

# Troubleshooting

## Trouble shooting

This section contains information and procedures for solving possible problems with X1 series inverters, and provides you with troubleshooting tips to identify and solve most problems that could occur with the X1 series inverters.

This section will help you narrow down the source of any problems you may encounter. Please read the following troubleshooting steps.

Check warnings or fault messages on System Control Panel or Fault codes on the inverter information panel. If a message is displayed, record it before doing anything further.

Attempt the solution indicated in below table.

Faults	Diagnosis and solution
SPI Fault	SPI communication fault <ul style="list-style-type: none"> <li>• Disconnect PV+ , PV-, reconnect them.</li> <li>• Or seek help from us, if can not go back to normal state.</li> </ul>
SCI Fault	SCI communication fault <ul style="list-style-type: none"> <li>• Disconnect PV+ , PV-, reconnect them.</li> <li>• Or seek help from us, if can not go back to normal state.</li> </ul>
PV Config Fault	PV Connection Setting Fault <ul style="list-style-type: none"> <li>• Resetting the PV connection</li> <li>• Or seek help from us, if can not go back to normal state.</li> </ul>
Inv EEPROM Fault	Inverter EEPROM fault <ul style="list-style-type: none"> <li>• Disconnect PV+ , PV-, reconnect them.</li> <li>• Or seek help from us, if can not go back to normal state.</li> </ul>
Relay Fault	Relay Fault <ul style="list-style-type: none"> <li>• Disconnect PV+ , PV-, reconnect them.</li> <li>• Or seek help from us, if can not go back to normal state.</li> </ul>
Sample Fault	The detection circuit Fault <ul style="list-style-type: none"> <li>• Disconnect PV+ , PV-, reconnect them.</li> <li>• Or seek help from us, if can not go back to normal state.</li> </ul>
RCD Fault	Residual Current Device Fault <ul style="list-style-type: none"> <li>• Check the impedance of DC input and AC output.</li> <li>• Disconnect PV+ , PV-, reconnect them.</li> <li>• Or seek help from us, if can not go back to normal state.</li> </ul>
AC HCT Fault	AC Current Sensor Fault <ul style="list-style-type: none"> <li>• Disconnect PV+ , PV-, reconnect them.</li> <li>• Or seek help from us, if can not go back to normal state.</li> </ul>
TZ Protect Fault	Over current Fault. <ul style="list-style-type: none"> <li>• Wait for a while to check if go back to normal status.</li> <li>• Disconnect PV+ , PV-, reconnect them.</li> <li>• Or seek help from us, if can not go back to normal state.</li> </ul>
Grid Lost Fault	Grid is Lost. <ul style="list-style-type: none"> <li>• System will reconnect if the utility is back to normal.</li> <li>• Or seek help from us.</li> </ul>
Grid Volt Fault	Grid Voltage Out of Range <ul style="list-style-type: none"> <li>• System will reconnect if the utility is back to normal.</li> <li>• Or seek help from us.</li> </ul>
Grid Freq Fault	Grid Voltage out of range <ul style="list-style-type: none"> <li>• System will reconnect if the utility is back to normal.</li> <li>• Or seek help from us.</li> </ul>
PLL Lost Fault	The Grid is Not Good. <ul style="list-style-type: none"> <li>• System will reconnect if the utility is back to normal.</li> <li>• Or seek help from us.</li> </ul>

Bus Volt Fault	<p>Bus Voltage out of Normal Range.</p> <ul style="list-style-type: none"> <li>• Disconnect PV+ , PV-, reconnect them.</li> <li>• Check if the PV input is within the range of the inverter.</li> <li>• Or seek help from us, if can not go back to normal state.</li> </ul>
Inv OCP Fault	<p>Inverter over current protection fault</p> <ul style="list-style-type: none"> <li>• Wait for a while to check if back to normal.</li> <li>• Or seek for help from us.</li> </ul>
DCI OCP Fault	<p>DCI over current protection Fault.</p> <ul style="list-style-type: none"> <li>• Wait for a while to check if back to normal.</li> <li>• Or seek for help from us.</li> </ul>
PV Volt Fault	<p>PV Voltage Fault</p> <ul style="list-style-type: none"> <li>• Check the output of the PV voltage.</li> <li>• Or seek for help from us.</li> </ul>
Isolation Fault	<p>Isolation Fault</p> <ul style="list-style-type: none"> <li>• Check the connection of the inverter.</li> <li>• Or seek for help from us.</li> </ul>
Temp Over Fault	<p>Temperature over the limitation</p> <ul style="list-style-type: none"> <li>• Check if the fan is running normally.</li> <li>• Check if the envirement temperature is over limitation.</li> <li>• Or seek help from us.</li> </ul>
RC Fault	<p>DCI over current protection Fault.</p> <ul style="list-style-type: none"> <li>• Wait for a while to check if back to normal.</li> <li>• Or seek for help from us.</li> </ul>
Other device Fault	<p>Other device fault.</p> <ul style="list-style-type: none"> <li>• Turn off the PV and grid, reconnect them,</li> <li>• Or seek for help from us if can not back to normal.</li> </ul>
SW OCP Fault	<p>Over current fault detected by software.</p> <ul style="list-style-type: none"> <li>• Turn off the PV and grid, reconnect them,</li> <li>• Or seek for help from us if can not back to normal.</li> </ul>
RTC Fault	<p>RTC Fault</p> <ul style="list-style-type: none"> <li>• Turn off the PV and grid, reconnect them,</li> <li>• Or seek for help from us if can not back to normal.</li> </ul>
Mgr EEPROM Fault	<p>Manager EEPROM Fault.</p> <ul style="list-style-type: none"> <li>• Turn off the PV and grid, reconnect them,</li> <li>• Or seek for help from us if can not back to normal.</li> </ul>
FAN fault	<p>FAN fault</p> <ul style="list-style-type: none"> <li>• Check if fan is running normally.</li> <li>• Check if anything block the fan.</li> <li>• Or seek help from us.</li> </ul>