HUAWEI SUN2000-100KTL-M1 Inverter Low Insulation Resistance Fault Indication Guide

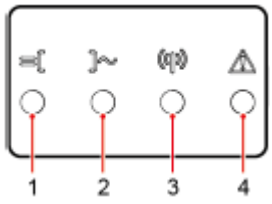
HUAWEI single phase residential inverter SUN2000-100KTL-M1 inverter has followed the requirement of AS 4777.2:2015 to detect earth fault via check the insulation resistance value. This inverter complies with IEC 62109-2 clause 13.9 for earth fault alarm monitoring. If an Earth Fault Alarm occurs, LED 1 and LED 2 will go red and fault code will occur in the app.

The fault is depicted in following table:

Alarm ID Alarm	Alarm Name	Alarm Severity	Possible Causes	Troubleshooting
2062	Low Insulation Resistance	Major	Cause ID = 1 1. The PV string is short-circuited to PE. 2. The PV string has been in a moist environment for a long time and the circuit is not well insulated to ground.	1. Check the impedance of the PV string to PE. If a short circuit occurs or the insulation is insufficient, rectify it. 2. Check that the PE cable of the solar inverter is correctly connected. 3. If you are sure that the impedance is less than the default value in a cloudy or rainy environment, reset Insulation resistance protection.

The fault or alarm can be indicated through two different ways:

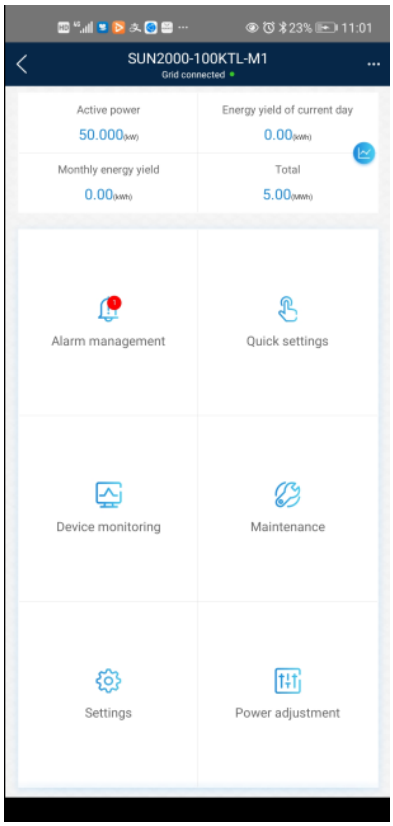
1. Inverter LED display:

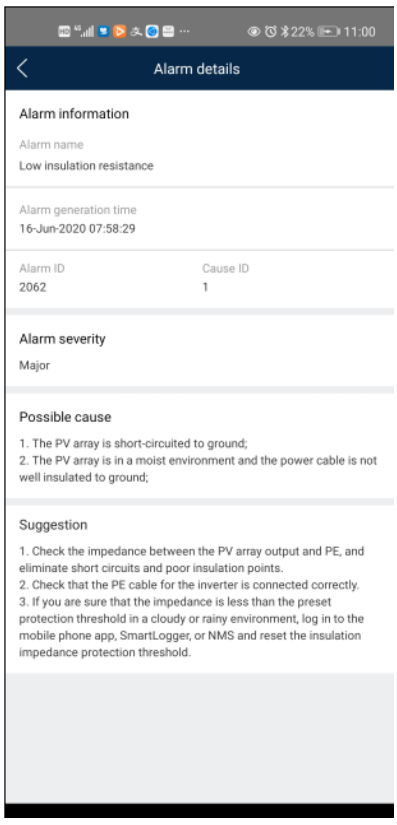
Category	Status		Description
Running indicator	**LED2**	**LED4**	
	Off	Steady red	Fault

2. FusionSolar App Indication:

- When connecting FusionSolar App to inverter via external WLAN adaptor, low insulation resistance alarm or fault can be indicated via following interface by:

  Click 'Alarm Management' → Select "Low Insulation Resistance" alarm





- When user monitoring the PV plant registered in FusionSolar App, the low insulation resistance alarm or fault can also be indicated via following interface by:

Clicking the inverter icon in power flow diagram → Select Alarm Info tab