KIT CONNECTION GUIDE · IN ENGLISH

Kit EASUN SMT 4 kW 24 V + EKPAOWE 25.6 V 100 Ah 2.56 kWh

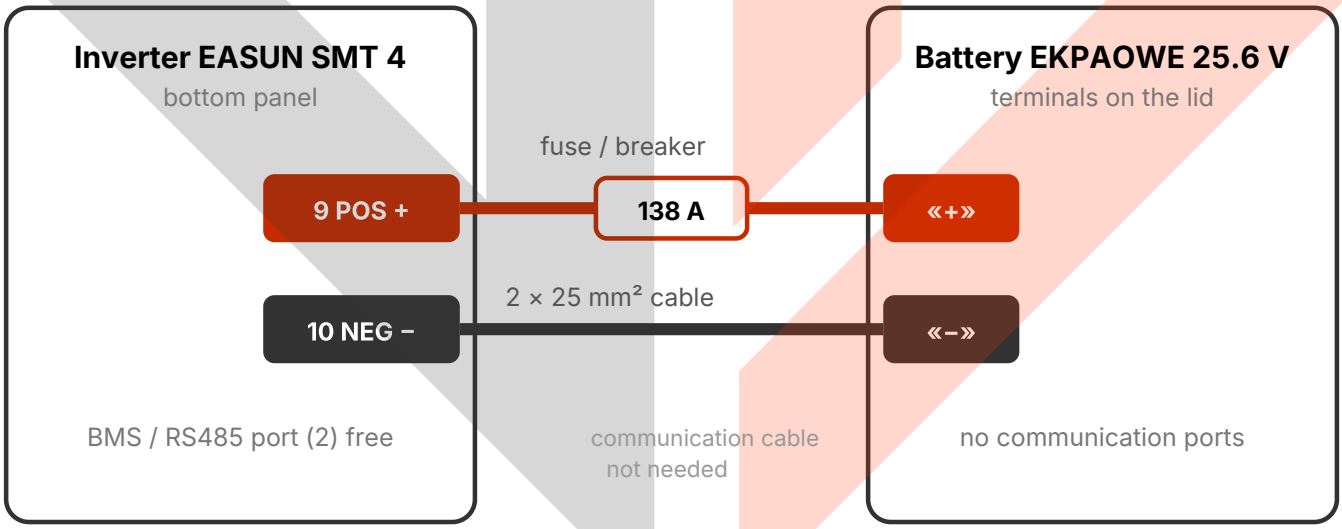
What connects to what, in which order to switch on and what to set in the inverter

Kit contents

	Inverter EASUN SMT 4 kW	Battery EKPAOWE
What it is	Hybrid inverter 24 V, Wi-Fi (ISolar-SMT-4K-24V-Wifi)	LiFePO4 (8S), 25.6 V 100 Ah
Power / energy	**3600 W** according to the manual table (“4K” model)	**2.56 kWh;** BMS approx. **100 A (≈** 2.5 kW)
Battery voltage	**24 V**	**25.6 V**
Charging current	up to 120 A (item 02, default 60 A)	recommended up to **50 A**
BMS communication	BMS / RS485 port (2) is **not used**	**none:** only “+” and “−” terminals
Battery protection	DC protection on the battery cable, typical current **138 A**	built-in BMS

Important about power. The continuous power from the battery is limited by its BMS: according to the product card, approx. **100 A,** i.e. about **2.5 kW** (the exact value is on the case label), and the inverter up to 3600 W. When the inverter runs on the battery only, keep the load within these limits. The inverter can deliver full power when there is grid or solar power.

Connection diagram



Numbers 9 and 10 are the BATTERY POS + and NEG − terminals on the inverter’s bottom panel, 4 is the ON/OFF switch on the side panel (manual numbers, as in the figure on the next page). Connect the grid, loads and solar panels according to the inverter manual.

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+38 093 293 93 93 · +38 099 054 40 38 · Specialist Pavlo Leonidovych · strooks@gmail.com

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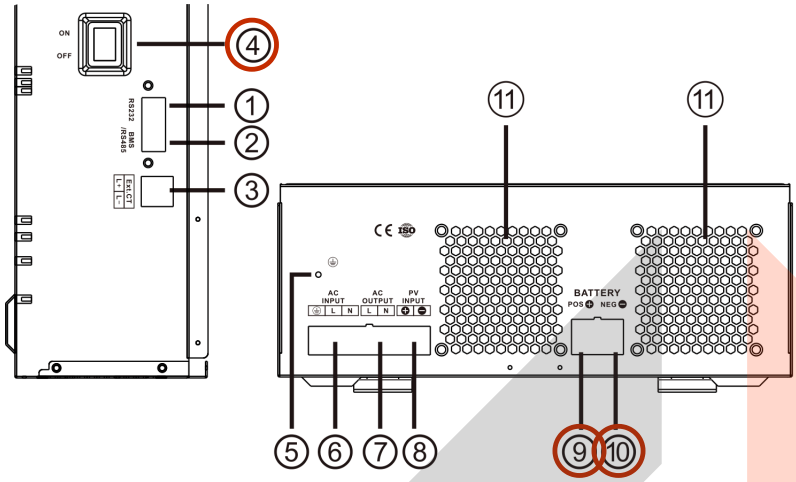
Where these connectors are



Inverter: manual figure: on the left, the side panel with the ON/OFF switch (4); underneath, the BATTERY POS + (9) and NEG – (10) terminals under the bottom cover (two screws). The BMS / RS485 port (2) is not needed for this kit.



Battery: "+" and "–" terminals on the top lid, polarity marked on the case. There are no communication ports to the inverter.

Connection procedure

1. The inverter is switched off with the ON/OFF switch (4); the fuse / breaker on the battery cable is off.
2. Remove the bottom cover (two screws). Crimp ring lugs onto the 2 × 25 mm² cables.
3. Negative cable: battery "–" terminal → inverter **NEG –** terminal (10).
4. Positive cable via a **fuse or breaker** (typical current 138 A according to the manual table): battery "+" terminal → inverter **POS +** terminal (9). Plus to plus, minus to minus: check with a tester before switching on.
5. Refit the bottom cover, switch on the fuse / breaker, then the inverter with its switch (4). Starting requires a battery voltage above 23 V.
6. Set up the inverter according to the table below. Do not connect a communication cable: this battery does not have one.

Inverter settings for this battery

Item	What it is	What to choose for this kit
05	Battery type	**USE —** user-defined (default AGn)
26	CV charge voltage	**28.4 V —** recommended battery charge voltage (default 28.2 V)
27	Float voltage	**27.2 V —** recommended battery float voltage (default 27.0 V)
29	Cut-off voltage	**24.0 V —** recommended battery cut-off voltage (default 21.0 V)
12	Switch to grid (SbU)	per the manual: **23.0 V** by default, range 22–25.5 V, step 0.5 V (applies in SbU mode)
02	Max. charge current (solar + grid)	**50 A —** no more than the battery's recommended charge current (default 60 A); item 11 can be left unchanged
30	Equalization charge	**EdS —** off (default); do not enable for a lithium battery

How to enter the menu: hold ENTER for 3 s, use UP / DOWN to select an item, ENTER to change, UP / DOWN for the value, ENTER to save, ESC to exit. If item 02 is lower than 11, the inverter charges from the grid at the current of item 02.

No BMS communication. The battery has only "+" and "–" terminals, so item 05 is **USE:** for LIA, PYL, tqF, GrO, FEL, LIb, LIC, items 26, 27, 29 are set automatically for other batteries. Item 37 (BMS communication) is **OFF;** items 38–41 work by SOC from the BMS, so go by the voltages in items 12, 13, 29.

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+38 093 293 93 93 · +38 099 054 40 38 · Specialist Pavlo Leonidovych · strooks@gmail.com