

Quickstart: avlesing HAN måler via Modbus, universal mal.

På nye enheter laster vi nå inn malene for konvertering fra HAN til Modbus før vi sender ut enheten.

Du kan bekrefte at disse er på plass via webgrensesnittet. Gå til «MBusHub Config» og sett «Configuration file» til «HAN2Mbus.csv»

The screenshot shows the PiiGAB M-Bus 900S web interface. The left sidebar contains navigation options: Start, Startup Config, MBusHub Config, Administration, Softwares Installed, QuickPost, Wireless, MBusAscii2Mqtt, Modbus2Mbus, Han2Mbus, AlarmServer, and Extra settings. The main content area is titled 'MBusHub Configuration' and shows the 'Master Port' configuration. The 'Configuration File' dropdown is set to 'Han2Mbus.csv'. The 'M-Bus Master options' section shows 'myprimaryaddress' as 251 and 'switchblocktime' as 200. There is also a 'Set Output' button and a 'Restart MBusHub' section with a 'Restart' button.

Deretter velger du «Slave Port 2» (anbefalt når man har 2 slaveporter) her linker du inn «HAN2Mbus_MBus2Modbus.csv». Her velger du også mellom Modbus TCP/RTU samt andre parametere for Modbus kommunikasjonen.

The screenshot shows the PiiGAB M-Bus 900S web interface. The left sidebar is the same as in the previous screenshot. The main content area is titled 'MBusHub Configuration' and shows the 'Slave Port 2' configuration. The 'Configuration File' dropdown is set to 'Han2Mbus_Mbus2Modbus.csv'. The 'Modbus options' section shows 'slaveaddress' as 1, 'floatmode' as 0, 'intreverse' as 0, and 'timeoutmode' as 0. There is a 'Show CSV-File' button and a 'Save Settings' button.

For at spørringen fra Modbus skal gå til riktig målertype/port så er vi avhengige av at man setter riktig M-Bus-ID på hver av han portene

Port	Aidon	Kaifa	Kamstrup
HAN Port 1 (Term 15+16)	10000001	10000003	10000005
HAN Port 2 (Term 17+18)	10000002	10000004	10000006

I eksempelet nedenfor har vi en Kaifa Måler på port 1 og Aidon på port 2.

PiIGAB M-Bus 900S

- Start
- Startup Config
- MBusHub Config
- Administration
- Softwares Installed ▾
- QuickPost
- Wireless
- MBusAscii2Mqtt
- Modbus2MBus
- Han2MBus
- AlarmServer
- Extra settings ▾

Han2MBus Configuration

Version 1.00.00

Configure
Results
Documentation

↓ HanModule1 port configuration

Meter Type	<input type="text" value="Kaifa"/>
Enable	<input type="text" value="YES"/>
Com port	MBSLAVE1
Baud rate	<input type="text" value="2400"/> ?
Bit Number	<input type="text" value="8"/>
Parity	<input type="text" value="Even Parity"/>
Stop Bit	<input type="text" value="1"/>
M-Bus Primary Address	<input type="text" value="241"/>
M-Bus ID	<input style="background-color: yellow;" type="text" value="10000003"/>

↓ HanModule2 port configuration

Meter Type	<input type="text" value="Aidon"/>
Enable	<input type="text" value="YES"/>
Com port	MBSLAVE2
Baud rate	<input type="text" value="2400"/> ?
Bit Number	<input type="text" value="8"/>
Parity	<input type="text" value="Even Parity"/>
Stop Bit	<input type="text" value="1"/>
M-Bus Primary Address	<input type="text" value="242"/>
M-Bus ID	<input type="text" value="10000002"/>

↓ M-Bus port configuration

Type	<input type="text" value="UDP"/>
Local Port	<input type="text" value="20002"/> Default 20002

Du er nå klar til å forsøke å lese av målerne, registerne du skal lese avhenger an type måler som er valgt.

Leses som holding-register (Funksjonskode 0x3).

Aidon Måler på PORT1 - M-Bus ID: 10000001		
Beskrivelse	Modbus Adresse	Datatype
ActivePowerImport	0	LONG (32-Bit Integer)
ActivePowerExport	2	LONG (32-Bit Integer)
Reactive_Power1	4	LONG (32-Bit Integer)
Reactive_Power2	6	LONG (32-Bit Integer)
Current_P_L1	8	LONG (32-Bit Integer)
Current_P_L2	10	LONG (32-Bit Integer)
Current_P_L3	12	LONG (32-Bit Integer)
Voltage_P_L1	14	LONG (32-Bit Integer)
Voltage_P_L2	16	LONG (32-Bit Integer)
Voltage_P_L3	18	LONG (32-Bit Integer)
Energy_1	20	LONG (32-Bit Integer)
Energy_2	22	LONG (32-Bit Integer)
Reactive_Energy_1	24	FLOAT (32-Bit Real)
Reactive_Energy_2	26	FLOAT (32-Bit Real)
Aidon Måler på PORT2 - M-Bus ID: 10000002		
Beskrivelse	Modbus Adresse	Datatype
ActivePowerImport	100	LONG (32-Bit Integer)
ActivePowerExport	102	LONG (32-Bit Integer)
Reactive_Power1	104	LONG (32-Bit Integer)
Reactive_Power2	106	LONG (32-Bit Integer)
Current_P_L1	108	LONG (32-Bit Integer)
Current_P_L2	110	LONG (32-Bit Integer)
Current_P_L3	112	LONG (32-Bit Integer)
Voltage_P_L1	114	LONG (32-Bit Integer)
Voltage_P_L2	116	LONG (32-Bit Integer)
Voltage_P_L3	118	LONG (32-Bit Integer)
Energy_1	120	LONG (32-Bit Integer)
Energy_2	122	LONG (32-Bit Integer)
Reactive_Energy_1	124	FLOAT (32-Bit Real)
Reactive_Energy_2	126	FLOAT (32-Bit Real)

Kaifa Måler på PORT1 - M-Bus ID: 10000003		
Beskrivelse	Modbus Adresse	Datatype
ActivePowerImport	200	LONG (32-Bit Integer)
ActivePowerExport	202	LONG (32-Bit Integer)
Reactive_Power1	204	LONG (32-Bit Integer)
Reactive_Power2	206	LONG (32-Bit Integer)
Current_P_L1	208	LONG (32-Bit Integer)
Current_P_L2	210	LONG (32-Bit Integer)
Current_P_L3	212	LONG (32-Bit Integer)
Voltage_P_L1	214	LONG (32-Bit Integer)
Voltage_P_L2	216	LONG (32-Bit Integer)
Voltage_P_L3	218	LONG (32-Bit Integer)
Energy_1	220	LONG (32-Bit Integer)
Energy_2	222	LONG (32-Bit Integer)
Reactive_Energy_1	224	FLOAT (32-Bit Real)
Reactive_Energy_2	226	FLOAT (32-Bit Real)

Kaifa Måler på PORT2 - M-Bus ID: 10000004		
Beskrivelse	Modbus Adresse	Datatype
ActivePowerImport	300	LONG (32-Bit Integer)
ActivePowerExport	302	LONG (32-Bit Integer)
Reactive_Power1	304	LONG (32-Bit Integer)
Reactive_Power2	306	LONG (32-Bit Integer)
Current_P_L1	308	LONG (32-Bit Integer)
Current_P_L2	310	LONG (32-Bit Integer)
Current_P_L3	312	LONG (32-Bit Integer)
Voltage_P_L1	314	LONG (32-Bit Integer)
Voltage_P_L2	316	LONG (32-Bit Integer)
Voltage_P_L3	318	LONG (32-Bit Integer)
Energy_1	320	LONG (32-Bit Integer)
Energy_2	322	LONG (32-Bit Integer)
Reactive_Energy_1	324	FLOAT (32-Bit Real)
Reactive_Energy_2	326	FLOAT (32-Bit Real)

Kamstrup Måler på PORT2 - M-Bus ID: 10000004		
Beskrivelse	Modbus Adresse	Datatype
ActivePowerImport	400	LONG (32-Bit Integer)
ActivePowerExport	402	LONG (32-Bit Integer)
Reactive_Power1	404	LONG (32-Bit Integer)
Reactive_Power2	406	LONG (32-Bit Integer)
Current_P_L1	408	LONG (32-Bit Integer)
Current_P_L2	410	LONG (32-Bit Integer)
Current_P_L3	412	LONG (32-Bit Integer)
Voltage_P_L1	414	LONG (32-Bit Integer)
Voltage_P_L2	416	LONG (32-Bit Integer)
Voltage_P_L3	418	LONG (32-Bit Integer)
Energy_1	420	LONG (32-Bit Integer)
Energy_2	422	LONG (32-Bit Integer)
Reactive_Energy_1	424	FLOAT (32-Bit Real)
Reactive_Energy_2	426	FLOAT (32-Bit Real)

Kamstrup Måler på PORT2 - M-Bus ID: 10000004		
Beskrivelse	Modbus Adresse	Datatype
ActivePowerImport	500	LONG (32-Bit Integer)
ActivePowerExport	502	LONG (32-Bit Integer)
Reactive_Power1	504	LONG (32-Bit Integer)
Reactive_Power2	506	LONG (32-Bit Integer)
Current_P_L1	508	LONG (32-Bit Integer)
Current_P_L2	510	LONG (32-Bit Integer)
Current_P_L3	512	LONG (32-Bit Integer)
Voltage_P_L1	514	LONG (32-Bit Integer)
Voltage_P_L2	516	LONG (32-Bit Integer)
Voltage_P_L3	518	LONG (32-Bit Integer)
Energy_1	520	LONG (32-Bit Integer)
Energy_2	522	LONG (32-Bit Integer)
Reactive_Energy_1	524	FLOAT (32-Bit Real)
Reactive_Energy_2	526	FLOAT (32-Bit Real)

For å teste at alt fungerer kan du teste med «PiiGAB setup wizard» eller lignende verktøy.

Her ser du en test der vi leser av en Kaifa måler på «Port 1».

The screenshot shows the 'PiiGAB M-Bus Wizard' window. The title bar includes the text 'PiiGAB M-Bus Wizard' and standard window controls. Below the title bar is a red header with the text 'Test meters with ModBus' and the 'M-Bus' logo.

The main interface contains the following elements:

- Protocol:** A group box with radio buttons for 'RTU' and 'TCP'. 'TCP' is selected.
- Function:** A dropdown menu set to '3'.
- Slave Address:** A text input field containing '1'.
- First register:** A text input field containing '218'.
- No of registers:** A text input field containing '12'.
- Read:** A button to execute the read operation.
- AutoRegister:** A checked checkbox.
- Result:** The text 'Ok'.
- Table:** A table with 6 columns: 'DataType', 'Format', 'Register', 'Byte', 'Value', and 'Description'. It contains 6 rows of data.
- Buttons:** 'Save', 'Get', 'Clear', 'Write', and 'Debug' buttons.
- Footer:** Copyright information '© 2005-2018 PiiGAB / TroSoft Version 3.2.1' and 'Back', 'Next', and 'Exit' buttons.

DataType	Format	Register	Byte	Value	Description
INT32	ABCD	218	0000 0000	0	
INT32	ABCD	220	0001 FD18	130328	
INT32	ABCD	222	0000 0000	0	
FLOAT	ABCD	224	3B03 126F	0.002000	
FLOAT	ABCD	226	4333 12B0	179.072998	
INT32	ABCD	228	0000 0000	0	