

# IQ-MBus-60

## Quick Guide

**Version 1.1**  
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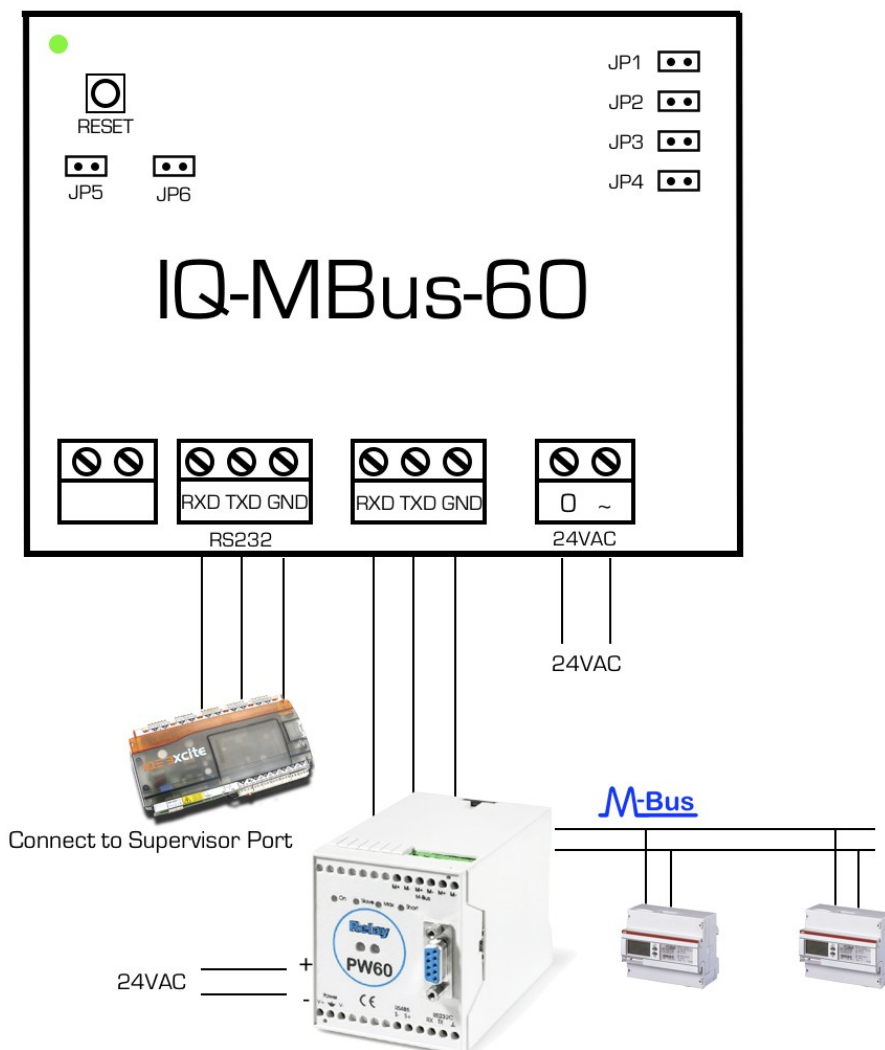
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## Installing the IQ-MBUS-60 module

**PLEASE NOTE:** All steps during installation of the module must take place with power OFF. The M-BUS terminals on the module must NOT be short circuited.

1

### STEP1: Wiring



2

**NOTE:** The CNC supervisor port must be set to 0 on the TREND IQ controller.

**NOTE:** If using a pin code: Set a user pin code to 3532 and level to 99 on the controller.

### STEP2: Configure

#### Set the IQ-MBUS-60 for searching

Set the jumpers JP1 and JP4 on the module. This erases meters from previous searches. The module will search for up to 60 meters and read data from the meters every minute (JP4).

Remove jumper JP5

Set jumper JP6 according to whether the meters communicate with 300 Baud or 2400 Baud:

JP6 set	: Communication with 300 Baud
JP6 removed	: Communication with 2400 Baud

**NOTE:** Jumpers JP5 and JP6 must not be set at the same time.

### Connect supply – 24AC supply

Supply 24 VAC on the IQ-MBUS-60 module on the screw terminals marked **0(-)** and **~(+)** and Relay PW60 as marked in the drawing above.

The green LED **POWER** indicates correct voltage supply and the LED JP2 will light for a short period of time.

- After connection the yellow LED will blink. This indicates that the module is scanning the M-BUS network in its search for meters.
- The red LEDs for jumper JP1 will light briefly for each meter that is found (8 blinks for 8 connected meters).
- Scanning stops after maximum 5 minutes.
- If one or more meters are found, the red LED at jumper JP1 will light up.

## 3 STEP3: Setup for reading

- Remove JP1 from the module. The module will remember the meters it found when searching during start up.
- Set the jumper JP4 "TIMER" according to your preference of retrieving data – every minute or every 15 minutes.

JP4 set : New data every minute.  
JP4 removed : New data every 15 minutes.

Set jumper JP5 ( under the RESET button) to retrieve data constantly and as fast as possible.

JP4 and JP5 set : New data constantly - as fast as possible.  
JP5 removed : New data dependable on JP4's setting.

- Reset the IQ-MBUS-60 module by pressing the RESET button.

The IQ-MBUS-60 module will write the meter number (serial number) and value type in the label on each node.

Item	Label	Value
A101	31947876 Energy [MWh]	0.00
A102	31947876 Volume [m3]	0.00
A103	31947876 Flow Temp [degC]	23.30
A104	10655579 Energy [MWh]	730.93
A105	10655579 Volume [m3]	14228.61
A106	10655579 Volume U1[m3]	14239.61
A107	00408260 Energy [MWh]	0.03
A108	00408260 Volume [m3]	0.74
A109	00408260 Volume U1[m3]	0.38
A110	..	0.00

*Examples of readings for three meters to TREND IQ3 controller*

Depending on the meter type, the following values will be passed in the listed priority (top to bottom).

Meter value	Meter unit	Trend unit
Energy	Wh	MWh
Energy	J	GJ
Volume	m <sup>3</sup>	m <sup>3</sup>
Mass	Kg	Kg
On time	Hours	Hours
Flow temperature	°C	°C
Return temperature	°C	°C
Temperature diff.	°C	°C
Power	W	kW
Power	J/h	J/h
Volume flow	m <sup>3</sup> /h	m <sup>3</sup> /h
Mass flow	kg/h	kg/h
Extern temperature	°C	°C
Pressure	Bar	Bar
HCA_Units(Subunit1)	-	-
HCA_Units(Subunit2)	-	-
Volume(Subunit1)	m <sup>3</sup>	m <sup>3</sup>
Volume(Subunit2)	m <sup>3</sup>	m <sup>3</sup>
Energy(Subunit1)	Wh	MWh
Energy(Subunit2)	Wh	MWh
Energy(Tarif1)	Wh	MWh
Energy(Tarif2)	Wh	MWh
Power(Peak)	W	kW

## Troubleshooting

### *The module does not find any or only few of the connected meters*

- **Are the Mbus wires connected to the meter?**
- **Does each meter have a unique M-bus address between 1 and 249?** Connected meters must not have the same addresses. Contact your supplier for information regarding the M-bus addresses set on the meters.
- **Is the communication rate (speed) set correctly?** Most meters will automatically adjust themselves to a communication rate of 2400 Baud. Try setting the communication rate to 300 Baud by setting the jumper JP5 and then reset the IQ-MBUS-60 module.
- **Is the meter delivered with a M-Bus module?**
- **Have the wires on the M-bus short circuited?**  
Replace the IQ-MBUS-60 module.

### *There is no data from the meters in the TREND IQ controller!*

- **Is the cable from the IQ-MBUS-60 connected to the TREND controller?**
- **If you are using a pin code: Is the pin code in the TREND controller set to 3532 and level to 99?**
- **Are the IQ-MBUS-60 module and the controller communicating?** For each meter found during searching, there should be data in the nodes A101 to A201

Write or fill in nodes from A101 with a value such as 9999. Communication between the IQ-MBUS-60 and the TREND controller is working correctly if 9999 is thereafter overwritten.

- **Has the IQ-MBUS-60 module found all the connected meters?** Run a new search as described in this guide.

### *There is data from one or two meters, but not from the last one!*

- **Has the IQ-MBUS-60 module found all the connected meters during the searching step?**