



# **MicroUnit series module**

## **Configuration program MU-1052M**

**program help**

**W\_mu1052m\_EN v. 2.01**



The W\_mu1052m program is designed for configuration and diagnostics of MU-1052M converters in all their versions. At the date of publication of the manual, the following converter versions were available:

- MU-1052M basic converter version (LAN, 2x RS-485)
- MU-1052M1 version M extended by a USB device interface for connecting the converter to a computer (USB-B connector)
- MU-1052M2 version M extended by a USB host interface for connecting a flash drive (USB-A connector)

Hereinafter referred to collectively as MU-1052M.

Configuration of all converter versions can be performed via...

LAN interface with Modbus TCP server protocol

RS-485 interface with Modbus RTU slave protocol

USB device port with virtual COM port driver with Modbus RTU slave protocol (MU-1052M1 version only)

The configuration data is stored in the converter in an EEPROM memory with the possibility of blocking writing using the fourth segment of the DIP switch (in the ON position, writing is blocked; for writing configuration data, the OFF position is necessary).

The eighth segment of the DIP switch defines the communication parameters used by the converter. If it is in the OFF position at the moment of power-on or restart, the user parameters stored in the EEPROM configuration memory are used, if it is in the ON position, the default parameters are used:

LAN parameters: IP address 192.168.0.99, mask 255.255.255.0, gateway 192.168.0.200

RS-485 with Modbus RTU slave protocol: address 247, speed 9600Bd, even parity

USB + virtual COM port: address 255, speed 115200Bd, even parity

*Note:*

*The location of the DIP switch in the converter and the meaning of the other segments is described in the user or installation manual.*

The program consists of the following files:

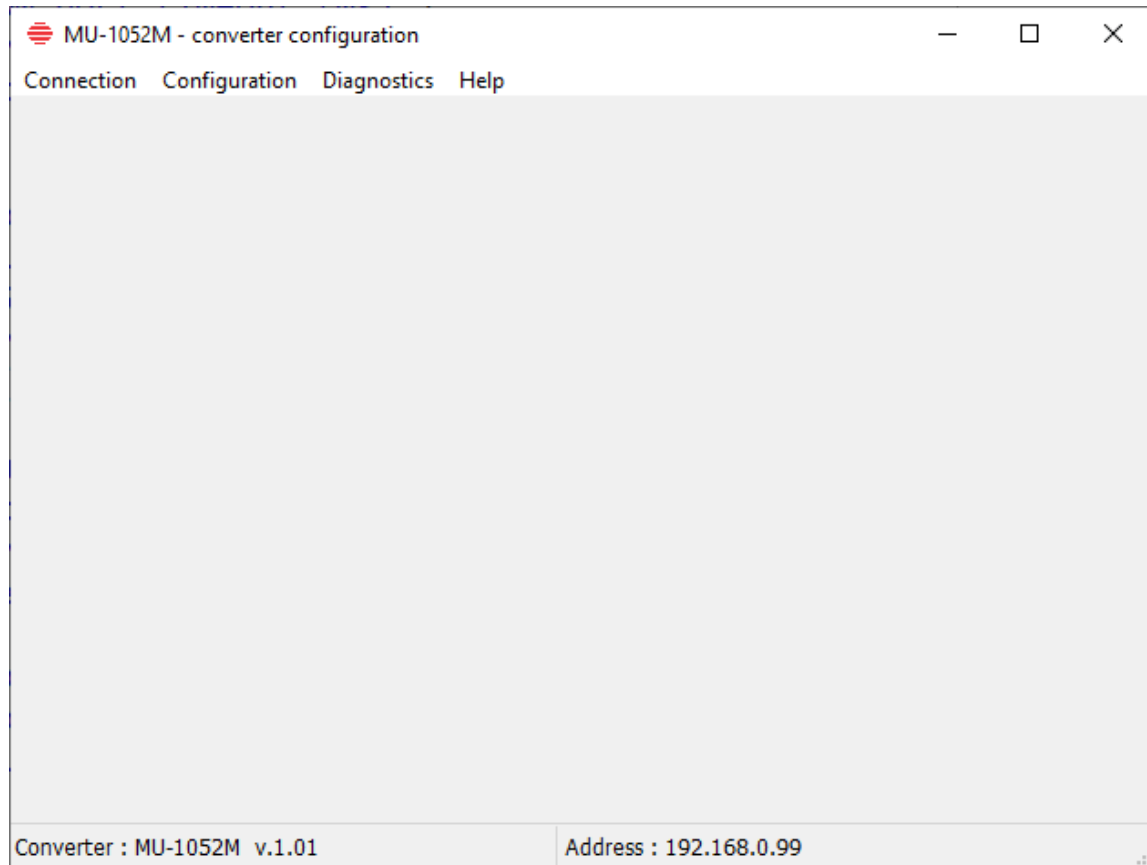
W\_mu1052m\_EN.exe – the configuration program itself

W\_mu1052m.ini – program initialization parameters

W\_mu1052m\_EN.pdf – program help (this file)



The main program window.

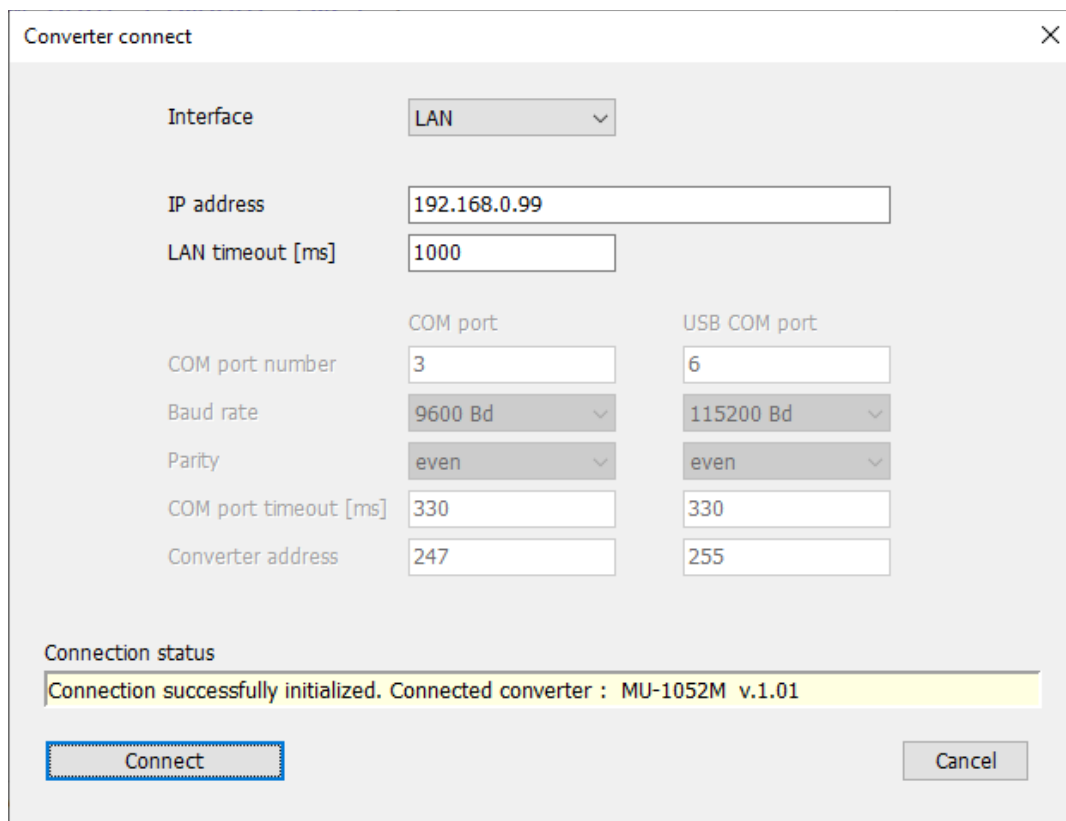


Main menu of the program.

- Connection - Converter connect
- Configuration - LAN parameters
  - Modbus TCP server (LAN)
  - Modbus RTU master (RS-485)
  - Modbus RTU slave (RS-485)
  - Modbus RTU slave (USB)
  - Converter restart
- Diagnostics - Converter information
  - Modbus RTU master
- Help - Help
  - About W\_mu1052m

**Menu *Connection / Converter connect***

Before configuration, it is necessary to initialize the connection with the configured converter.



Converter connect

Interface: LAN

IP address: 192.168.0.99

LAN timeout [ms]: 1000

COM port: 3

COM port number: 3

Baud rate: 9600 Bd

Parity: even

COM port timeout [ms]: 330

Converter address: 247

USB COM port: 6

USB COM port: 115200 Bd

Parity: even

COM port timeout [ms]: 330

Converter address: 255

Connection status: Connection successfully initialized. Connected converter : MU-1052M v.1.01

Connect Cancel

Interface – selection of communication interface (LAN, COM port, USB COM port)

Converter IP address – LAN communication address of the converter

LAN timeout [ms] – max. waiting time for the converter's response

COM port number – standard computer COM port number

Baud rate – converter's communication speed

Parity – parity of communication with the converter

COM port timeout [ms] – max. waiting time for the converter's response

Converter address – converter's communication address

Connection status – information about the current connection

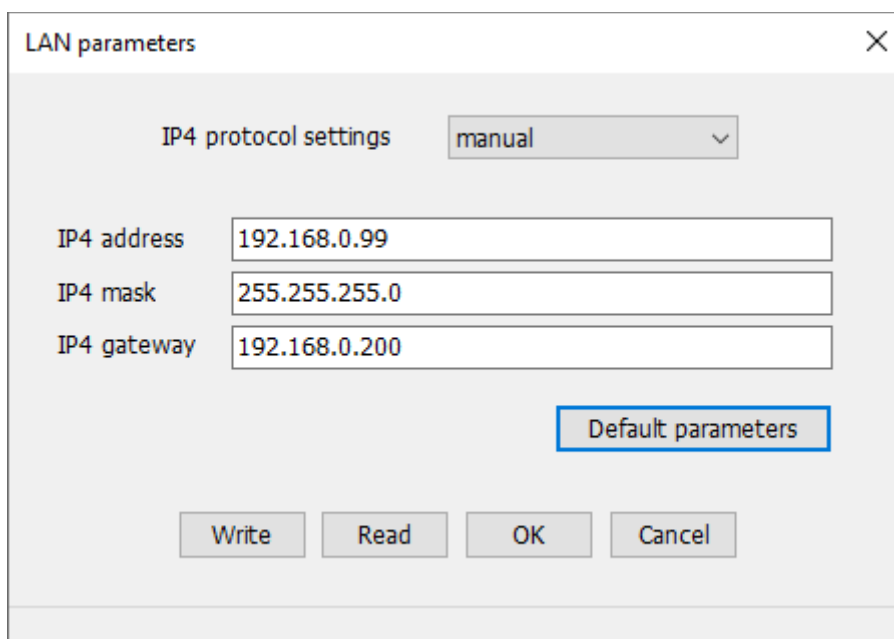
Connect – button to initialize the connection with the converter

Cancel – button to close the window

**Menu *Configuration / LAN parameters***

Sets the communication parameters of the LAN interface of the converter. The new settings are accepted only after the converter is restarted.

When the converter is turned on with the eighth segment of the DIP switch in the ON position, the set configuration parameters are ignored and the converter uses the default communication parameters (IP address = 192.168.0.99, Subnet mask = 255.255.255.0, Gateway = 192.168.0.200).



IP4 protocol settings – parameter settings selection – Manual / Automatic (DHCP)

Default parameters – button for presetting default parameters

Write – button for saving current parameters to the converter

Read – button for reading current parameters from the converter

OK – button for closing the window with saving current parameters

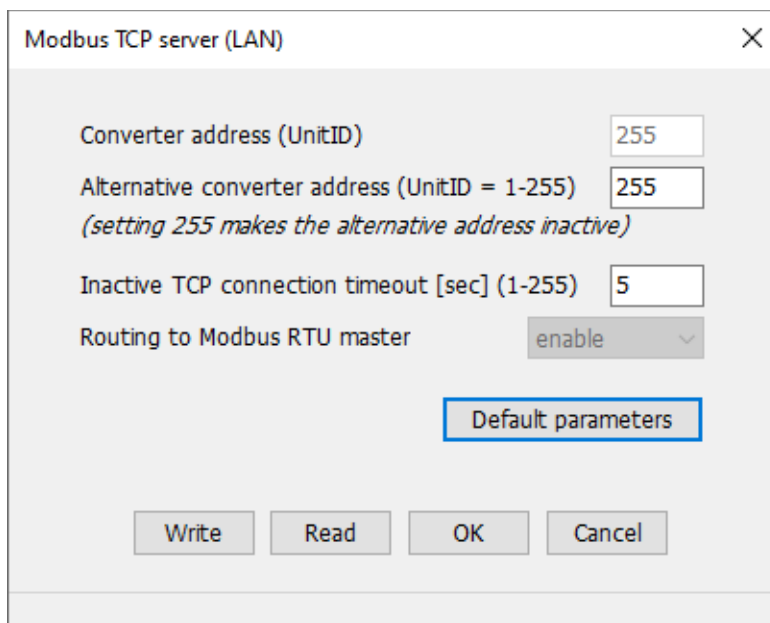
Cancel – button for closing the window without saving current parameters

***Note:***

*Newly entered parameters will be accepted only after the converter is restarted.*

**Menu *Configuration / Modbus TCP server (LAN)***

Setting communication parameters with Modbus TCP server (LAN).



Converter address (UnitID) – fixed UnitID for communication with the converter

Alternative converter address (UnitID = 1-255) – alternative UnitID for communication with the converter (by entering the value 255, the alternative address is inactive and the converter communicates only via UnitID 255)

Inactive TCP connection timeout [s] (1-255s) – setting the termination time of an established inactive TCP connection

Routing to Modbus RTU master – always enabled communication with external Modbus RTU devices connected to the Modbus RTU master interface (for addresses different from the converter UnitID)

Default parameters – button for presetting default parameters

Write – button for saving current parameters to the converter

Read – button for reading current parameters from the converter

OK – button for closing the window with saving current parameters

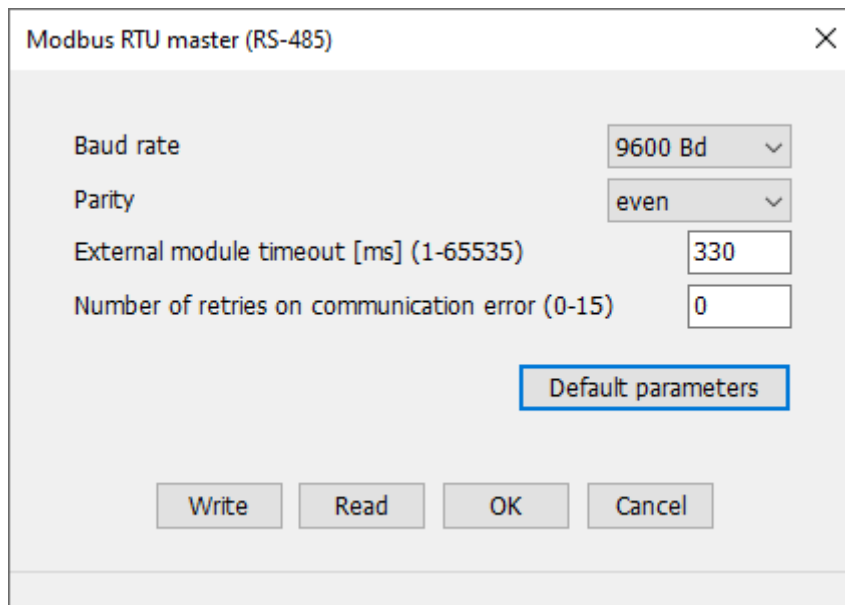
Cancel – button for closing the window without saving current parameters

***Note:***

*Newly entered parameters will be accepted only after the converter is restarted.*

**Menu *Configuration / Modbus RTU master (RS-485)***

Setting the Modbus RTU master (RS-485) interface parameters for communication with connected Modbus RTU devices.



Default parameters – button for presetting default parameters

Write – button for saving current parameters to the converter

Read – button for reading current parameters from the converter

OK – button for closing the window while saving current parameters

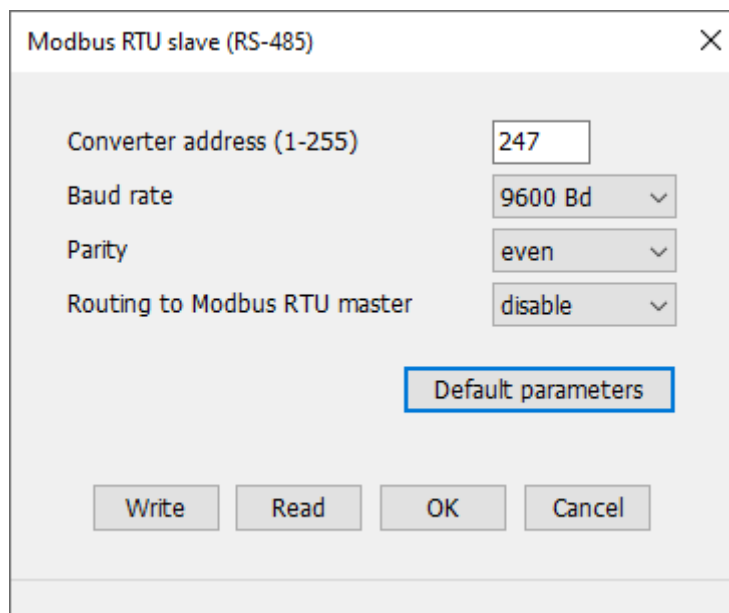
Cancel – button for closing the window without saving current parameters

***Note:***

*Newly entered parameters will be accepted only after the converter is restarted.*

### Menu *Configuration / Modbus RTU slave (RS-485)*

Setting the Modbus RTU slave (RS-485) interface parameters for communication with the MU-1052M converter.



Routing to Modbus RTU master – disable or enable the repeater function. When the repeater function is enabled, messages from the Modbus RTU slave interface (RS-485) are forwarded to the Modbus RTU master interface (RS-485) for processing by the connected Modbus RTU device devices. Messages with the address of the MU-1052M converter are not forwarded and are processed directly by the converter.

Default parameters – button for presetting default parameters

Write – button for saving current parameters to the converter

Read – button for reading current parameters from the converter

OK – button for closing the window with saving current parameters

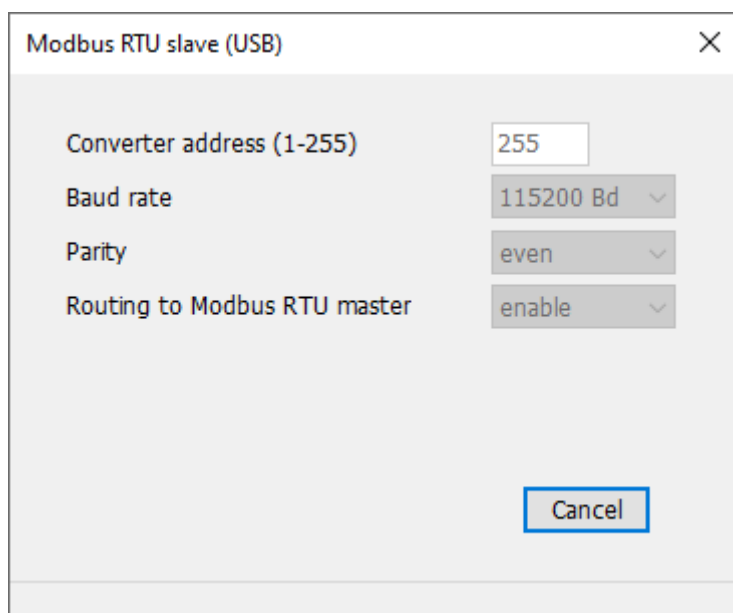
Cancel – button for closing the window without saving current parameters

#### *Note:*

*Newly entered parameters will be accepted only after the converter is restarted.*

### Menu *Configuration / Modbus RTU slave (USB)*

Fixed parameters of the Modbus RTU slave (USB) interface for communication with the MU-1052M1 converter.



Modbus RTU slave (USB)	
Converter address (1-255)	255
Baud rate	115200 Bd
Parity	even
Routing to Modbus RTU master	enable
<div>Cancel</div>	

Routing to Modbus RTU master – repeater function enabled. Messages from the Modbus RTU slave (USB) interface are forwarded to the Modbus RTU master (RS-485) interface for processing by connected Modbus RTU devices. Messages with the address of the MU-1052M converter are not forwarded and are processed directly by the MU-1052M converter.

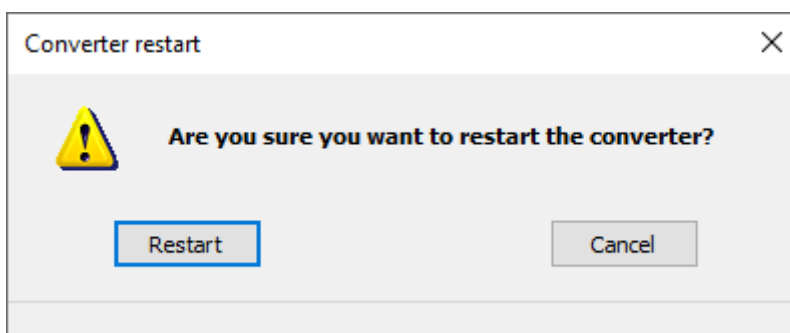
Cancel – button to close the window

#### *Note:*

*The communication parameters of the Modbus RTU slave (USB) interface are fixed and cannot be changed.*

### Menu *Configuration / Restart konvertoru*

Performs a remote restart of the converter. A restart must be performed after changing the converter settings.

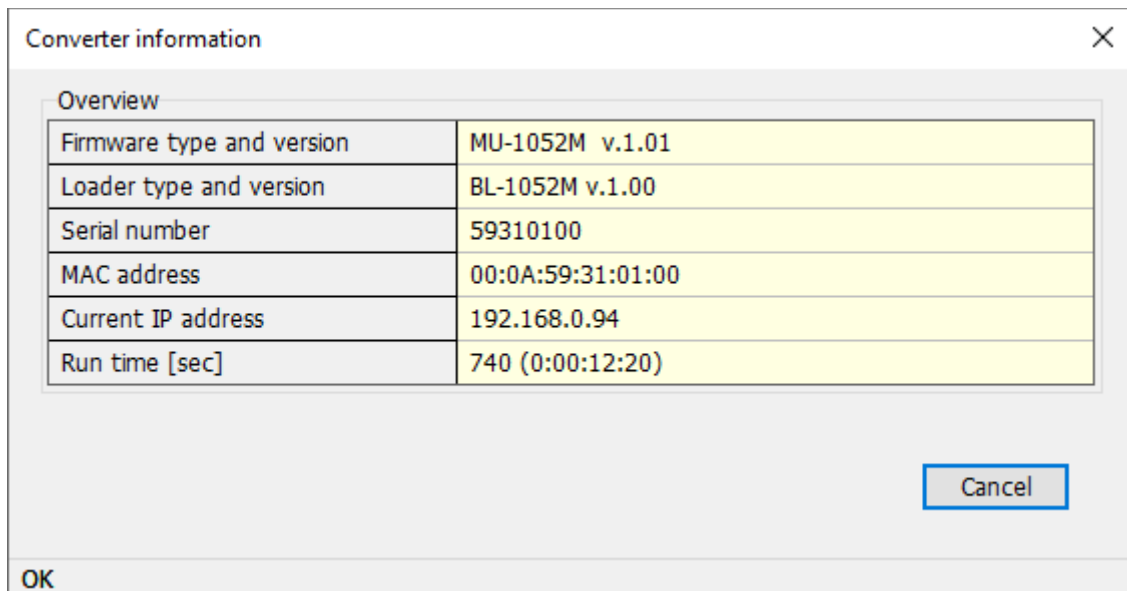


Restart – button to restart the converter, all new settings will be updated

Cancel – button to close the window

### Menu *Diagnostics / Converter information*

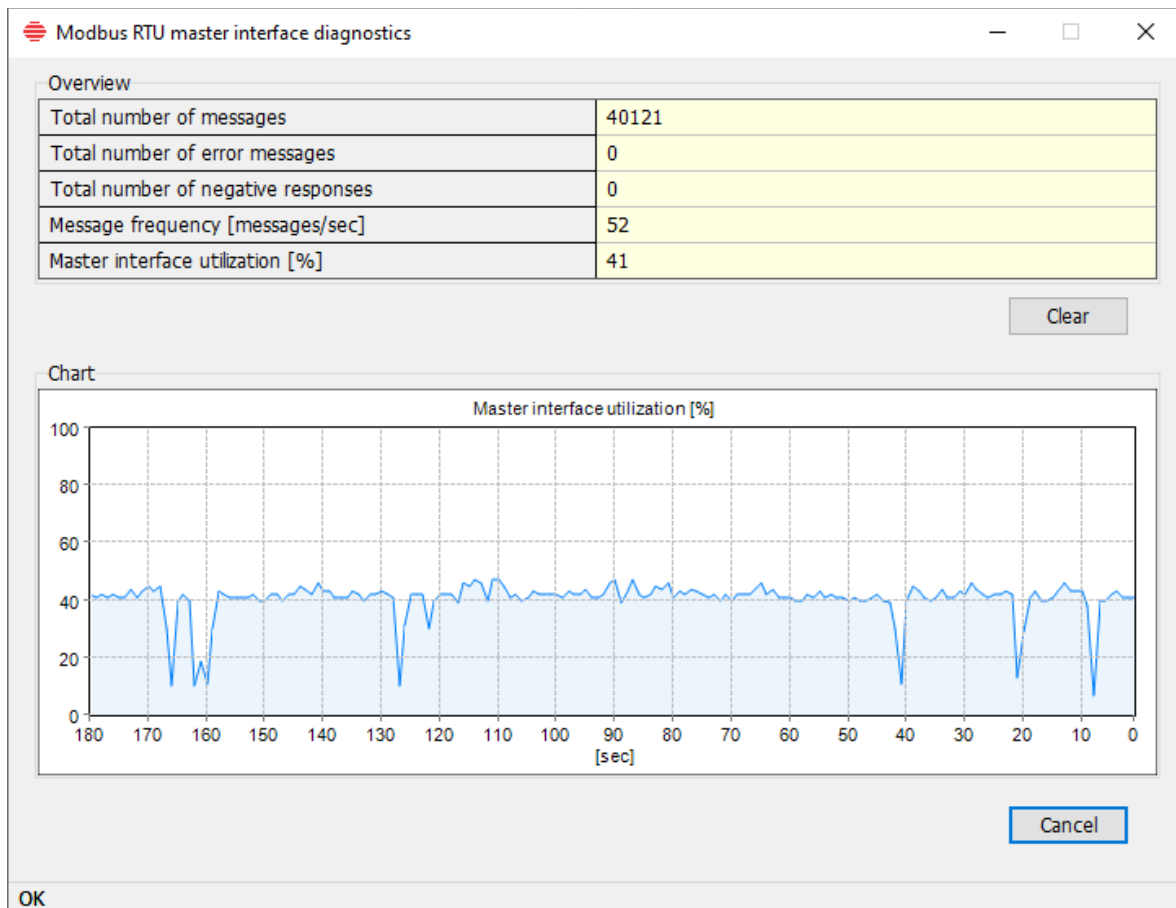
Displays basic information about the converter.



Cancel – button to close the window

## Menu *Diagnostics / Modbus RTU master*

Displays the current status of the Modbus RTU master (RS-485) interface.



Clear – button to reset diagnostic counters

Cancel – button to close the window

## Menu *Help*

Displays information about the program and the contents of this program description file.