







Compatible Batteries for SH5K-30

1. Li-ion

1.1. Compatible batteries

The batteries listed in the following table are approved for the operation with the hybrid inverters SH5K-30 with software version SH5K-30_V01_V006. Please find the specific models in the following table, which are subject to change without notice.

Compatible Low Voltage Batteries for SH5K-30:

Brand	Model
 LG Chem	RESU Gen1: RESU6.4EX
	RESU Gen2 48V: RESU3.3, RESU6.5, RESU10, RESU13
 PYLONTECH	US2000 B
	Phantom-S
 GCL	E-KwBe5.6
 SUNGROW	SBP4K8
 BYD	Battery-Box Res: Res2.5/Res5.0/Res7.5/Res10.0
	Battery-Box Pro: Pro2.5/Pro5.0/Pro7.5/Pro10.0
	Battery-Box: L3.5/L7.0/L10.5/L14.0
	Battery-Box Premium LVS: LVS4.0/LVS8.0/LVS12.0/LVS16.0/LVS20.0/LVS24.0
	Battery-Box Premium LVL 15.4
 TAWAKI	MAUI Battery Pack 86 Ah

2. Other battery

2.1. Limitations

The other batteries need to be connected, which are not in the above compatible batteries list (such as lead-acid battery), must meet the following restrictions:

- (1) The inverter does not have any port for the temperature sensor of the battery. Sungrow is not responsible for the problem caused by temperature issues of the battery.
- (2) The battery room must be ventilated in accordance with the requirements of the battery manufacturer and with the locally applicable standards and directives (see documentation of the battery manufacturer).
- (3) The parameters such as charge or discharge current, charge or discharge voltage and etc. are not beyond the upper limit. For specific requirements, see **section 2.2 Step 3 Parameter description**.

2.2. Setting battery type

Step 1 Stopping the inverter

By pressing ▲/▼ to select and ENT to confirm to perform the following steps: Main page → Menu → “ON/OFF” → “OFF” → confirm.

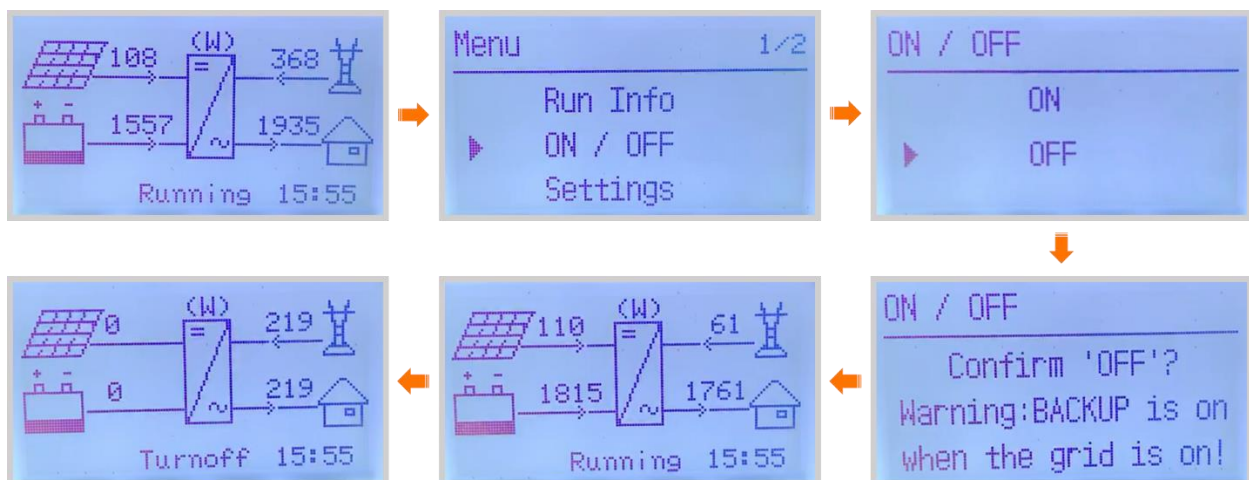


Figure 1 Stop the inverter

Step 2 Setting battery type

By pressing ▲/▼ to select and ENT to confirm to perform the following steps: Main page → Settings → Input the password “111” → “Battery Type” → “Other Battery”.

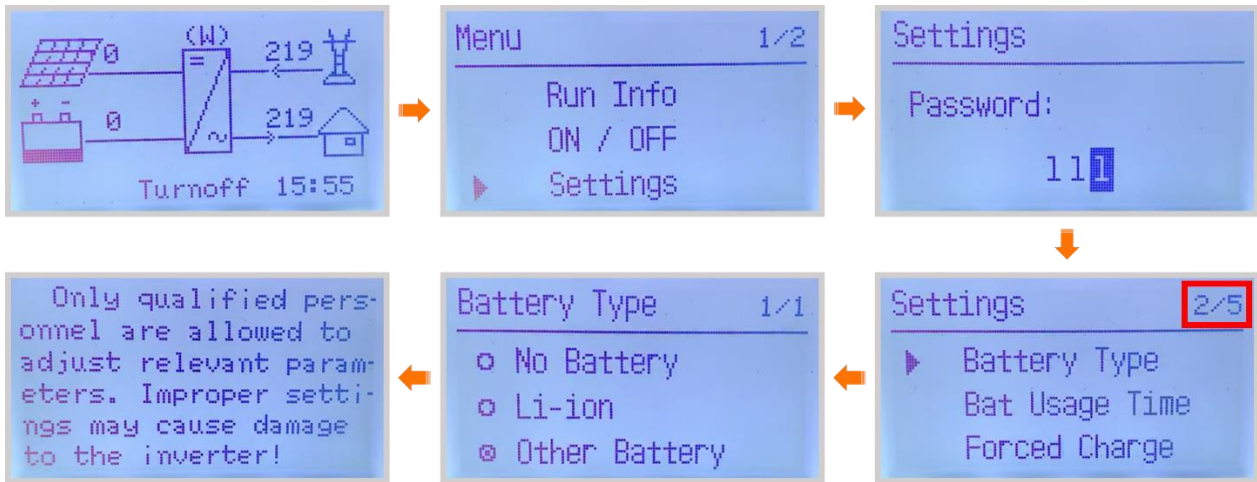


Figure 2 Setting battery type

Step 3 Parameter description

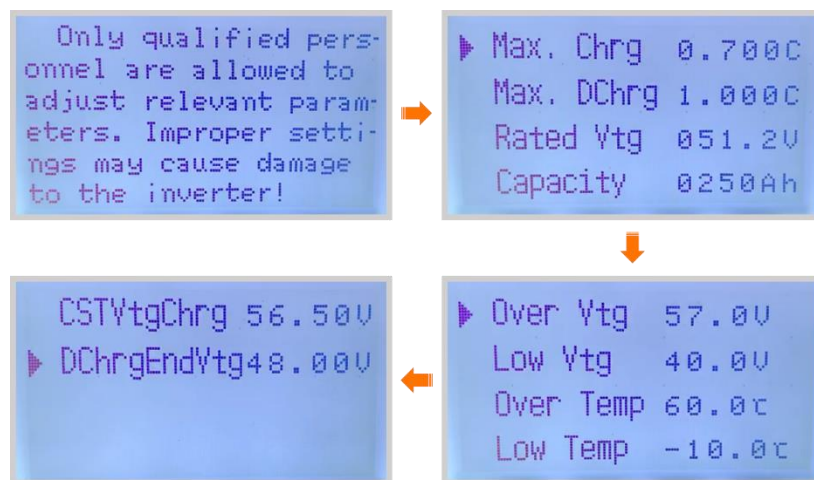


Figure 3 Battery parameters

Please note that:

- Max. Chrg / Max. DChrg:
 - 1) Make sure that the charge or discharge current is not beyond the upper limit (65A) to protect the battery from overcharging or deep discharging.
 - 2) The unit C is the "capacity", which refers to the maximum amount of charge that a battery can store. Refer to the manufacturer's specifications for details. If the max.

charge or discharge is set to more than 65 A (e.g. $C = 600 \text{ Ah}$, $0.3C = 180\text{A}$), then the inverter will limit the charge and discharge current to 65 A.

3) The charge or discharge voltage is not beyond the upper limit (63 V / 70 V).

- DChrgEndVtg: Stop discharging at a voltage not lower than DChrgEndVtg, so as to protect the battery from deep discharging. The DChrgEndVtg setting value should be higher than the Low Vtg setting value.

Parameter Description for Other Battery

Parameter	Description	Range
Max. Chrg	The upper limit of the charging current	0.05C to 2C
Max. DChrg	The upper limit of the discharging current	0.1C to 2C
Rated Vtg	The rated voltage of the equipped battery	30 V to 60 V
Capacity	Capacity of the battery tray	10 Ah to 1000 Ah
Over Vtg	The upper limit of battery voltage when charging	48 V to 70 V
Low Vtg	The lower limit of battery voltage when discharging	32 V to 48 V
Over Temp	The upper limit of battery temperature	20°C to 70°C
Low Temp	The lower limit of battery temperature	-30°C to 10°C
CSTVtgChrg	The voltage of constant-voltage charging	40 V to 63 V
DChrgEndVtg	The voltage at which the discharging is stopped	30 V to 53 V

NOTICE: The parameters can only be set by qualified personnel. Consult the battery manufacturer for an advice before any modification.