

Instructions for integrating

AC•THOR / AC•THOR 9s / AC ELWA 2

with Fox ESS Type H3 or H3 Pro



If the RS485 communication port on the inverter is also used by other devices, for example by a data logger in the case of type T(G3), communication with my-PV is not reliably possible!

A connection with the AC ELWA-E is not possible as it does not have Modbus RTU (RS485) communication!

The combination with Fox ESS was tested with type H3, for which the communication parameters are preset from AC•THOR firmware a0021002, for AC ELWA 2 from firmware e0000202.

For the H3 Pro the communication parameters are preset from AC•THOR firmware a0021702, for AC ELWA 2 from firmware e0001301.

The compatibility of my-PV cannot be certified for types H1 and T(G3)!

1. Basic settings on the my-PV device

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

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

Find the AC ELWA 2 operation manual [here](#).

2. Connection to the my-PV device (Modbus RTU)

The my-PV device is connected directly to the Solplanet inverter via shielded twisted-pair cable (for example CAT-Cable).

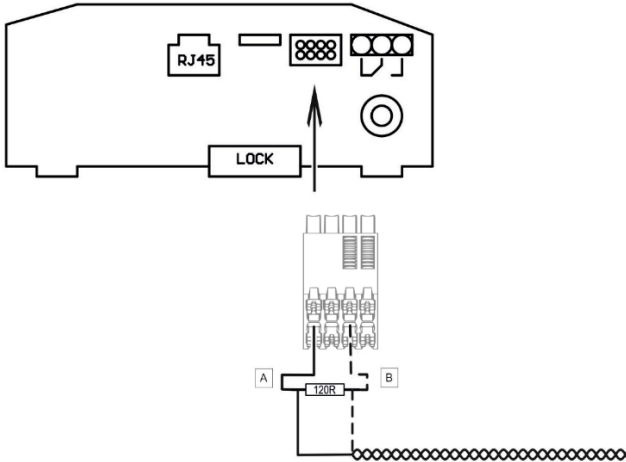


- Use a shielded cable with twisted wires (e.g. CAT cable) and connect the shield to earth (GND) at one end!
- Fit the RTU-BUS with a 120 Ohm terminating resistor!

- When controlled via Modbus RTU, the M7 operating mode cannot be used with the AC•THOR!

AC•THOR / AC•THOR 9s

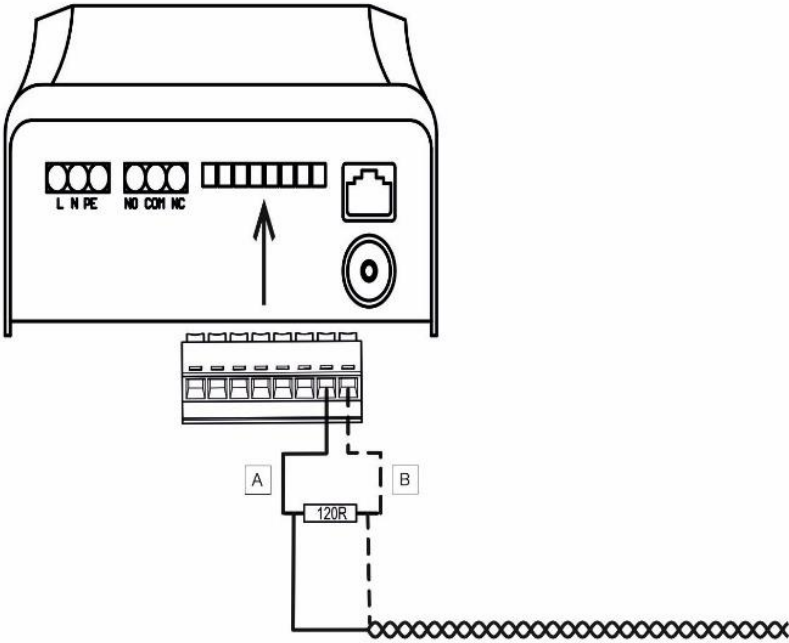
Three pins on the 8-pin connector of the AC•THOR are for the Modbus RTU communication connection. The 120 ohm terminating resistor is not included in the scope of delivery and must be purchased separately.



AC ELWA 2

On the AC ELWA 2, the connection is labelled RS485, A, B, GND.

The 120 Ohm terminating resistor is included in the scope of delivery of the AC ELWA 2



3. Settings on my-PV device

Select 'Fox Ess H3 (Modbus RTU)' or 'Fox Ess H3 Pro (Modbus RTU)' on the display in control settings.



Alternatively, these settings can also be made on the web interface. To do this, the my-PV device must also be integrated into the local network.

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

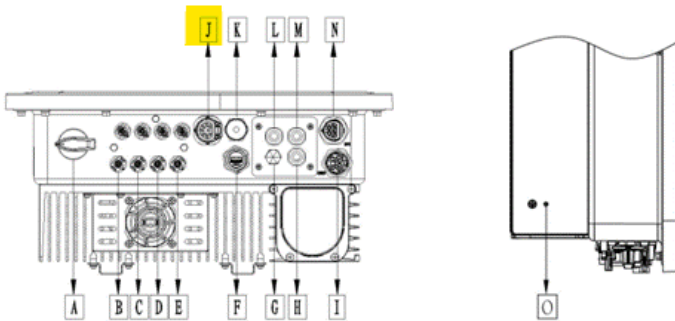
4. Connection to the Fox ESS H3



The following information and illustrations were kindly provided to my-PV by FOX-ESS. my-PV does not guarantee the accuracy of the information and that the illustrations are up to date.

A power meter is required in the system, otherwise the my-PV device will not provide any data when querying the inverter.

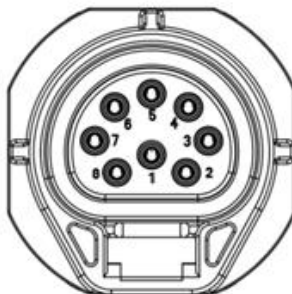
Connection to the Fox ESS H3



Item	Description	Item	Description
A	DC Switch	I	GRID
B	PV1	J	Meter / RS485
C	PV2	K	BMS
D	PV3	L	DRM
E	Battery Connector	M	PARALLEL2
F	USB / WiFi / GPRS / LAN	N	EPS
G	Waterproof Lock Valve	O	Grounding Screw
H	PARALLEL 1		

• **Meter/RS485**

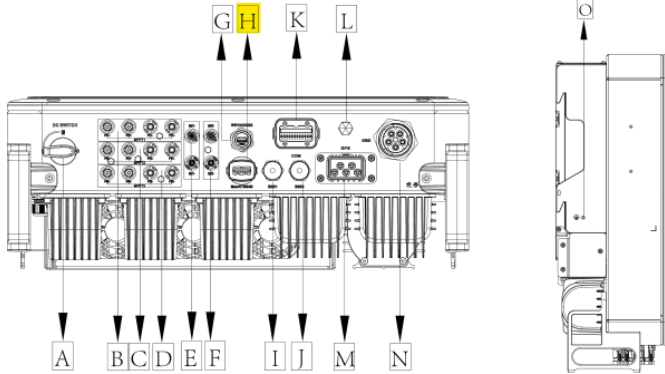
The PIN definitions of Meter/485 interface are as below.



PIN	1	2	3	4	5	6	7	8
Definition	Logger 485A	Logger 485B	Meter 485B	Meter 485A	GND	GND	RY_CON	+12V

Connection to the H3 Pro

3.3 Terminals of inverter

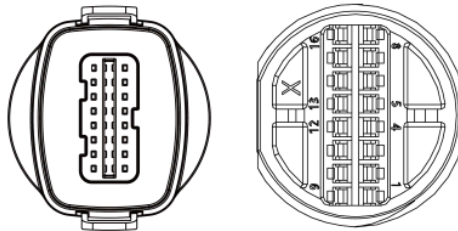


Item	Description	Item	Description
A	DC Switch	I	BMS1
B	MPPT1	J	BMS2
C	MPPT2	K	COM
D	MPPT3	L	Waterproof Lock Valve
E	BAT1	M	EPS
F	BAT2	N	GRID
G	USB/WIFI/PRS/LAN	O	Grounding Screw
H	METER/CT/RS485		

Note: Only authorized personnel are permitted to set the connection.

- Meter/RS485**

The PIN definitions of Meter/485 interface are as below.



METER/CT/RS485 interface (20pin terminals)

1	2	3	4	5	6	7	8
DRY RLY2-	DRY RLY2+	DRY RLY1-	DRY RLY1+	/	/	Meter 485A	Meter 485B
9	10	11	12	13	14	15	16
GND TVS	GND COM	+12V SELV	RY Ctrl	/	/	/	/
17	18	19	20				
EMS 485A	EMS 485B	/	/				

5. Settings on Fox ESS

The combination with Fox ESS was tested with type H3.

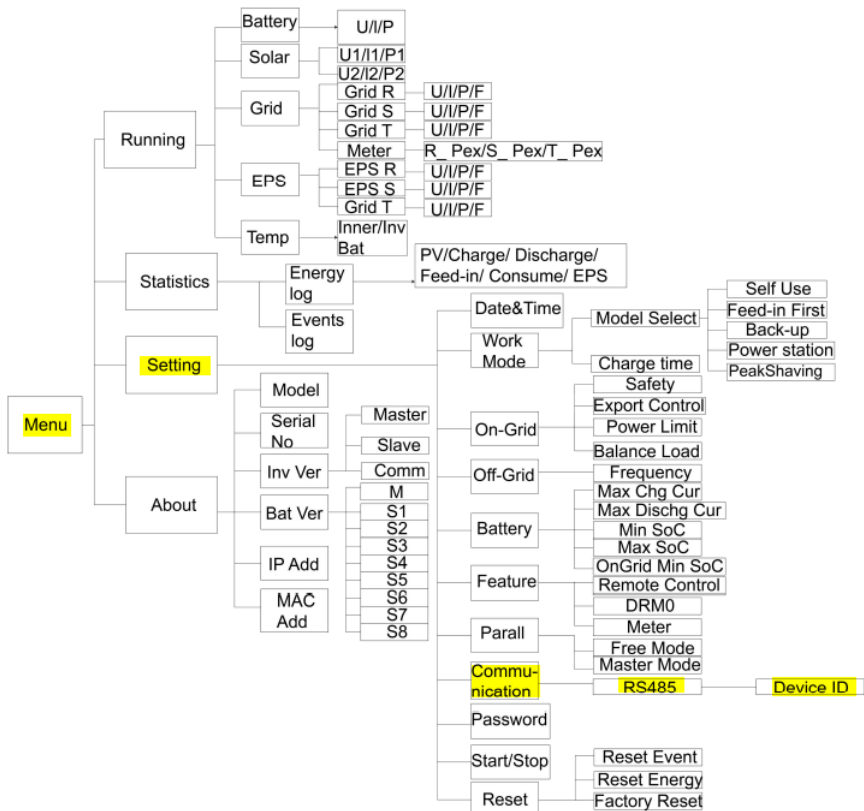
For this type, the communication parameters are preset from AC•THOR firmware a0021000, for the AC ELWA 2 from firmware e0000200.

For type H3 Pro, the communication parameters are from AC•THOR firmware a0021700, for the AC ELWA 2 from firmware e0001100.

The device ID must be 247 and adjusted if necessary. This can be checked on the FOX ESS H3 as follows (according to the FOX ESS, the factory default password for accessing the settings is "0000"):

8.2 Function Tree

- Single machine operation mode



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

Subject to change without notice.

