Jean Müller PLMulti - Commissioning

This brief installation instruction provides a quick overview of all the necessary steps. Additional information, safety instructions, references, and sources can be found in our HelpCenter. The Installation instructions are only valid for the integration of the energy management system and the configuration of relevant assets. Make sure to carefully read the **safety instructions** and adhere to the **infrastructural requirements for a gridBox gateway installation**.

Required:

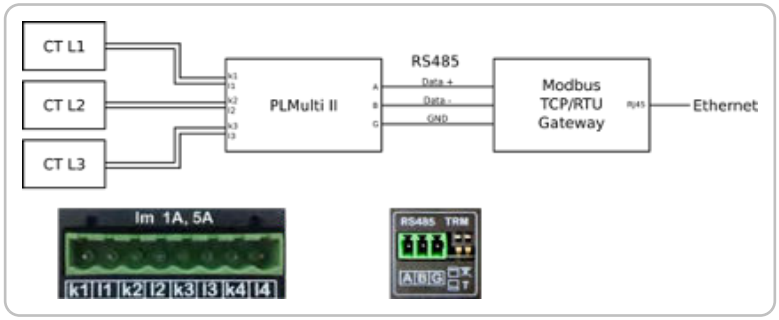
- Modbus TCP gateway is required to connect the PL Multi meter to the network, as the meter only supports Modbus RTU via RS485 (gateway HD67507-A1 from Wachendorff recommended)
- Latest firmware
- Default password: 1111
- For power measurements, the meter requires current transformers (CTs) with 1A or 5A as secondary current.

Connection

The meter is not directly connected to the network. Instead, a Modbus TCP/RTU gateway is included that converts from Modbus TCP to Modbus RTU and vice versa.

The gateway is connected to the network with an Ethernet cable plugged into the RJ45 connector. The gateway is connected to the meter via RS485.

Connect the RS485 cables as follows:



Connector on meter	RS485 line
A	Data +
B	Data -
C	GND

The meter requires CTs that are connected to the inputs k1/l1 - k3/l3. The following table provides a description of the CT inputs of the meter.

Connector on meter	Description
k1	Power side L1
l1	Load side L1
k2	Power side L2
l2	Load side L2
k3	Power side L3
l3	Load side L3

To connect the CTs, follow the instructions in the manufacturer's manual “Jean-Mueller PLMulti-II Manual”[1]

Configuration

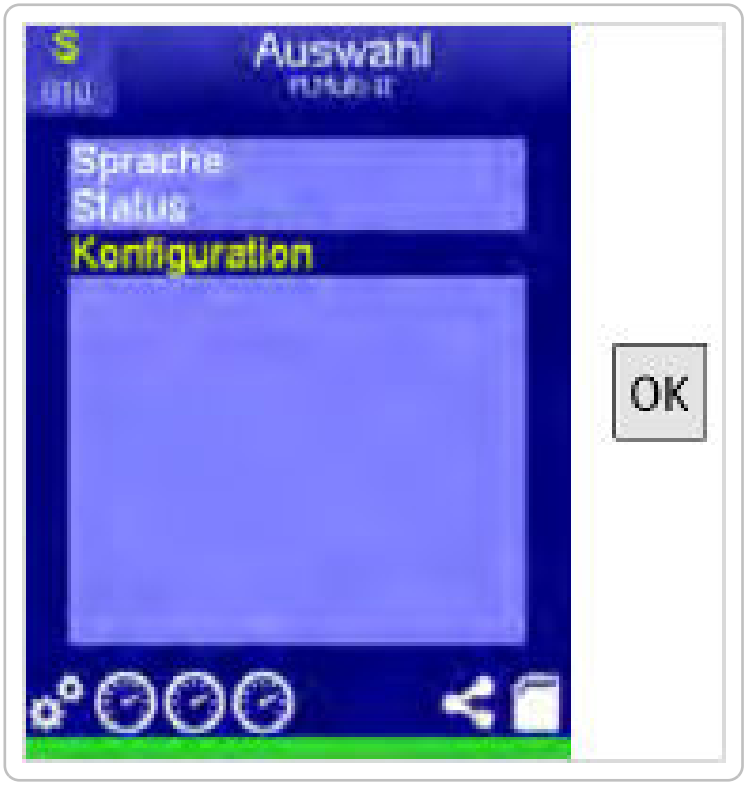
Configure the PLMulti meter via the integrated display.

Modbus settings

1. In the module selection, find the station (S) group by using the arrow buttons and confirm by pressing OK.[2]

2. Use the arrow buttons to navigate to **Configuration** and confirm by pressing **OK.**[3]

[1]BA–E040 PLMulti-II.pdf, p.23
[2]Image source: BA–E040 PLMulti-II.pdf, p.42
[3]Image source: BA–E040 PLMulti-II.pdf, p.42



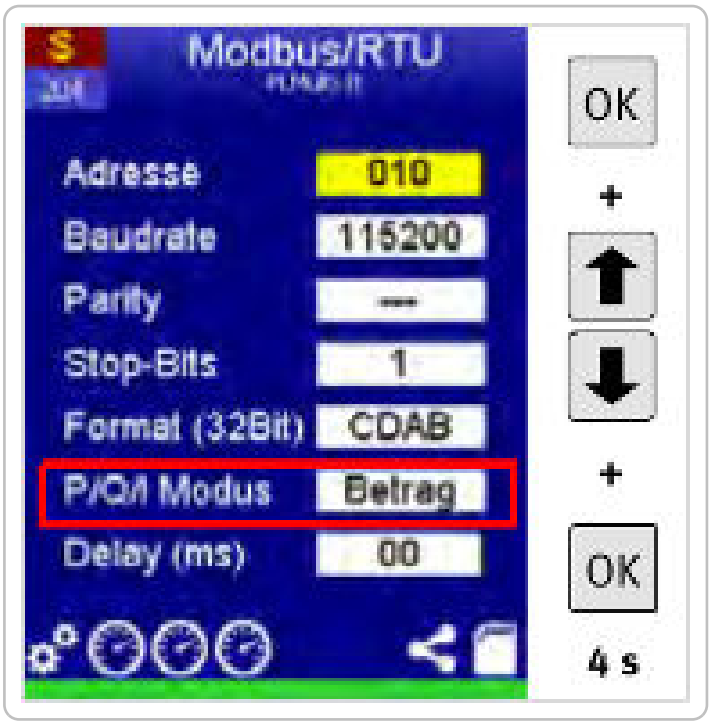
3. Enter the PIN Code (by default, 1111) and confirm by **holding** the **OK** button.[4]

4. Enter the configuration menu again and navigate to **Modbus/RTU** using the arrow buttons. Confirm by clicking the **OK** button.[5]

[4]Image source: BA–E040 PLMulti-II.pdf, p.44
[5]Image source: BA–E040 PLMulti-II.pdf, p.49

display - Modbus/RTU Selection

5. Navigate to **P/Q/I Mode** by pressing the **OK** button until the field is selected. Use the arrow buttons to change the mode to **Signed**.
6. Afterwards, confirm the new Modbus setting by holding the **OK** button.



7. Go back to the **Modbus/RTU** menu and verify that the settings have been applied correctly.

Current transformers

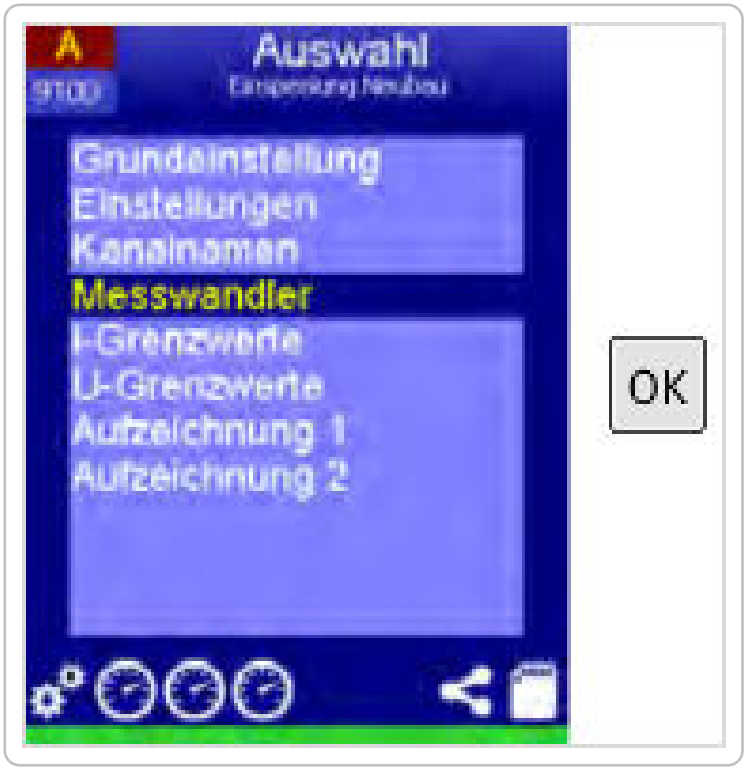
1. In the module selection, find the module A by using the arrow buttons and confirm by pressing **OK**.[6]

2. Use the arrow buttons to navigate to **Configuration** and confirm by pressing **OK**.[7]

3. Enter the PIN Code (by default, 1111) and confirm by **holding** the OK button.[8]

[6]Image source: BA–E040 PLMulti-II.pdf, p.42
[7]Image source: BA–E040 PLMulti-II.pdf, p.52
[8]Image source: BA–E040 PLMulti-II.pdf, p.56

4. Enter the configuration menu again and navigate to **Transducers** using the arrow buttons. Confirm by clicking the OK button.[9]



5. Navigate through by pressing the OK button until the desired field is selected. Use the arrow buttons to change values. In the most left fields, pressing OK will select the next character. Enter the CTs **primary** current to the **I-pri** column and the **secondary** current to the **I-sec** column.

[9]Image source: BA–E040 PLMulti-II.pdf, p.56

6. Afterwards, confirm the new CT settings by holding the OK button.[10]

7. Go back to the menu and verify that the settings have been applied correctly.

[10]Image source: BA–E040 PLMulti-II.pdf, p.56