Noltage concer failure
Uvoltage sensor failure
OFF
Temperature sensor failure
When the cell temperature exceed 20 °C, the cell temperature failure warning will be activate.
Current sensor failure
OFF
Button switch failure
The failure of power switch would activate the button switch failure warning
Cell voltage difference failure
If the voltage difference value exceeds the setting value, cell voltage difference failure will be
activated.
Charging switch failure
OFF
Discharging switch failure
OFF
Current limiting switch failure OFF
Cell high voltage warning
When an individual cell voltage value exceeds the setting value, the cell high voltage warning will
be activated, and BMS would ask the inverter for a Maximum of 10A charging current.
Cell low voltage warning
When a individual cell voltage value is lower the setting value, the cell low voltage warning will
be activated.
Cell over voltage protection
When an individual cell voltage value exceeds the setting value, the cell over voltage protection
will be activated, and the BMS will cut off the charging MOSFET. Cell under voltage protection
Cell under voltage protection When an individual cell voltage is lower than the setting value, cell low voltage protection will be
activated, and the BMS will cut off the discharging MOSFET.
Cell low voltage forbidden to charge
If an individual cell is lower than the setting value, no charge could be conducted. Pack high voltage warning
When the pack voltage value exceeds the setting value, the pack high voltage warning will be
activated, and the BMS would ask for a Maximum of 10A charging current from the inverter.
Pack low voltage warning
When the pack voltage value is lower than the setting value, the pack low voltage warning will be
activated,.
Pack over voltage protection
When the pack voltage exceeds the setting voltage, the pack over voltage protection will be
activated, and the BMS will cut off the charging MOSFET. Pack under voltage protection
Pack under voltage protection When the Pack voltage is lower than the setting value, the pack under voltage protection will be
activated, and the BMS will cut off the discharge MOSFET.

Charging high temperature warning

When at the charging status, and the cell temperature exceeds the setting value, the charging high temperature warning will be activated. And the BMS will ask the inverter for a Maximum of 10A charging voltage. Charging over temperature protection When at the charging status, and the cell temperature exceeds the setting value, the charging over temperature protection will be activated. And the BMS will cut off the charging MOSFET automatically. Charging low temperature warning When at the charging status, and the cell temperature is lower than the setting value, the charging low temperature warning will be activated. Charging under temperature protection When at the charging status, and the cell temperature is lower than the setting value, the charging low temperature protection will be activated. And the BMS will cut off the charging MOSFET automatically. Discharging high temperature warning When at the discharging status, and the cell temperature exceeds the setting value, the discharging high temperature warning will be activated. Discharging over temperature protection When at the discharging status, and the cell temperature exceeds the setting value, the discharging high temperature protection will be activated. And the BMS will cut off the discharging MOSFET automatically. Discharging low temperature warning When at the discharging status, and the cell temperature is lower than the setting value, the discharging low temperature warning will be activated. Discharging under temperature protection When at the discharging status, and the cell temperature is lower than the setting value, the discharging low temperature protection will be activated. And the BMS will cut off the discharging MOSFET automatically. Ambient high temperature warning When the ambient temperature exceeds the setting value, the ambient high temperature warning will be activated. Ambient over temperature protection When the ambient temperature exceeds the setting value, the ambient high temperature protection will be activated. And the BMS will cut off both charging and discharging MOSFET automativally. Ambient low temperature warning When the ambient temperature is lower than the setting value, the ambient low temperature warning will be activated. Pack over temperature cooling Preserved functions Over current protection (Transient) Within the setting period, when the discharging current is lower than the setting value, the

transient current over-current protection will not be activated.

Recovery conditions: charging or 60 seconds after the protection conducted.

☐ Transient over current locking
If the transient current over-current protection was continuously activated for 5 times, the
transient over current locking will be activated.
Recovery conditions: charging
☐ Discharging current short circuit protection
When the discharging current exceeds 500A, and the duration is 100us exceeds the setting
duration, the discharge current short circuit protection will be activated.
Recovery conditions: charging, or 60 seconds after the protection conducted.
☐ Discharging current short circuit locking
If the discharging current short circuit protection was continuously activated for 5 times, the
discharging current short circuit locking will be activated.
Recovery conditions: charging
☐ Cell low temperature heating
When at the charging status, if the cell temperature is lower than the setting value, the heating
function will be activated.
Ambient under temperature protection
When the ambient temperature is lower than the setting value, the ambient under temperature
protection will be activated. And the BMS will cut off both discharging and charging MOSFET
automatically.
■ MOSFET high temperature warning
When the MOSFET temperature exceeds the setting value, the MOSFET high temperature
warning will be activated.
MOSFET over temperature protection
When the MOSFET temperature exceeds the setting value, the MOSFET over temperature
protection will be activated. And the BMS will cut off both discharging and charging MOSFET.
☐ Charging over current warning
When at the charging status, if the charging current exceeds the setting value, the charging
current over-current warning will be activated.
☐ Discharging over current protection
When at the discharging status, if the discharging current exceeds the setting value, the charging
current over-current protection will be activated. And BMS will cut off the discharge MOSFET
automatically.
☐ Charging over current protection
When the charging current exceeds the setting value, the charging over current will be activated.
And the BMS will cut off the charging MOSFET.
☐ Intermittent power supply function
When the SOC reaches 100%, if the SOC exceeds the setting value (which is 96%), the charging
MOSFET will be cut off. And the battery can not be charged.
☐ Remaining capacity warning
When the SOC percentage is lower than the setting value, the remaining capacity warning will be
activated.
☐ Remaining capacity protection
When the SOC percentage is lower than the setting value, the remaining capacity protection will

be activated. And the BMS will cut off the discharge MOSFET.
Output reverse polarity protection
OFF
□ Connection failure
OFF
Output soft start function
When the BMS is power on, the voltage value between P+ terminal and P- terminal will get closer
to the battery real voltage gradually.
☐ Charging equalization function
When at the charging status, if the cell voltage is higher than setting value, and the voltage
difference value exceeds the setting value, the BMS charging equalization function will activated.
Equalization over time forbidden
When the equalization period exceeds the setting time, the charging equalization function will be
turned off.
Equilization over temperature forbidden
When at the charging over temperature protection status, equalization function can not be
activated.
Automatic charging activation
OFF
Active charging current limiting
When the active charging current limiting function is turned on, the charging current will be
limited to 10A.
Passive charging current limiting
When charging current exceeds the setting value, the passive charging current limiting function is
turned on. And the charging current will be limited to 10A.
Switch turn-off function
To control the external switch status, if this function is turned on, the RESET button will be
invalid.
☐ History record function
Click to record the historical data of the battery
LCD display function
To control the function of the LCD Screen button.
Warning protection connection point
OFF
multiple circuits expansion connection point
OFF