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.

	Login	٥.
ccount		-
Password		joj.
	Login	
	Register	
Forgot password		
	Others	
Visitor login	L	.ogin inverter

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.

mloaded
vnloaded
0
0
0

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-Bxxxxxxxxx**" (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.

MORE	
<mark>위</mark> Profile	
WLAN Configuration	\rightarrow
📮 Local Access	>
Message Center	
 My Service Provider 	
7 FAQs	
🔣 Feedback	BETA
Settings	

Figure 5 Local Access

Figure 6 Device Upgrade

On clicking Local Access, select WLAN and then login using "admin" as the account and "pw88888" as the password.



Figure 8 Device Upgrade

On logging in, click on "More" and then Firmware upgrade.

	SG10KTL-M	
Fault shutdown		
0 W		
Current power		0
		0 w
Power installed		10.0 kW
Yield today		0.0
		U.U kwn
Total yield		8 kWh
A		
Mome		More

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.

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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.

Settings WLAN	
WLAN	
✓ SG-B20****2973	a 🗢 🚺
MY NETWORKS	
SG-B20****4653	۵ 🗢 💧
Telstra0592	۵ 🗢 🕯
THER NETWORKS	
DIRECT-mjQL-810W_BRccf1	• 🕈 🚺
HP-Print-46-Officejet Pro X576dw	▲ 중 🚺
TP-LINK_Extender_2.4GHz	۵ 🕈 🚺
Other	
Apps Using WLAN & Mobile	×
Enable WAPI	

Figure 14 SG signal connection

Figure 15 Local Access

SUNGROW

< BACK LOCAL ACCESS		
WLAN	0	admin pw8888
Bluetooth		LOGIN
		Forgot Password
Figure 16 V	VLAN	Figure 17 Account name and passwor

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

SG	98K-D	MORE			
Initial Standby		SOBK-D			
0 W	0 W	Jook D			
	⊠	WLAN Configuration	>	Country/Region Australia	
	Ŭ I Ŭ	Settings	>		
		Advanced Settings	>	System Parameters	
	$(\mathbf{\mathbf{\hat{e}}})$	Firmware Update	>	Operation Parameters	
	0 W			Protection Parameters	
Paal time Dower		Software Version	>	Power Control	
Real-time Power	O w	LOGOUT			
Nominal Power	8.0 kWp				
Today Yield					
	0.0 kWh				
Total Yield	111 kWh				
			•		
Home Run Information	Chart More	Home Run Information Chart	More		
Figure 18	Click More	Figure 19 Settings	Figur	e 20 Operation Paramete	ərs

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.

(prov.	< BACK	< васк
	AFCI PARAMETERS	AFCI PARAMETERS
OPERATION PARAMETERS	AFCI Self-test	AFCI Self-test
Power Reduction at Overfrequency	AFCI Activation	AFCI Activation
AFCI Parameters		
		Are you sure to perform Clear AFCI Alarm? CANCEL
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.