

Heating function introduction						
Condition	BAT ACTUALLY SOC<35% or Vcell min < 3.26			BAT ACTUALLY SOC>35% or Vcell min > 3.26		
Min Cell TEMP (°C)	-30<CELL TEMP <-7	-7<CELL TEMP <0	0< CELL TEMP	-30< CELL TEMP <-7	-7< CELL TEMP <0	0<CELL TEMP
Battery heating Function	works	works	works	works	works	works
Heating energy source	PV or Grid ( PV Priority)	PV or Grid ( PV Priority)	PV or Grid ( PV Priority)	PV or Grid ( PV Priority)	PV>BAT (SOC>35%) >grid	PV>BAT (SOC>35%) >grid
battery status	No charge and discharge, not able to heat battery by itself	No charge but able to drain few power to heat battery by itself	stage, the battery is not charged and discharged. After the battery cell temperature is heated to 2°, the battery can be charged and discharged while heating.	No charge and discharge, neither able to heat battery by itself	No charge , but able to drain few power to heat battery by itself when PV not enough	Yes, battery can charge and discharge, meanwhile able to heat battery by itself when PV not enough

Heating function:enable

\*Enter heating function condition 1: The system time is in the heating time period, and the energy source priority is PV>BAT (SOC>35%)>grid

\*Enter the heating function condition 2: The system time is in the non-heating time period, if the machine has PV, the battery will be automatically heated by the energy of the PV

\*The temperature is the minimum temperature of the cell and has a tolerance of ±1°

\*After the battery enters the heating mode, though condition 1 or condition 2 is satisfied, the heating function will be automatically exited when the battery temperature reaches 10°

For half-heating to be able to function

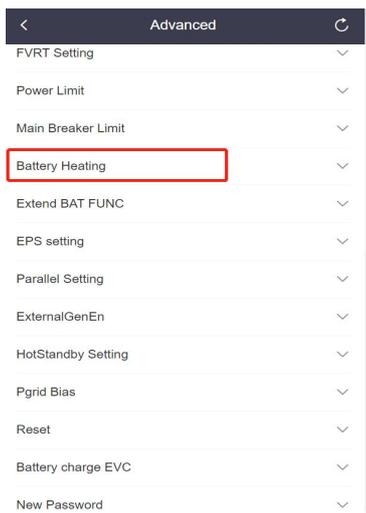
1. both INV and BAT FW in latest version, which is ARM V1.30, DSP V1.31, BAT Master V3.13, BAT Slave V3.13

2. Go to remote setting - Advanced - Battery Heating - Eable - set heating time

3. battery heating power source sequence : from PV as priority, then Battery itself, finally from Grid

4. For PV to heat the battery, needs to meet 2 condition: 1. PV has generation, system detects that in lasting 10 mins, system noticed 10 times of power limitation: 2. AC output power above 300W,and it last for at least :

Self - heating function take power :  $1.2A * \text{Battery Model Voltage}$  . like say for 2 pcs T30 battery, it's  $1.2 A * 2 * 102.4v = 246W$  give or take.



10 mins