my-PV WiFi Meter: Assembly- and Operation Manual

Last update: 13.8.2025, 08:17
Firmware version:

Contents

1. Intended use

The my-PV WiFi Meter is intended for operation with my-PV devices such as AC•THOR 9s, AC•THOR or AC ELWA-E.
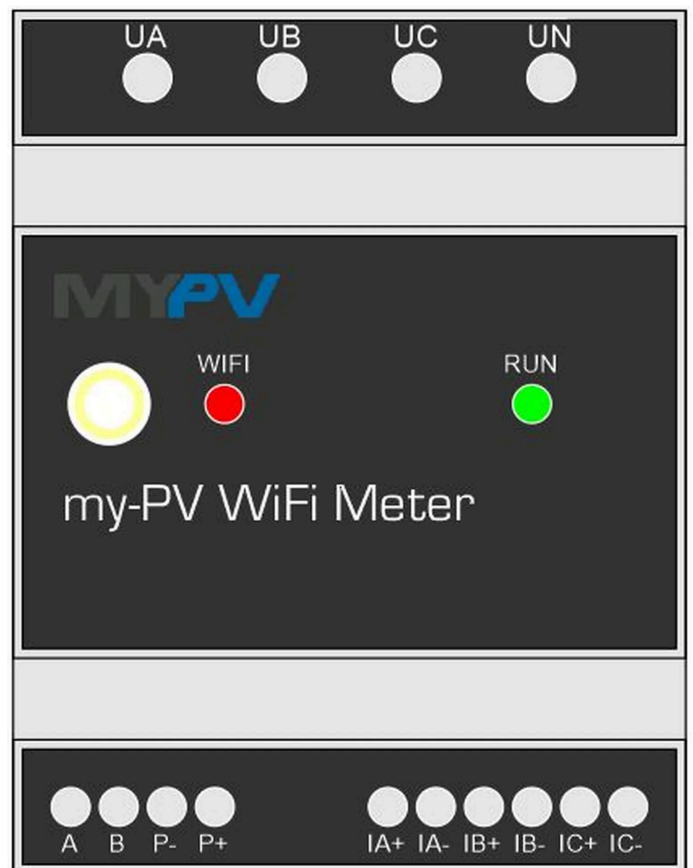
2. Scope of delivery

- my-PV WiFi Meter
- 3 external current transducers
- Quickstart guide

⚠ **Safety notice**

- The installation must be carried out exclusively by the authorized expert. When installing and connecting the relevant standards must be observed.
- Connect the current transducers to the my-PV Wifi Meter first, afterwards attach to the wires!
  Another approach could lead to the induction of dangerous voltages in the metering leads and/or damage the current transducers!
- Any damage caused by ignoring the manuals is not covered by the manufacturer's warranty.
- my-PV does not recommend connecting the meter to the Internet via port forwarding.

3. Indicator elements

A green LED ("RUN") on the my-PV WiFi Meter indicates that the voltage supply is present. A voltage of 230 V must be present between UN and at least one of the three terminal points UA, UB or UC. A red LED ("WIFI") on the my-PV WiFi Meter indicates that the device is connected to a WLAN. See next section.

4. Wiring and WLAN commissioning

Find all Details in the Quickstart guide here.

> 💡 **Tip**
>
> ■ When mounting the current transducers, ensure correct phase assignment!
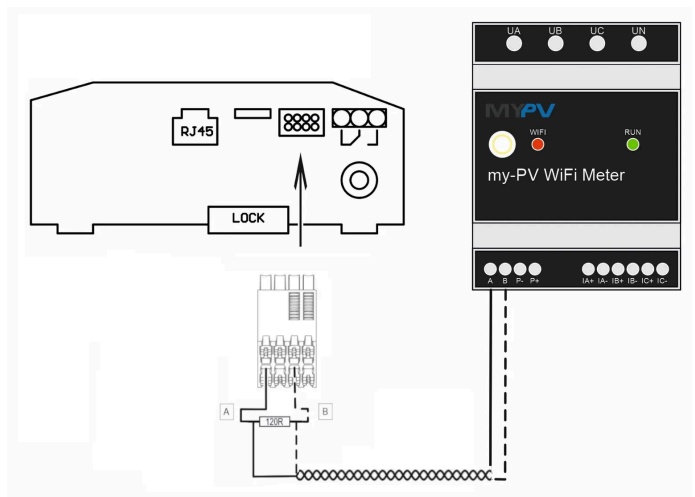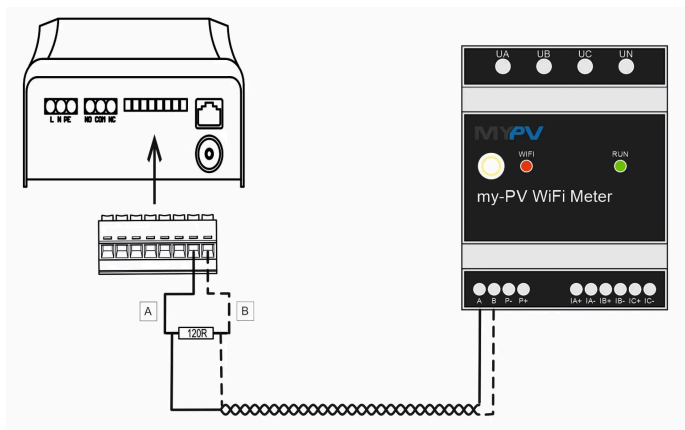> ■ When mounting the current transducers, pay attention to the correct direction!

5. Wiring of the my-PV WiFi Meter for Modbus RTU

Connection possible from WiFi meter serial number: 230505XXXX! Firmwareversion e0001301 required!

On the AC-THOR or the AC ELWA 2, "my-PV WiFi Meter (Modbus RTU)" must be set as the control in the settings on the device.

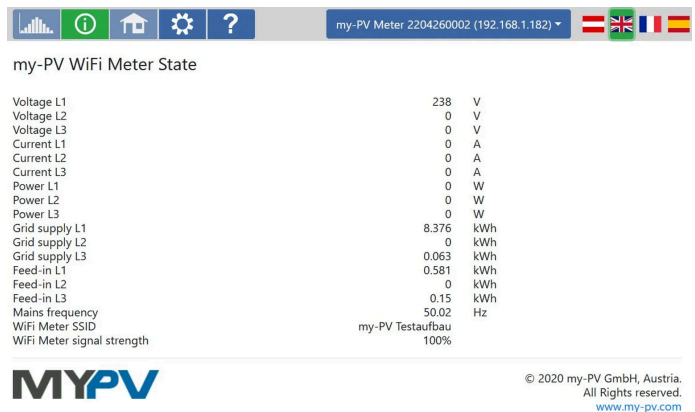The wiring should be done as follows.

Tip

- Use shielded twisted pair cable! (CAT cable)

- Install a 120 Ohm terminating resistor on the RTU bus!
  (Included in the scope of delivery of the AC ELWA 2)

6. Web-Interface

The my-PV web interface of AC•THOR, AC•THOR 9s and AC ELWA-E is also suitable for the my-PV WiFi Meter in the same way. A search program for finding the my-PV WiFi Meter in the network and for downloading the web interface can be found here.
The Web-Interface can also be downloaded directly here.

Please note that the display and setting options may change with more recent software versions.

my-PV WiFi Meter State

Voltage L1	238	V
Voltage L2	0	V
Voltage L3	0	V
Current L1	0	A
Current L2	0	A
Current L3	0	A
Power L1	0	W
Power L2	0	W
Power L3	0	W
Grid supply L1	8.376	kWh
Grid supply L2	0	kWh
Grid supply L3	0.063	kWh
Feed-in L1	0.581	kWh
Feed-in L2	0	kWh
Feed-in L3	0.15	kWh
Mains frequency	50.02	Hz
WiFi Meter SSID	my-PV Testaufbau	
WiFi Meter signal strength	100%	

© 2020 my-PV GmbH, Austria.
All Rights reserved.
www.my-pv.com

At Info ("i") the current measured variables and energy quantities for all three phases are displayed.

At Settings ("gearwheel symbol") you get to the following setting options:

IP Settings

DHCP: By default, DHCP is enabled, i.e. the device receives an IP address from the router to which it is connected during WLAN commissioning.

Static IP: Later, the dynamic IP address can be changed to a static IP address. The settings must be adapted to the router, otherwise the device is not visible in the network!

Basic Settings

3 current transducers ("CT terminals") for a measuring range of 0 - 75 amperes are included in the scope of delivery of the my-PV WiFi Meter ex works. No setting needs to be changed to use these transformers.

For measuring currents above 75 amps, it is possible to use other current transducers. There are different sizes of my-PV available. Please contact my-PV: info@my-pv.com

As a third option the use of third party transducers is possible, where the ratio of primary to secondary current of the transformers has to be adjusted. Please contact my-PV: support@my-pv.com

> ⚠ **Attention!**
>
> The maximum secondary current must not exceed 125 mA!

Firmware Version

In this area, the installed firmware versions can be viewed (for service and update purposes). A firmware update is neither automatic nor provided by the plant operator. If required, you can obtain further information here: support@my-pv.com. Please specify the 10-digit serial number of the my-PV WiFi Meter when contacting us.

The "Reboot device" button restarts the my-PV WiFi Meter.

The "Factory Reset" button resets the settings of the device to the factory settings.

7. Modbus TCP communication registers

The my-PV WiFi Meter also offers an open data interface.
The communication registers can be queried by superordinated controllers, for example.

Device ID: 1
Device Port: 502
Register range: Holding registers

Note: When using my-PV current transducers in special sizes (100A, 200A, 400A, 600A), the measured values of the registers are not automatically corrected.
Therefore multiply the currents / powers by the corresponding CT factor, i.e. in the case of 200A with 200A/75A = 2.6667.

index	Register address(Dec)	Register address(Hex)	register length	Description
1	0	0000	1	Phase A voltage,unsigned,value=data/100,unit: V
2	1	0001	1	Phase A current,unsigned,value=data/100,unit: A
3	2	0002	2	Phase A active power,signed,value=data,unit: W
4	4	0004	2	Phase A forward energy,unsigned,value=data/800,unit:kWh
5	6	0006	2	Phase A reverse energy,unsigned,value=data/800,unit:kWh
6	8	0008	1	Phase A power factor,unsigned,value=data/1000
7	9	0009	1	PadA 0x00,not used
8	10	000A	1	Phase B voltage,unsigned,value=data/100,unit: V
9	11	000B	1	Phase B current,unsigned,value=data/100,unit: A
10	12	000C	2	Phase B active power,signed,value=data,unit: W
11	14	000E	2	Phase B forward energy,unsigned,value=data/800,unit:kWh
12	16	0010	2	Phase B reverse energy,unsigned,value=data/800,unit:kWh
13	18	0012	1	Phase B power factor,unsigned,value=data/1000
14	19	0013	1	PadB 0x00,not used
15	20	0014	1	Phase C voltage,unsigned,value=data/100,unit: V
16	21	0015	1	Phase C current,unsigned,value=data/100,unit: A
17	22	0016	2	Phase C active power,signed,value=data,unit: W
18	24	0018	2	Phase C forward energy,unsigned,value=data/800,unit:kWh
19	26	001A	2	Phase C reverse energy,unsigned,value=data/800,unit:kWh
20	28	001C	1	Phase C power factor,unsigned,value=data/1000
21	29	001D	1	PadC 0x00,not used
22	30	001E	1	frequency, unsigned,value=data/100,unit:Hz
23	31	001F	1	padH 0x00,not used
24	32	0020	2	sum of power, signed, value=data, unit:W
25	34	0022	2	sum of forward energy,unsigned, value=data/800, unit:kWh
26	36	0024	2	sum of reverse energy,unsigned, value=data/800, unit:kwh

8. Technical specifications

You can find them at any time here.

9. EU Declaration of Conformity

You can find them at any time here.

10. Disposal

Either keep packing material or dispose properly.
Dispose of the product at the end of its service life in accordance with the applicable regulations.