

SKD-045-M

Use function code **16** (0x10) to **set** an holding parameter, please due note the data format of each holding parameter.

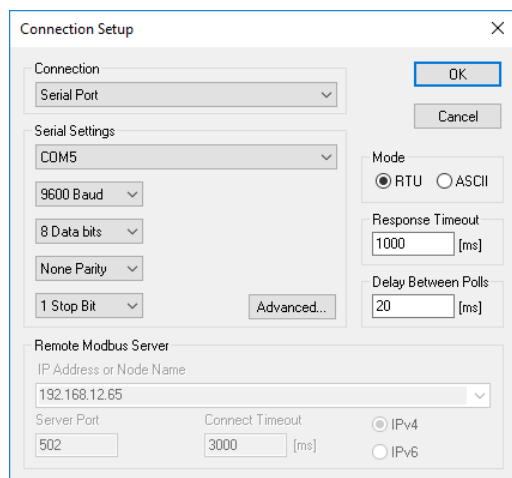
Use function code **03** to **read** an holding parameter.

Float is formatted as IEEE-754

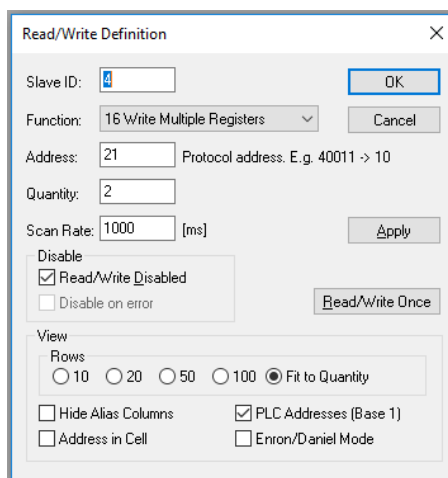
Address Register	Parameter	Start Address Hex		Description	Length Data Format	Mode
		Hi byte	Lo byte			
40013	Relay Pulse Width	00	0C	Write relay on period in milliseconds: 60 ms,100 ms or 200 ms Default 100ms.	4 bytes Float	r/w
40019	Network Parity Stop	00	12	Parity & stop bits: 0 == One stop bit and no parity, 1 == One stop bit and even parity (DEFAULT) 2 == One stop bit and odd parity. 3 == Two stop bits and no parity. <i>Requires a restart to become effective.</i>		r/w
40021	Network Node	00	14	Ranges from 1 to 247 <i>Requires a restart to become effective</i>		r/w
40029	Network Baud Rate	00	1C	0 == 2400 baud 1 == 4800 baud 2 == 9600 baud 3 == 19200 baud 4 == 38400 baud <i>Requires a restart to become effective</i>		r/w
462721	Demand interval, Slide Time, Auto Scroll Time, Backlit Time	F5	00	min-min-s-min (Demand Interval – Slide Time – Auto Scroll Time – Backlit Time) Scroll Time = 0 : the display does not scroll automatically Backlit Time = 0 : Backlit is always on	4 bytes BCD	r/w
463761	System Power	F9	10	0000 == 0.001 kWh (kVAh) /Imp (default) 0001 == 0.01 kWh (kVAh) /Imp 0002 == 0.1 kWh (kVAh) /Imp 0003 == 1 kWh (kVAh) /Imp	4 bytes Hex	r/w
463776	Measurement Mode	F9	20	0001 == Total = Import 0002 == Total = Import + Export 0003 == Total = Import - Export		r/w
363792	Pulse 1 output mode, LED Indicator Mode	F9	30	0001 == Import active energy 0002 == Import + export active energy 0004 == Export active energy, (default) 0005 == Import reactive energy 0006 == Import + export reactive energy 0008 == Export reactive energy		ro

Using Modbus Poll (<https://www.modbustools.com/>) to set i.e. write the desired parameters mentioned above.

Make a connection and define the read/write operation. Notice the ticks on **Read/Write Disabled** and **PLC Addresses (Base 1)**

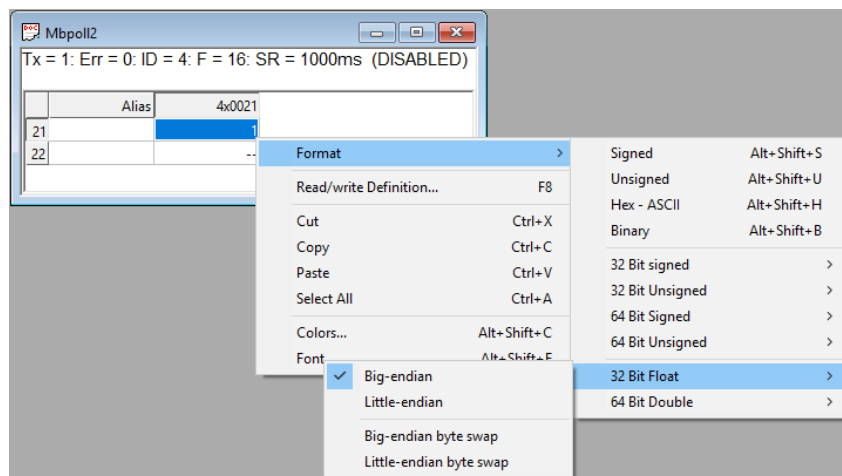


Connection Setup dialog box. Connection: Serial Port. Serial Settings: COM5, 9600 Baud, 8 Data bits, None Parity, 1 Stop Bit. Mode: RTU (selected), ASCII. Response Timeout: 1000 [ms]. Delay Between Polls: 20 [ms]. Remote Modbus Server: IP Address or Node Name: 192.168.12.65, Server Port: 502, Connect Timeout: 3000 [ms], IPv4 (selected), IPv6.



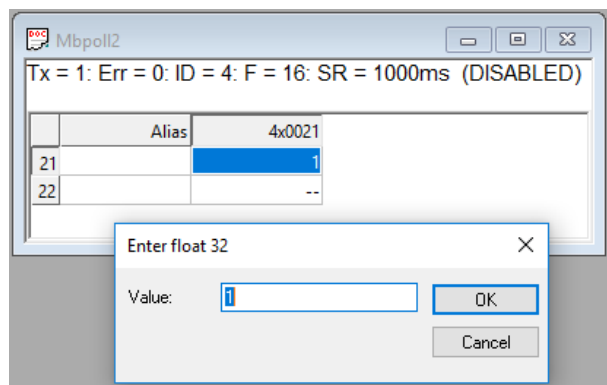
Read/Write Definition dialog box. Slave ID: 4. Function: 16 Write Multiple Registers. Address: 21. Protocol address. E.g. 40011 -> 10. Quantity: 2. Scan Rate: 1000 [ms]. Disable: ☒ Read/Write Disabled, ☐ Disable on error. View: Rows: ☐ 10, ☐ 20, ☐ 50, ☐ 100, ☒ Fit to Quantity. ☐ Hide Alias Columns, ☒ PLC Addresses (Base 1), ☐ Address in Cell, ☐ Enron/Daniel Mode. Buttons: OK, Cancel, Apply, Read/Write Once.

Define the register to write to. Below an example to change the network node id.



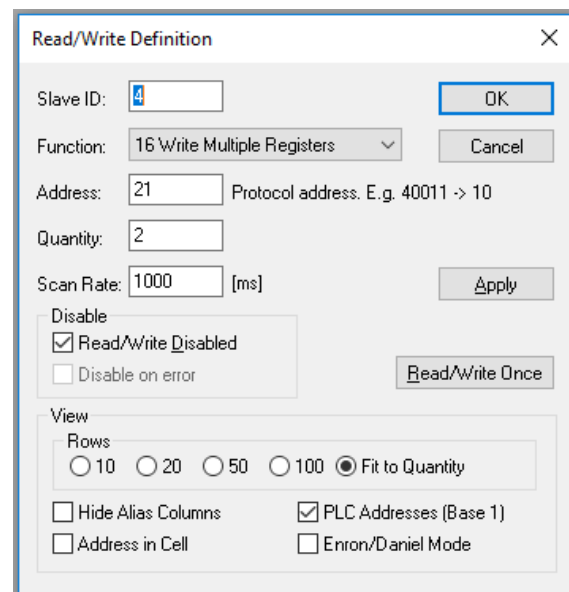
Mbpol12 main window. Tx = 1: Err = 0: ID = 4: F = 16: SR = 1000ms (DISABLED). Alias: 4x0021. Register 21: 1. Context menu: Format, Read/write Definition... (F8), Cut (Ctrl+X), Copy (Ctrl+C), Paste (Ctrl+V), Select All (Ctrl+A), Colors... (Alt+Shift+C), Font, Big-endian (selected), Little-endian, Big-endian byte swap, Little-endian byte swap. Signed, Unsigned, Hex - ASCII, Binary, 32 Bit signed, 32 Bit Unsigned, 64 Bit Signed, 64 Bit Unsigned, 32 Bit Float (selected), 64 Bit Double.

Double click on the register value to set the value. Below to set the network node id to 4.



Mbpol12 main window. Tx = 1: Err = 0: ID = 4: F = 16: SR = 1000ms (DISABLED). Alias: 4x0021. Register 21: 1. Enter float 32 dialog box: Value: 4, OK, Cancel.

Press F8 and followed by a press on the **Read/Write Once** button to write the value to the meter



Read/Write Definition dialog box. Slave ID: 4. Function: 16 Write Multiple Registers. Address: 21. Protocol address. E.g. 40011 -> 10. Quantity: 2. Scan Rate: 1000 [ms]. Disable: ☒ Read/Write Disabled, ☐ Disable on error. View: Rows: ☐ 10, ☐ 20, ☐ 50, ☐ 100, ☒ Fit to Quantity. ☐ Hide Alias Columns, ☒ PLC Addresses (Base 1), ☐ Address in Cell, ☐ Enron/Daniel Mode. Buttons: OK, Cancel, Apply, Read/Write Once.