
5 Troubleshooting

5.1 Troubleshooting

Check the indicators on the front to determine the state of the battery pack. A warning state is triggered when a condition, such as with voltage or temperature, is beyond design limitations. The battery pack's BMS periodically reports its operating state to the inverter.

When the battery pack falls outside prescribed limits, it enters a warning state. When a warning is reported, the inverter immediately stops operation.

Use the monitoring software on the inverter to identify what caused the warning. The possible warning messages are as follows:

- Battery Over Voltage
- Battery Under Voltage
- Battery Over Temperature
- Battery Under Temperature
- Battery Discharge Over Current
- Battery Charge Over Current
- BMS Internal Communication
- Battery Cell Voltage Imbalance

The abnormal state is cleared when the battery pack recovers normal operation. If battery pack is not working correctly and the issue persists, contact a Qualified personnel, Installer or LGC regional contact point.

NOTE

For a serious warning, if no proper corrective actions are taken by the inverter, the battery pack's circuit breaker and disconnect switch automatically trip to protect it self.

CAUTION

If the battery pack or the inverter indicates FAULT or fails to operate, contact LGC regional contact point (page 34) or your distributor immediately.

5.1.1 Post-Installation Check List

	YES	NO
1. Visual check if the wiring matches with the installation manual.(3.2 Cable connection)	<input type="radio"/>	<input type="radio"/>
2. The disconnect switch is ON.	<input type="radio"/>	<input type="radio"/>
3. The Circuit Breaker is ON.	<input type="radio"/>	<input type="radio"/>
4. The battery “ON” LED is ON	<input type="radio"/>	<input type="radio"/>
5. The inverter power is ON. ¹⁾	<input type="radio"/>	<input type="radio"/>
6. The inverter has the latest firmware. ²⁾	<input type="radio"/>	<input type="radio"/>
7. The inverter recognizes the battery.	<input type="radio"/>	<input type="radio"/>
8. The battery can operate after installation is correctly done.	<input type="radio"/>	<input type="radio"/>
8-1. The AC grid is connected.		
8-2. The Meter is installed.		
8-3. The government approval is complete		
9. IF ANY OF #8 IS CHECKED AS “NO” OR THE INVERTER NEEDS TO BE TURNED OFF, TURN OFF THE CIRCUIT BREAKER. ³⁾	<input type="radio"/>	<input type="radio"/>

5.1.2 Troubleshooting Guideline

If the battery LED is OFF

1. Turn off the Circuit Breaker
2. Turn off the disconnect switch.
3. Turn off the Inverter. Verify there is no power at the battery connection.
4. Unplug all the wires and reconnect. Re-check the wiring on the battery is done correctly. Refer to the installation manual (3.2 Cable connection).
5. Turn on the Circuit Breaker.
6. Turn on the inverter.
7. If the LED is still off, turn off the Circuit Breaker.
8. Contact LGC regional contact point.

1) Contact the inverter manufacturer.

2) Refer to the inverter installation manual or troubleshooting guideline.

3) Refer to the User guide or Installation manual (3.2 Cable connection) for the location of the battery Aux Power Switch and the Circuit Breaker.

If the battery LED is ON, but the battery is not charging or discharging

1. Update both the inverter and battery firmware version. Refer to the inverter's troubleshooting guide for instruction.
2. Check the inverter's setting for battery.
Refer to the inverter's troubleshooting guide for the battery set-up instruction.
3. If the battery is recognized, inverter set up is correct.
4. If the issue persists,
 - 4-1. Turn off the Circuit Breaker.
 - 4-2. Turn off the disconnect switch.
 - 4-3. Turn off the inverter. Verify there is no power at the battery connection.
 - 4-4. Unplug all the wires and reconnect. Re-check the wiring on the battery is done correctly. Refer to the installation manual (3.2 Cable connection).
 - 4-5. Turn on the disconnect switch first, then Turn on the Circuit breaker.
5. If the battery set up is correctly done, but the battery still does not operate, turn off the Circuit Breaker first, then turn off the Aux Power Switch.
6. Turn off the disconnect switch.
7. Contact LGC regional contact point.

LED Status	Action
	Power on, Idle
	Charging
	Discharging

If the battery FAULT LED is ON

1. Check if the inverter recognizes the battery. Refer to the inverter's troubleshooting guide on the battery set-up instruction.
2. If the inverter is connected to the internet, collect the log file from the inverter company.
 - 2-1. Send the log file to LGC regional contact point.
 - 2-2. Turn off the Circuit Breaker first, then turn off the disconnect switch.
 - 2-3. Wait further instruction from LGC
3. If the inverter is not connected to the internet, check the inverter LCD to read battery's fault ID. Refer to the inverter's troubleshooting guide for instruction.
 - 3-1. Send the fault ID to LGC regional contact point.
 - 3-2. Turn off the Circuit Breaker first, then turn off the Aux Power Switch.
 - 3-3. Wait further instruction from LGC

LED Status	Action
	Fault