

## Grid Voltage Issues

### Disclaimer

Sungrow Crystal Series (SG2KTL-S, SG3KTL-S, SG3KTL-D, and SG5KTL-D) is compliance with the standard AS/NZS 4777 related to grid protection requirements. If the line voltage or frequency goes outside pre-determined parameters, the inverter must shut down for safety purposes, which means it is not a faulty inverter in these instances.

**Error 002** indicates that the grid voltage has exceeded the inverter allowable upper limit (260 V within 2 seconds). The inverter will recover once the grid voltage returned to normal.

**Error 003** indicates that the grid transient voltage exceeds the permissible range. This is a short-term fault due to a grid recovery condition.

**Error 004** indicates that the grid voltage is below the inverter's allowable lower limit.

**Error 005** indicates that the grid voltage is too low. This may be a short-term fault due to a grid condition. Wait a moment for inverter recovery.

This document will use error 002 as an example to explain troubleshooting process and the other grid voltage faults will have a similar troubleshooting process.

If the fault persists, restart the inverter.

1. Turn off the solar supply main switch or the AC isolator. The solar supply main switch is usually in the switchboard. The AC isolator is between the inverter and the switchboard.
2. Turn off the DC PV array isolator (which is located next to the inverter).
3. Wait until the inverter shuts down completely (there will be no LEDs lit up and no display).
4. Turn on the DC PV array isolator.
5. Turn on the solar supply main switch or the AC isolator (whichever was turned off in step 1).
6. Wait a few minutes for inverter recovery (the LEDs go from flashing green and red indicating standby and starting up, then if the inverter works fine it will go to a green light).

### Check Fault Records

Go to the **Fault Records** (as shown in Figure 1).

Tap ▼ for less than half a second to scroll down.

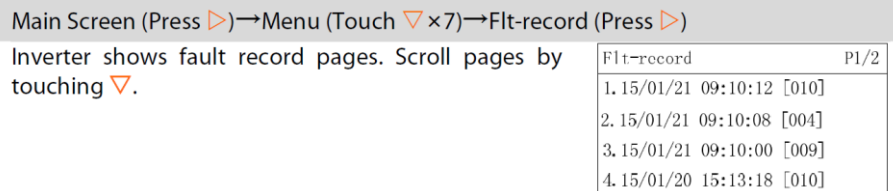


Figure 1 Fault records

Take note of the most recent faults and press the escape button to return to the main screen.

Go to running information to check the **V<sub>AC</sub> [V]** value (Figure 2).

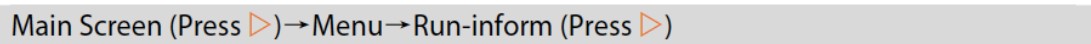


Figure 2 Access running information

Once in the running information, keep tapping the escape/down arrow button (for less than half a second) to access the AC parameters (Figure 3). Take a photo of the screen showing the values in this table and email all the photos to [service@sungrowpower.com.au](mailto:service@sungrowpower.com.au).

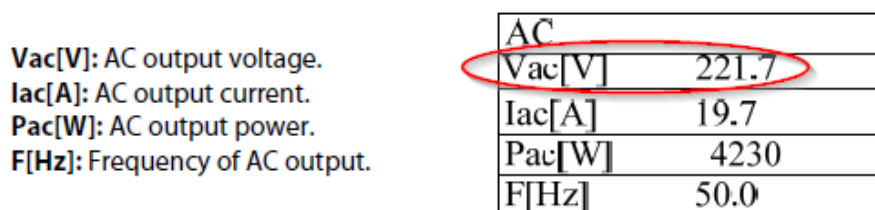


Figure 3 Inverter running information

Please watch this tutorial video by clicking [here](#).

The normal value should be around 240 to 250 V. If the value is too high, you need to contact your local distributed network service provider (**DNISP**). Please find more information by clicking [here](#).