

Instructions for integrating

AC•THOR[®] or AC ELWA[®]-E

with Kostal Piko IQ, Plenticore Plus or Smart Energy Meter (KSEM)

KOSTAL

1. Default settings on AC•THOR or AC ELWA-E

Before commissioning, it is essential that you read the assembly instructions that accompany the device, as well as the operating instructions available on line.

Find the AC•THOR operation manual [here](#).

Find the AC ELWA-E operation manual [here](#).

2. Communication of AC•THOR or AC ELWA-E with Kostal

AC•THOR or AC ELWA-E are connected to Kostal in the network via a router. Within this network, the unit receives information from Kostal about how much excess PV power is available.



Do not connect the unit directly to the inverter or battery system!



When controlled by an inverter, a feed-in meter is required in the system. Otherwise, the query of the inverter does not provide any data.

3. Settings on Kostal

With the "Kostal PIKO IQ Plenticore plus Manual" control, Modbus must be activated on the inverter.

For the "Kostal Smart Energy Meter Manual" control, "Enable TCP Slave" must be activated under Modbus Settings - Modbus TCP.

Modbus/Sunspec (TCP)

Activate Modbus

Byte order: little-endian (CDAB) Standard Modbus big-endian (ABCD) Sunspec

Modbus port: 1502

Unit ID: 71

Kostal Inverter

Modbus Settings

Modbus RTU
Configuration of serial interfaces.

Modbus TCP
Configuration of TCP interfaces.

Master

Slave addresses and sockets

Slave address: Connection socket:

Slave

Enable TCP Slave:

Kostal Smart Energy Meter

⚠ When communicating with Kostal, the IP address of the inverter must not change during operation (e.g. through a DHCP router), otherwise the AC•THOR or the AC ELWA-E will lose the control signal!

4. Settings on AC•THOR or AC ELWA-E

For the AC•THOR, select "Kostal PIKO IQ Plenticore plus Manual" **or** "Kostal Smart Energy Meter Manual" for the control type either on the display or in the web interface. The IP address of the signal source must then be statically specified on the display under "Ctrl IP".



Alternatively, these settings can also be made on the AC•THOR via the web interface. In the web setup, the parameters "Device ID" and "Device Port" can also be set by Kostal.

For the "Kostal PIKO IQ Plenticore plus Manual" control, my-PV has preset device ID 71 and device port 1502.

For the "Kostal Smart Energy Meter Manual" control, my-PV presets device ID 1 and device port 502.

With the AC ELWA-E, configuration is only possible in the web setup.

A screenshot of the web interface 'Control Settings' form. The form has several fields: 'Control type:' with a dropdown menu showing 'Kostal Smart Energy Meter M' (highlighted with a red box); 'Control source IP address:' with three input boxes; 'Device ID:' with an input box containing '1'; 'Device port:' with an input box containing '502'; 'Control state:' with a dropdown menu showing 'Modbus multiple Write received'; 'Power timeout:' with an input box containing '10'; 'Control target:' with an input box containing '-50' and a 'W' unit indicator; and 'Block start / stop hour:' with two input boxes containing '0' and '0'. A yellow 'Save' button is at the bottom right.

"Power timeout" is not to be changed.

If there is a battery storage unit in the system and it is to be charged with priority, then the "target value of the control" should be set to -150 W. Otherwise, we recommend leaving -50 W.

my-PV GmbH
Betriebsstrasse 12, 4523 Neuzeug
www.my-pv.com

Subject to change.

MYPV