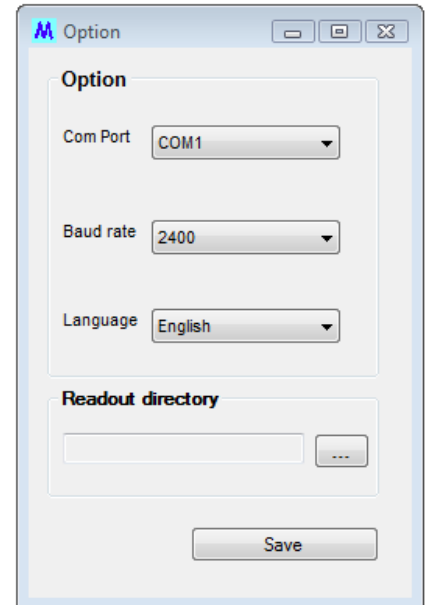
Set the Baud rate (ex. 2400) for the "Simple readout" section.

Language

Choose the language (German or English) to be used for the software and read data.

Readout directory

Selection of folder for files with reading data.
All .csv files are saved in this folder.

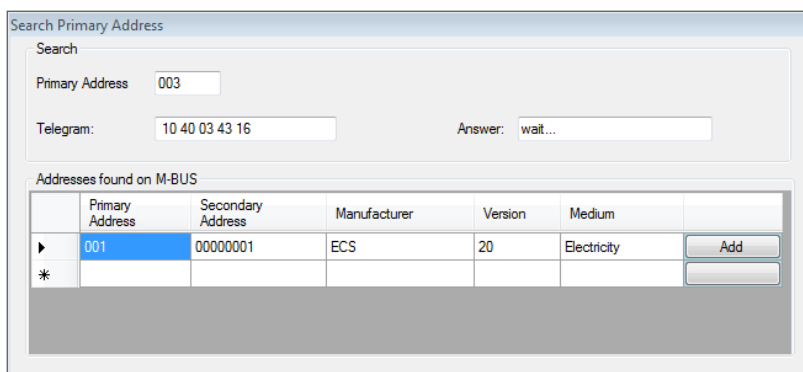


4 Simple readout

The “Simple readout” function is for configuring and reading an M-Bus communication module. Before sending a control, the address mode must be chosen (primary or secondary). The desired M-Bus module address must be chosen as well.

4.1 Search for connected M-BUS Interfaces

The “Search” function allows to search for all M-Bus modules connected.

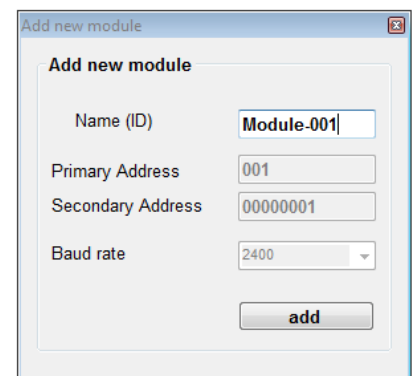


	Primary Address	Secondary Address	Manufacturer	Version	Medium	
▶	001	00000001	ECS	20	Electricity	Add
*						

A new M-Bus module can be added by pressing "Add".

In the section “Add new module”, enter the name of the module in the entry Name (ID).

Click "Add" to add the M-Bus module to automatic readout.

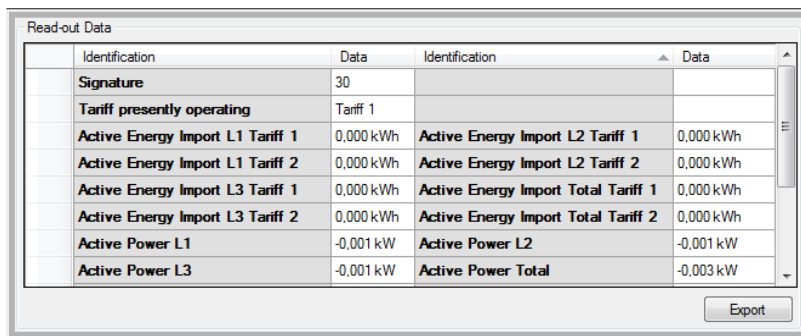


4.2 Initialisation of M-Bus Interface

The “Initialisation of M-Bus module” function starts the M-Bus module.

4.3 Transmit Read-out Data

The read data is shown as follows:



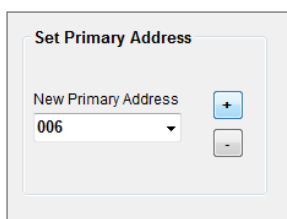
Identification	Data	Identification	Data
Signature	30		
Tariff presently operating	Tariff 1		
Active Energy Import L1 Tariff 1	0,000 kWh	Active Energy Import L2 Tariff 1	0,000 kWh
Active Energy Import L1 Tariff 2	0,000 kWh	Active Energy Import L2 Tariff 2	0,000 kWh
Active Energy Import L3 Tariff 1	0,000 kWh	Active Energy Import Total Tariff 1	0,000 kWh
Active Energy Import L3 Tariff 2	0,000 kWh	Active Energy Import Total Tariff 2	0,000 kWh
Active Power L1	-0,001 kW	Active Power L2	-0,001 kW
Active Power L3	-0,001 kW	Active Power Total	-0,003 kW

4.4 Transmit Error Flags

This function reads the error flags of the selected M-Bus module. The error flags are displayed on a table.

4.5 Set Primary Address

The “New Primary Address” function allows setting a new primary address for the M-Bus module.



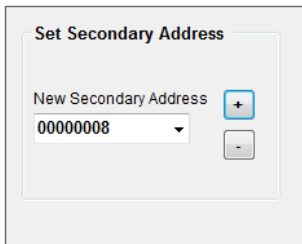
Set Primary Address

New Primary Address

006

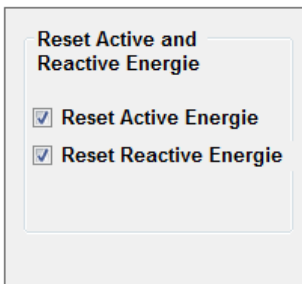
4.6 Set Secondary Address

The “New Secondary Address” function allows setting a new secondary address for the M-Bus module.



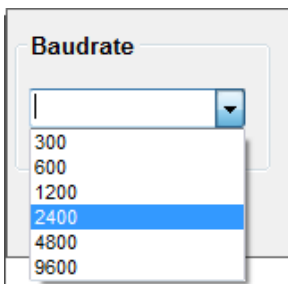
4.7 Reset Active and Reactive Energy

The “Reset Active and Reactive Energy” function allows resetting the active and/or reactive energy counting registers of the selected M-Bus module.



4.8 Set Baud rate

The “Baud rate” function allows selecting the transmission rate of the pre-selected M-Bus module.



4.9 Reset M-Bus Interface “called upon”

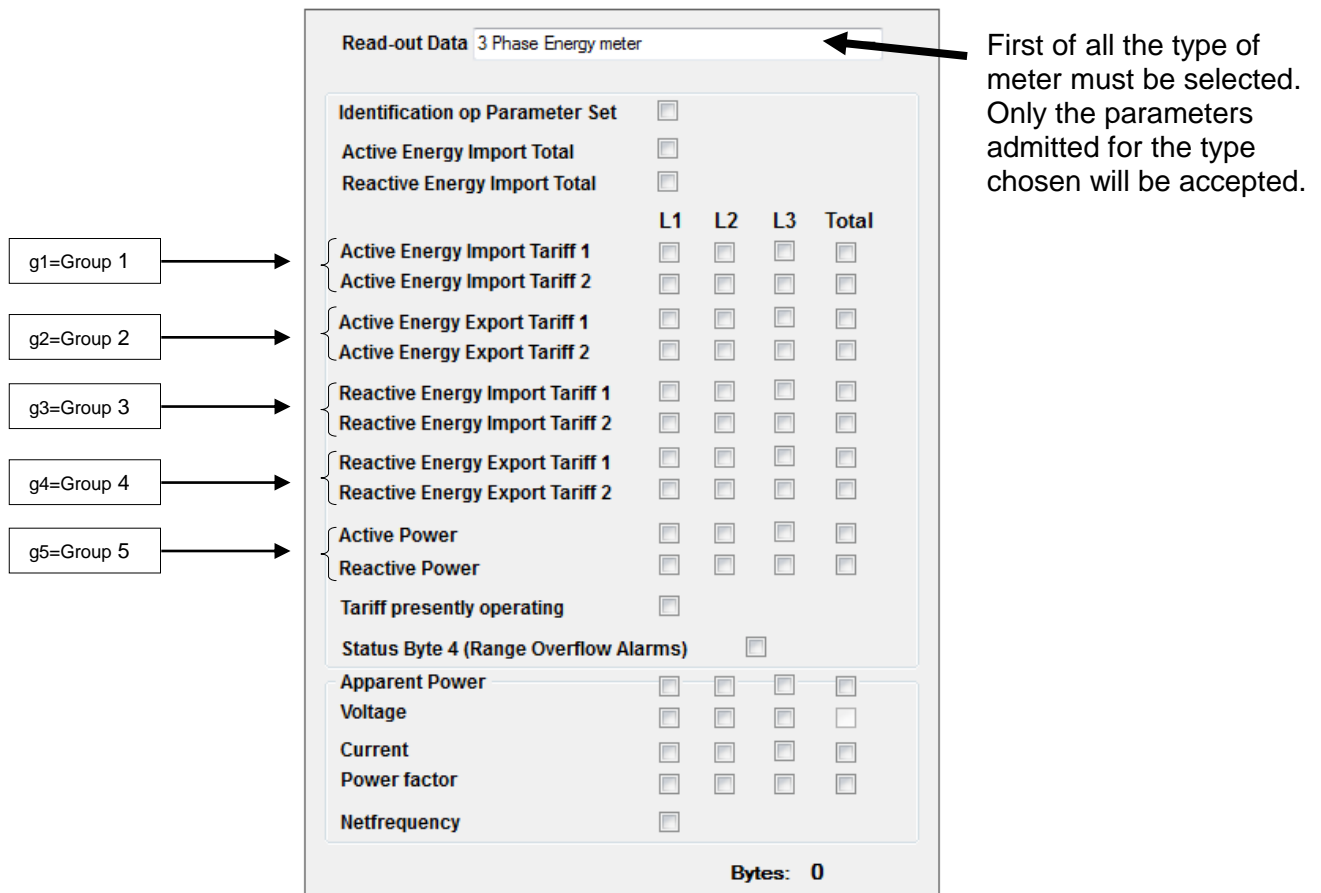
The “Reset M-Bus Interface ‘called upon’” function allows resetting the access meter on the M-Bus module.

4.10 Set Parameter Set for all Read-out Data possible

The “Set Parameter Set for all Read-out Data possible” allows setting the default Imported active energy on the M-Bus module.

4.11 Set Parameter Set for Read-out Data desired

The “Set Parameter Set for Read-out Data desired” allows setting the preferred parameterization into the M-Bus module. The maximum length of the telegram cannot exceed 240 bytes.



Read-out Data 3 Phase Energy meter

Identification op Parameter Set

Active Energy Import Total

Reactive Energy Import Total

	L1	L2	L3	Total
Active Energy Import Tariff 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Active Energy Import Tariff 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Active Energy Export Tariff 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Active Energy Export Tariff 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reactive Energy Import Tariff 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reactive Energy Import Tariff 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reactive Energy Export Tariff 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reactive Energy Export Tariff 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Active Power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reactive Power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tariff presently operating	<input type="checkbox"/>			
Status Byte 4 (Range Overflow Alarms)	<input type="checkbox"/>			
Apparent Power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Voltage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Current	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Power factor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Netfrequency	<input type="checkbox"/>			

g1=Group 1 →

g2=Group 2 →

g3=Group 3 →

g4=Group 4 →

g5=Group 5 →

Bytes: 0

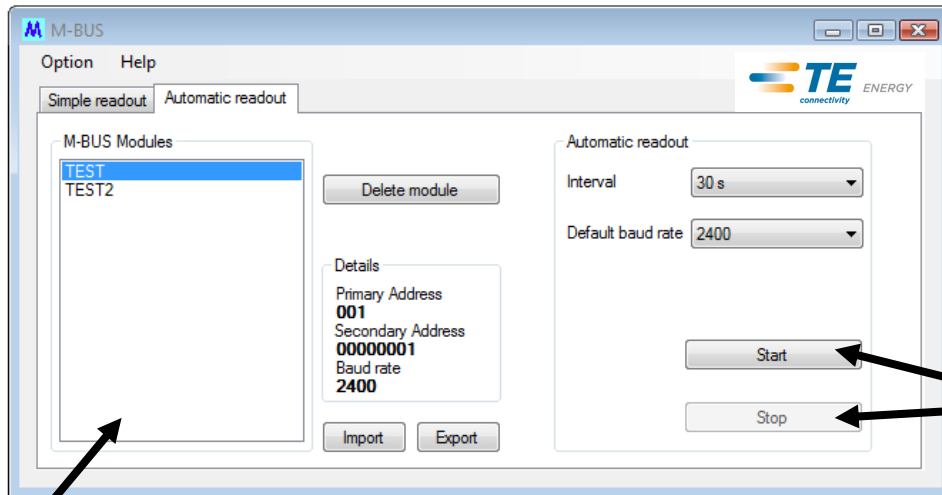
First of all the type of meter must be selected. Only the parameters admitted for the type chosen will be accepted.

In the parameterization you can enter only a subset of the available groups according to the following rules:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
g1	X					X	X	X	X							X	X	X	X	X	X			
g2		X				X				X	X	X				X	X	X				X	X	
g3			X				X			X		X	X			X			X	X		X	X	X
g4				X				X			X		X		X		X		X		X	X		X
g5					X				X			X		X	X			X		X	X		X	X

5 Automatic readout

The “Automatic readout” section is used for continuous reading of the defined M-Bus modules.



All of the defined M-BUS Modules.

Starting and stopping automatic readout

5.1 Delete module

To eliminate an M-Bus module, select it from the list and click "Delete module".

5.2 Import

To import M-Bus modules that have already been registered by an XML file, click “Import” and select the XML file containing the desired M-Bus modules. The imported modules will be added to the automatic reading.

5.3 Export

To export M-Bus modules already registered in automatic reading, click "Export", select the folder and name of the file.

5.4 Interval

The reading cycle period can be chosen on this part of the software program. Once the selected time has elapsed, each registered M-Bus module will be read once again.

5.5 Default baud rate

The entry "Default baud rate" refers to the transmission rate pre-set for automatic readout. If no particular transmission rate has been selected for an M-Bus module, the module will be read at this rate.

5.6 Start

Pressing "Start" will start automatic reading.

5.7 Stop

Pressing "Stop" will stop automatic readout.