

INSTRUCTION

for connection between

Tower and KOSTAL PLENTICORE plus/BI



Note

This is an instruction for connection and commissioning between Tower battery and KOSTAL PLENTICORE plus/BI. For details of the connection and commissioning, please go to user manual of the battery and the KOSTAL PLENTICORE plus/BI if you cannot find it in this instruction.

This instruction is only applicable to upgraded Tower series (except Tower T21), the upgraded Tower series have new characteristic as under:

1. The mark BDU-2G is on the packaging carton
2. RS232 port is added on the BDU interface and mark CAN/RS485 has replaced previous mark CAN
3. The color of nameplate has been changed from white to light yellow:

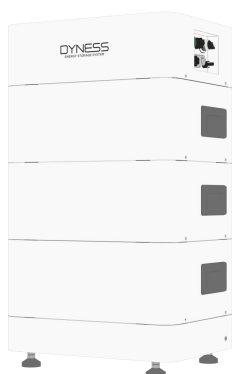
DYNESS ENERGY STORAGE SYSTEM		DYNESS ENERGY STORAGE SYSTEM									
	T7	T10	T14	T17	T21		T7	T10	T14	T17	T21
Nominal Energy/kWh	7.1	10.7	14.2	17.8	21.3	Nominal Energy/kWh	7.1	10.7	14.2	17.8	21.3
Nominal Voltage/V	192	288	384	480	576	Nominal Voltage/V	192	288	384	480	576
Nominal Capacity/Ah	37	37	37	37	37	Nominal Capacity/Ah	37	37	37	37	37
Ambient Temp/°C	0-50	0-50	0-50	0-50	0-50	Ambient Temp/°C	0-50	0-50	0-50	0-50	0-50
IP Grade	54	54	54	54	54	IP Grade	54	54	54	54	54
Protective Class	I	I	I	I	I	Protective Class	I	I	I	I	I

Applicable Product type

- Dy Ness Battery Module Type:
Tower T7 ESS unit/Tower T10 ESS unit/Tower T14 ESS unit/Tower T17 ESS unit
- Kostal Inverter Type:
PLENTICORE plus 3.0/ PLENTICORE plus 4.2/ PLENTICORE plus 5.5/ PLENTICORE plus 7.0/ PLENTICORE plus 8.5/ PLENTICORE plus 10
PLENTICORE BI 5.5/26 and PLENTICORE BI 10/26

Installation Steps

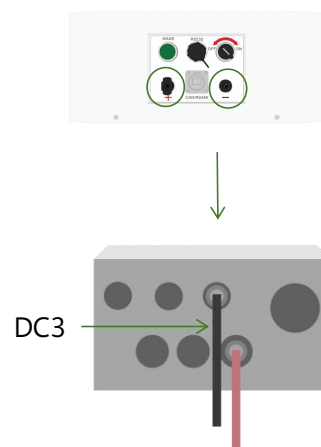
- 1 Install tower as per user manual. Take T10 as an example



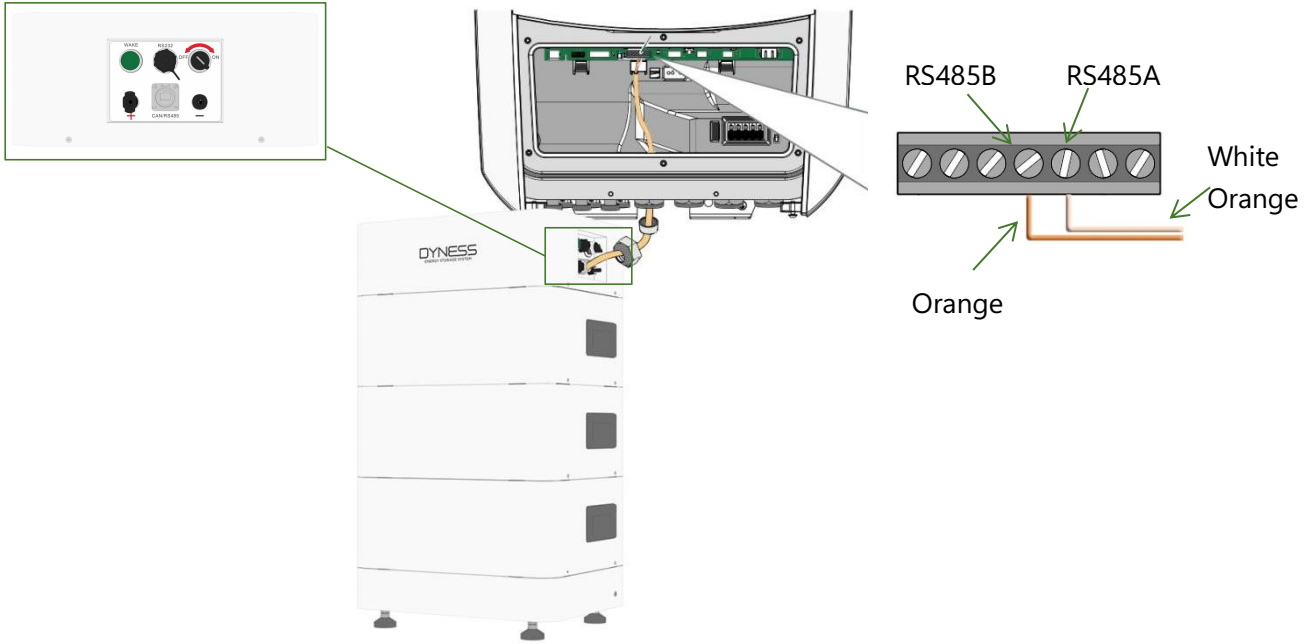
- 2 refer to user manual to connect energy meter, grid, loads, etc. to PLENTICORE plus/BI inverter



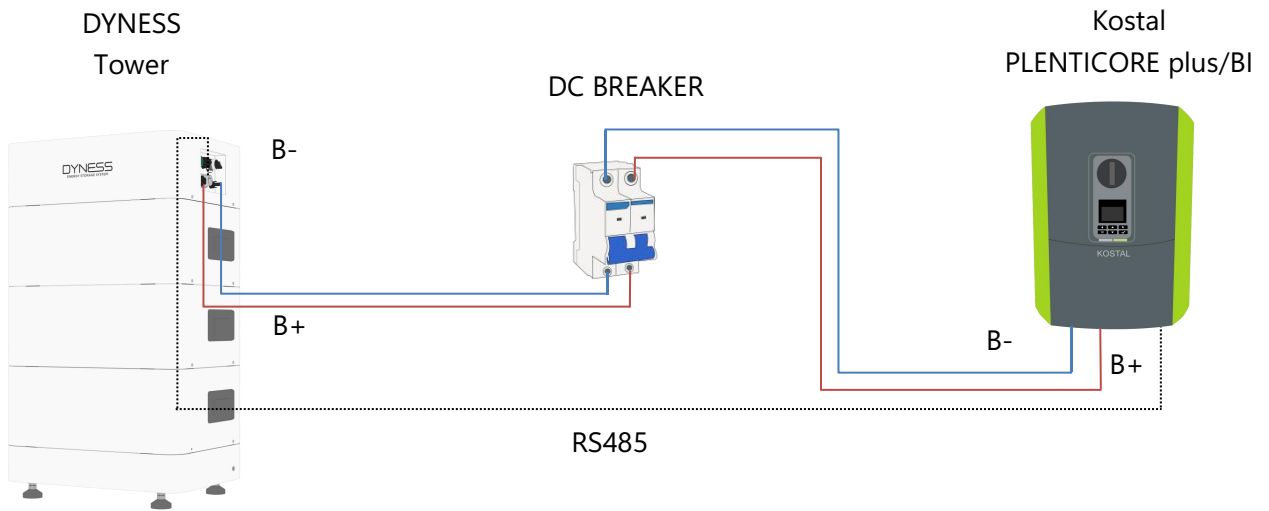
- 3 Connect the battery power cables to inverter. Plug the socket and plug of the battery's DC power cables onto the DC input 3 on the inverter



- 4 Connect the battery communication cable to inverter (RJ45 plug at battery end, expose wires at the inverter end, keep the wire in orange and the wire in white & orange, remove other wires)



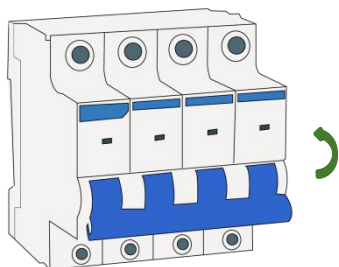
It is recommended to install a circuit breaker between Tower and Kostal



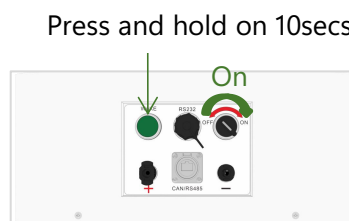
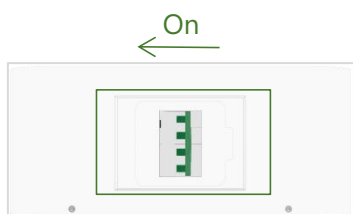
Tower and Kostal connection diagram

5 Turn on battery and inverter

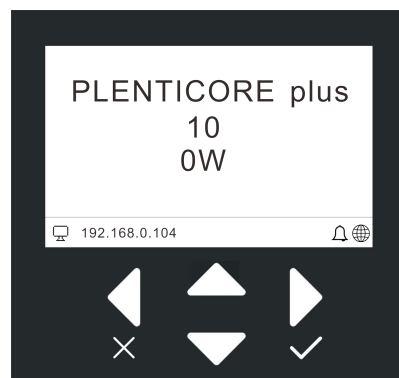
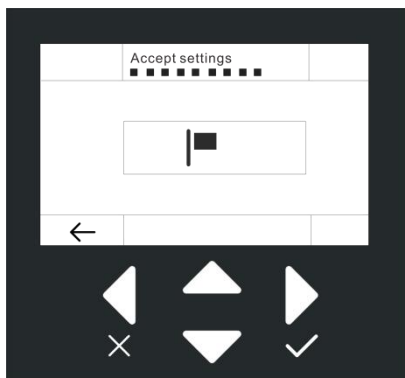
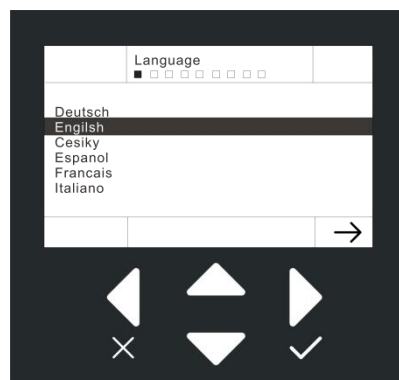
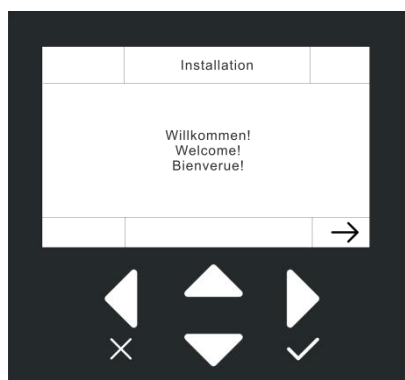
Turn on inverter: turn on circuit breaker of mains power to turn on Kostal. Turn on the DC switch to "I" position



Turn on battery: Turn on the circuit breaker on BDU of tower, turn on the power on switch and press and hold on the "wake" button for 10s

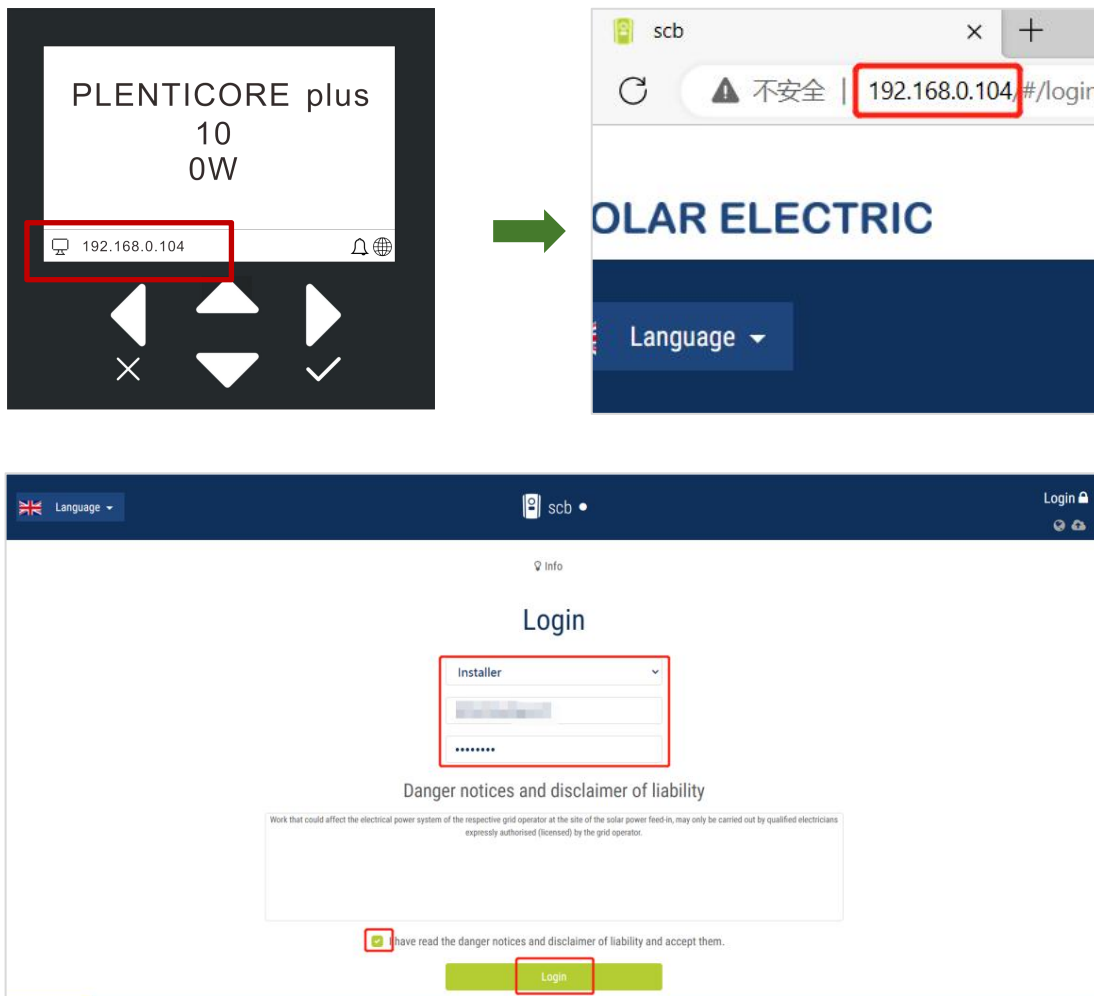


6 Initial commissioning of inverter: follow the installation wizard on the display and make settings.

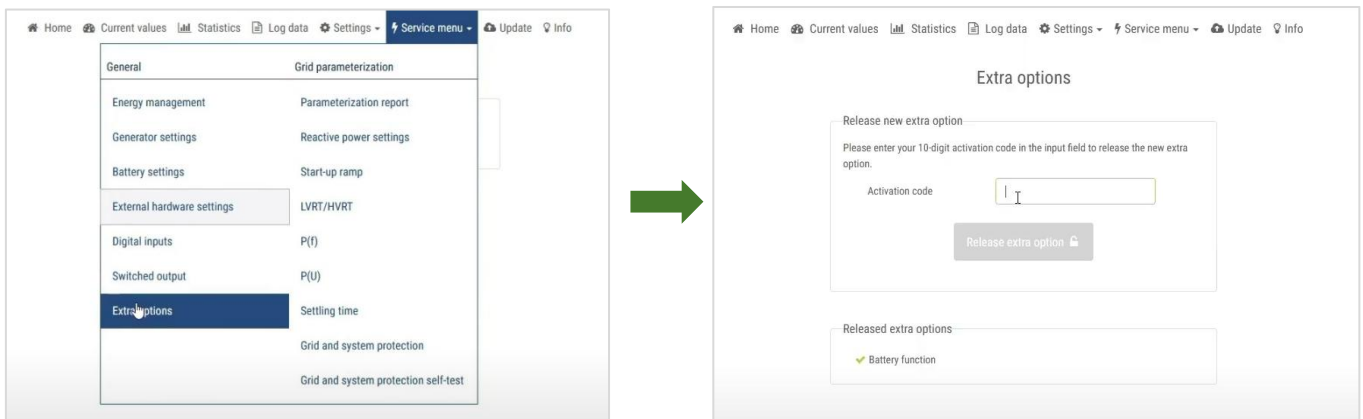


Initial commissioning is completed.

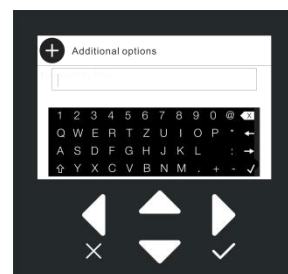
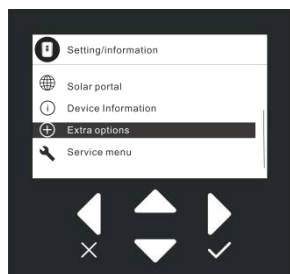
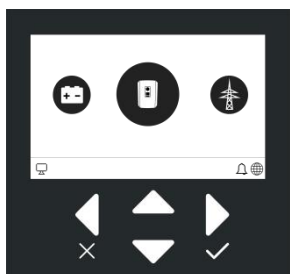
7 Enter the IP of the inverter into the URL line of your browser, log in



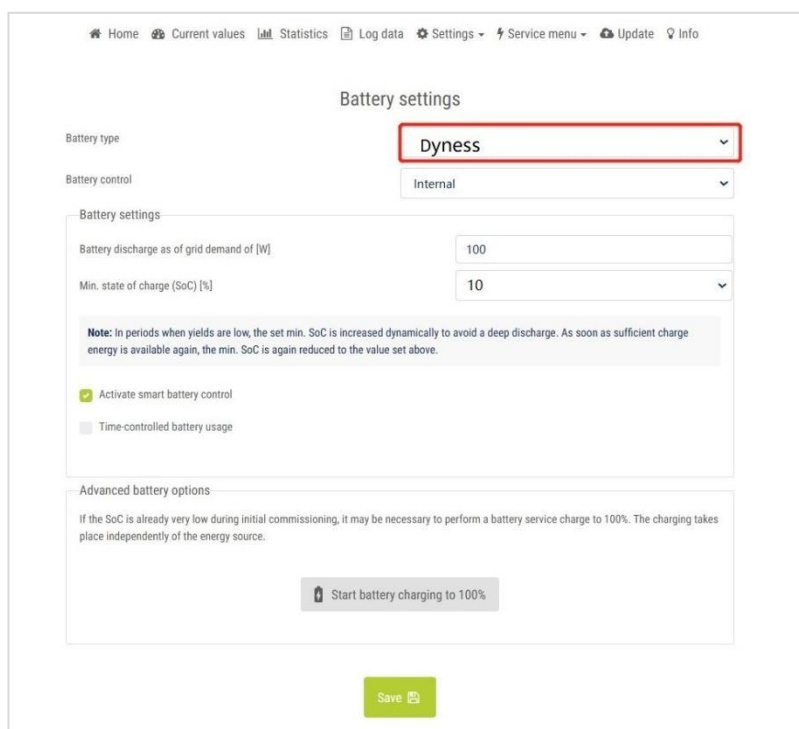
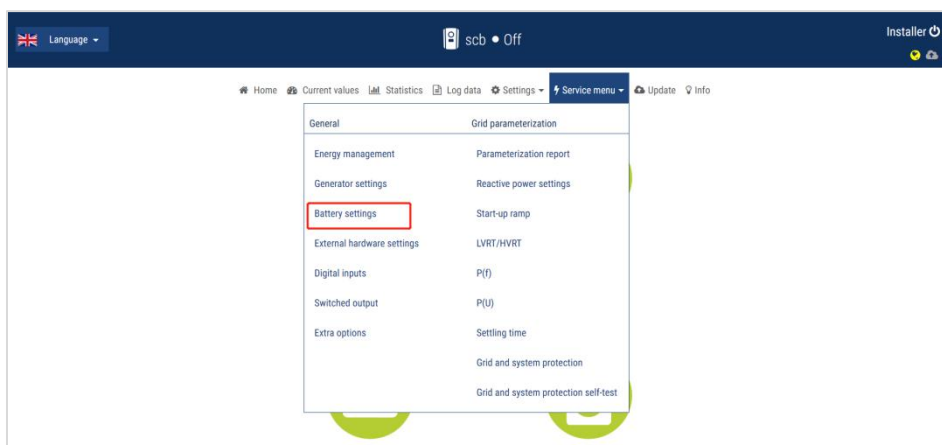
8 A battery activation code is required to release the DC3 of inverter for connecting the battery. Purchase a "Battery activation code" from KOSTAL Solar online shop and enter this in the inverter via webserver: Service menu > Extra options > Release new options > Enter code



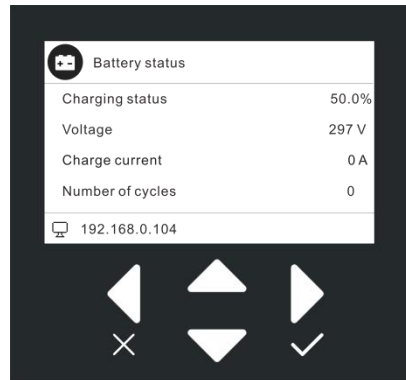
or in the inverter menu: Settings> Extra options> Additional options>Release options>Activate options > Enter code.



9 select battery type and parameters in service menu, save the settings



- 10 check the battery information on LCD display. If the battery status is normal, then the commission is successful





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www.dyness-tech.com