Error 088 - Arc Fault on PV Side (Local Access)

Disclaimer

The material in this document has been prepared by Sungrow Australia Group Pty. Ltd. ABN 76 168 258 679 and is intended as a guideline to assist solar installers for troubleshooting. It is not a statement or advice on any of the Electrical or Solar Industry standards or guidelines. Please observe all OH&S regulations when working on Sungrow equipment.

Arc Faults are usually a result of loose wiring / terminal or even damaged cables. Hence, to protect against such faults, Sungrow introduces a new feature on inverters.

The new Crystal G2 Premium Inverters come with the new in-built feature i.e. AFCI (Arc Fault Current Interrupter) function. This function allows the inverter to detect Arc Faults on the PV side (088 Fault) and stop the inverter from producing to prevent its consequences.

A new firmware has been released to improve sensitivity of detecting Arc Faults. This upgrade can be done locally by the end-user or the installer*. The upgrade process involves two steps i.e. downloading the file and uploading the file.

**Sungrow recommends installers to do the on-site local firmware upgrade while commissioning the inverter to avoid possible issues in the future.*

Downloading the Firmware

The firmware for the upgrade can be downloaded using the iSolarCloud APP. Click right top setting gear and select the '**Firmware download**' below.

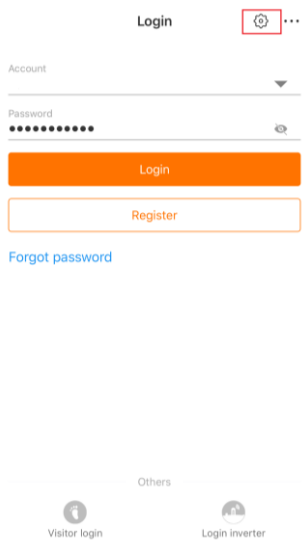

Figure 1 Home Screen

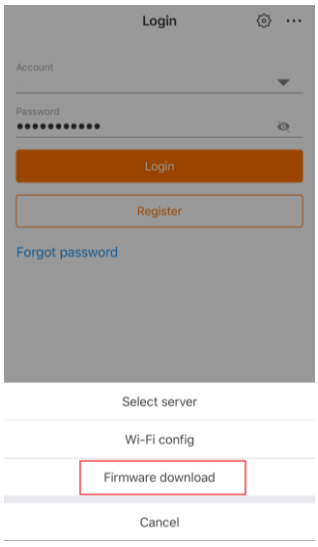

Figure 2 Firmware Download

The file required to be used for the upgrade is as follows:

- **SG2_S_V65_20201001.zip**
- **SG5_D_V65_20201001.zip**
- **SG8_D_V40_20210111.zip**

A message on the bottom of the screen will be displayed once the firmware file has downloaded successfully. This can also be checked under the “Downloaded” tab.

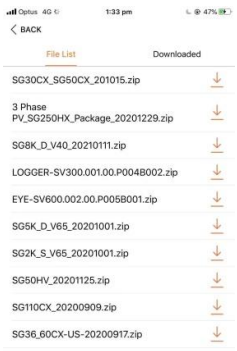

Figure 3 Firmware List

Figure 4 Downloaded Firmware

Local Firmware Upgrade

Once the download is complete, the firmware must be uploaded to the inverter. This can be done by connecting to the inverter directly through local access. First step is to connect the phone to the Sungrow network i.e. “**SG-Bxxxxxxxxxx**” (Password required – WiFi dongle’s serial numbers). Once connected, Local Access can be found on the “**Login Page**” of the app or the “**More**” section after logging in.

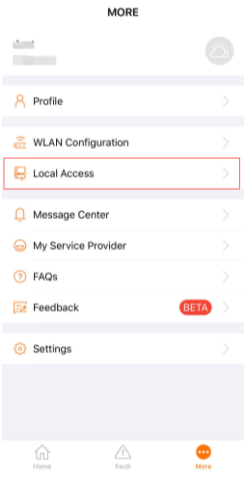

Figure 5 Local Access

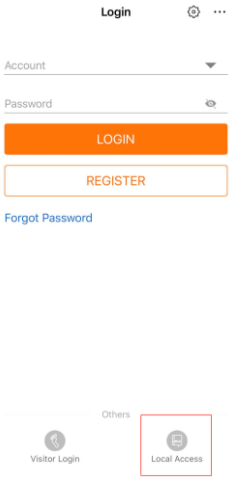

Figure 6 Device Upgrade

On clicking Local Access, select **WLAN** and then login using “**admin**” as the account and “**pw8888**” as the password.

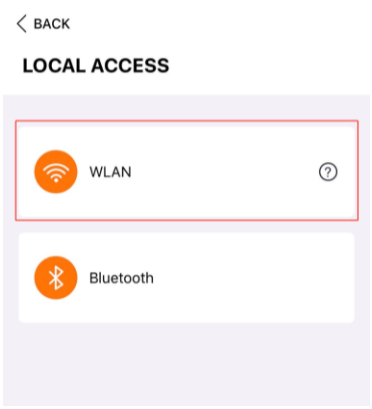

Figure 7 Local Access

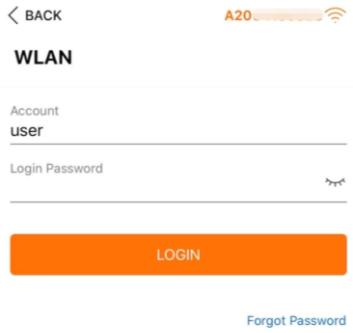

Figure 8 Device Upgrade

On logging in, click on “**More**” and then Firmware upgrade.

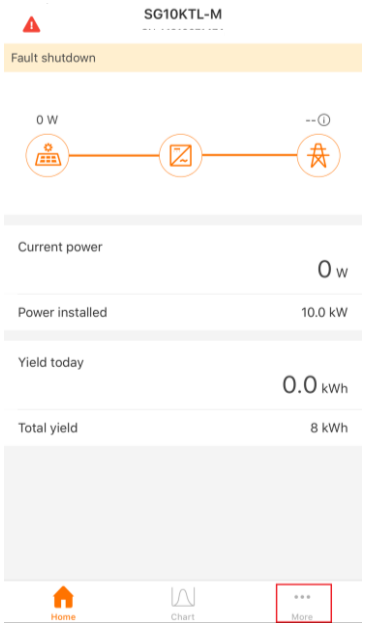

Figure 9 Local Access

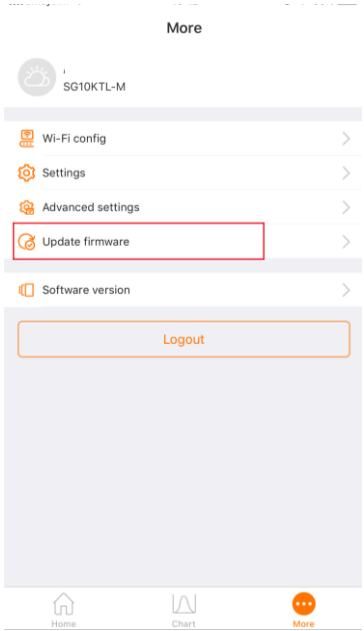

Figure 10 Device Upgrade

The relevant file can then be selected and uploaded. On completion, a message will pop up showing the upgrade as successful.

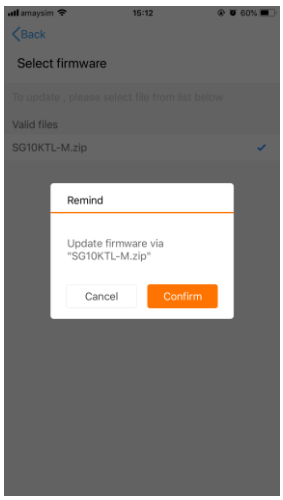

Figure 11 Upload Firmware

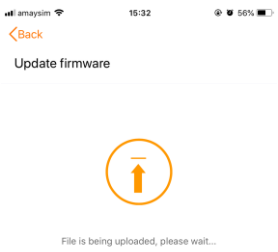

Figure 12 Firmware Upgrade

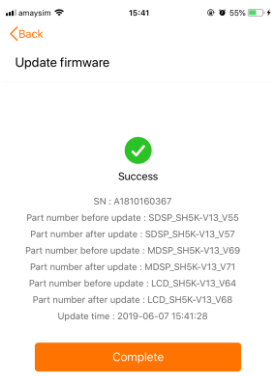

Figure 13 Upgrade Successfully

Video tutorial how to Upgrade firmware via iSolarCloud APP

https://youtu.be/9qe31fJ1zwE

Once complete, please do not forget to clear the fault in the power control part of the settings.

Clear the Arc Fault via Local Access

Firstly, do the Local Access as shown from below. Please note the account name is admin and the password is pw8888.

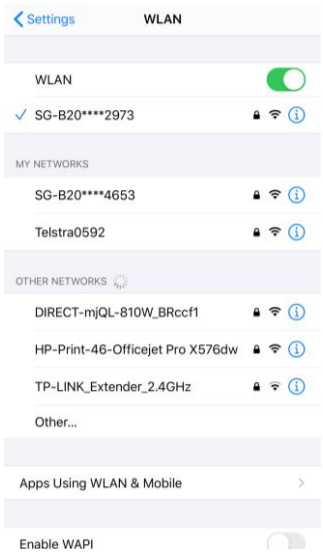

Figure 14 SG signal connection

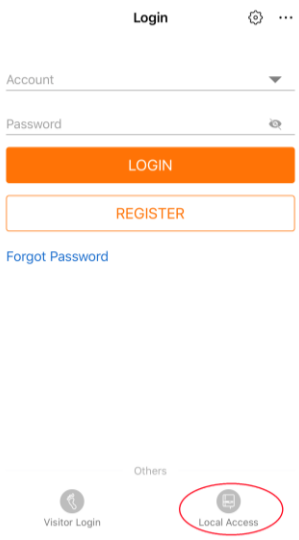

Figure 15 Local Access

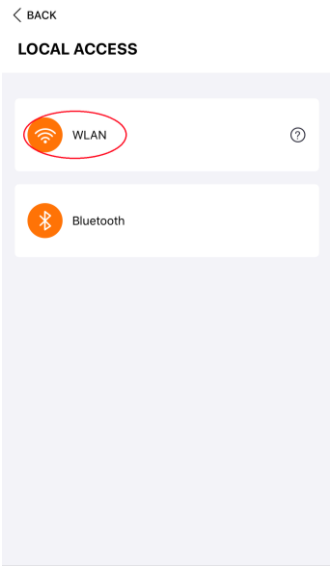

Figure 16 WLAN

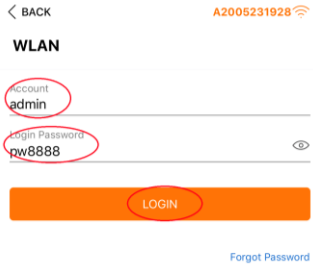

Figure 17 Account name and password

Click More and find Settings. After that, find Operation Parameters under Settings shown as below.

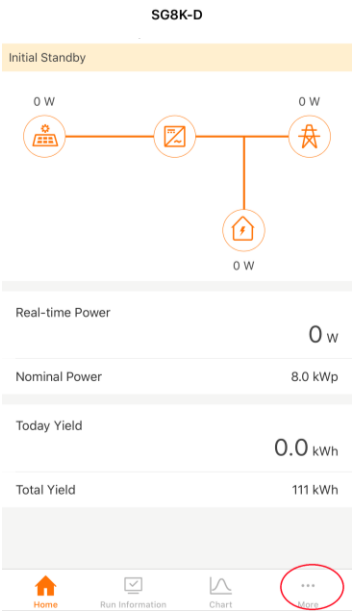

Figure 18 Click More

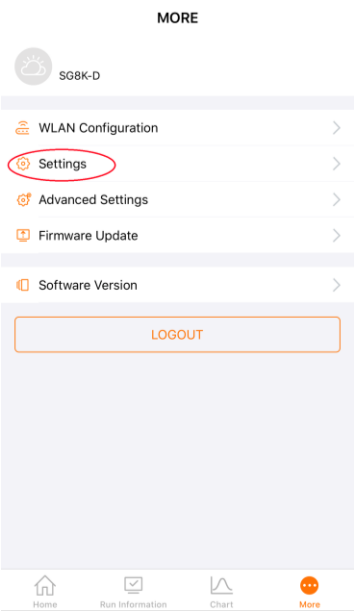

Figure 19 Settings

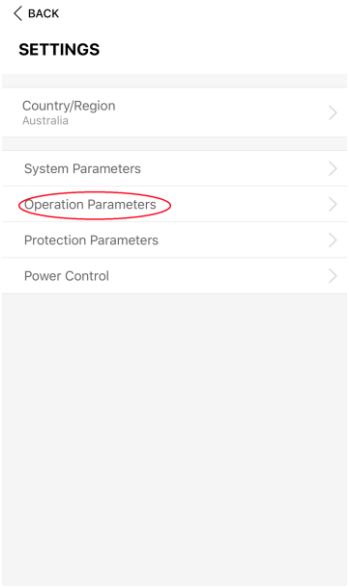

Figure 20 Operation Parameters

Choose AFCI Parameters shown under Operation Parameters and select Clear AFCI Alarm in the new popped window. Finally, confirm to perform Clear AFCI Alarm, which could be shown below.

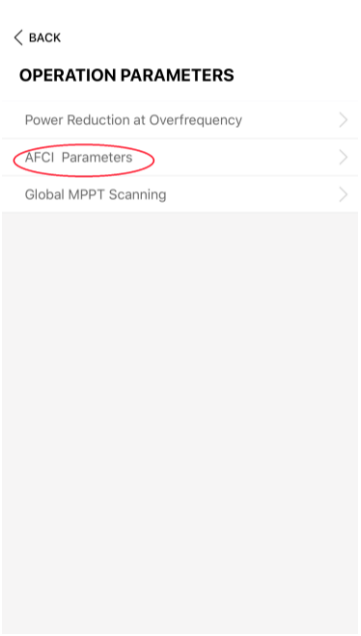

Figure 21 AFCI Parameters

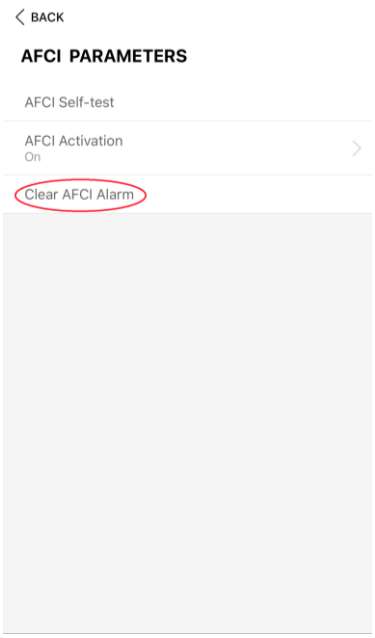

Figure 22 Clear AFCI Alarm

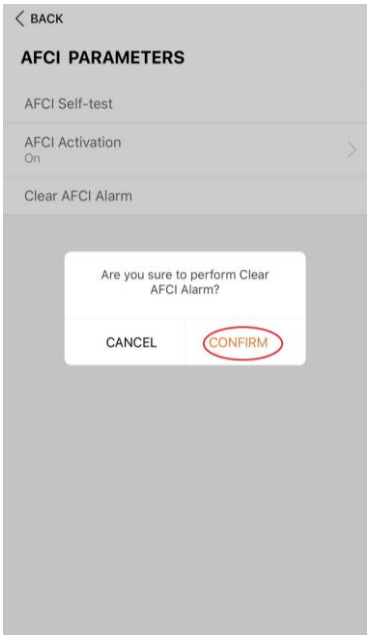

Figure 23 Confirm to perform

If the issue persists, please take photos testing on site and contact Sungrow Service Department on 1800 786 476 or email to service@sungrowpower.com.au.