SH8.0/10 RS Hybrid inverter – Whole Home Backup and when to connect the meter

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.

Overview:

With the SH8.0RS and SH10RS Hybrid inverters, it is not always necessary to connect the supplied DTSU666-20 meter.

If the 'Whole Home Backup' function is used, and there are no 3rd party retrofit inverters on site, the internal measuring points inside the inverter will provide all necessary data to iSolarCloud. So no meter is necessary.

Whole Home Backup:

In the 'Whole Home Backup mode, all loads are connected to the Backup port of the inverter.



The cross-reference chart below shows when and when not to use a meter.

GD_202311_SH8.0 and 10RS_Whole Home Backup and meter settings_V1.0

Cross Reference chart:

Hybrid Inverter	Scenario	Meter required?	Channel 2 CT's required?	Whole Home Backup setting
SH8.0/10RS	Whole Home Backup	NO	NO	ENABLE
SH8.0/10RS	Some loads on grid	YES	NO	DEFAULT
SH8.0/10RS	Whole Home Backup with Sungrow retrofit inverter	NO	NO	ENABLE
SH8.0/10RS	Whole Home Backup with 3rd party retrofit inverter	YES	YES	DEFAULT
SH8.0/10RS	Some loads on grid with Sungrow retrofit inverter	YES	NO	DEFAULT
SH8.0/10RS	Some loads on grid with 3rd party retrofit inverter	YES	YES	DEFAULT

As can be seen from the above chart, any Sungrow retrofit inverters also do not require metering as they will upload the necessary data to the iSolarCloud via the dongle.

Current transformers:

If you are connecting a DTSU666-20 meter, the Channel 1 current transformer(s) will monitor the AC mains.



Only use channel 2 if a non-Sungrow inverter is connected to the same phase(s).

Don't forget to remove the short-links if connecting a CT.

Enabling the Whole Home Backup mode in the settings:

If you are utilising the whole home backup, and don't have a meter connected, enable the setting in the App.

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< Energy Management Parameters			
Data Update Time: 15/08/2023 03:05:08			
Genset Start/Stop Control Set Value: Please Select			
Max. Permitted Charging Power from AC Set Value:			
Nominal Power of Genset Set Value:			
Lower Limit of SOC to Start Genset Set Value:	>		
Upper Limit of SOC to Stop Genset Set Value:	>		
External EMS Heartbeat Set Value:	>		
Battery First Set Value: Please Select	>		
Whole Home Backup Set Value: Please Select	>		
Forbid Genset Night-time Operation Set Value: 85	>		
Apply Settings			
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If the issue still persists, please take photos testing on site and contact Sungrow Service Department on 1800 786 476 or email to service@sungrowpower.com.au.

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