Connecting a 3-Phase energy meter (DTSU666) to G2 3-Phase PV Inverters

Disclaimer

The material in this document has been prepared by Sungrow Power Supply Co. Ltd. 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.

Applicability: SG5.0RT, SG7.0RT, SG10RT, SG15RT, SG20RT

Electrical Wiring:

All Sungrow 3-Phase energy meters are designed to be installed between the main switch and all other loads and inverters.

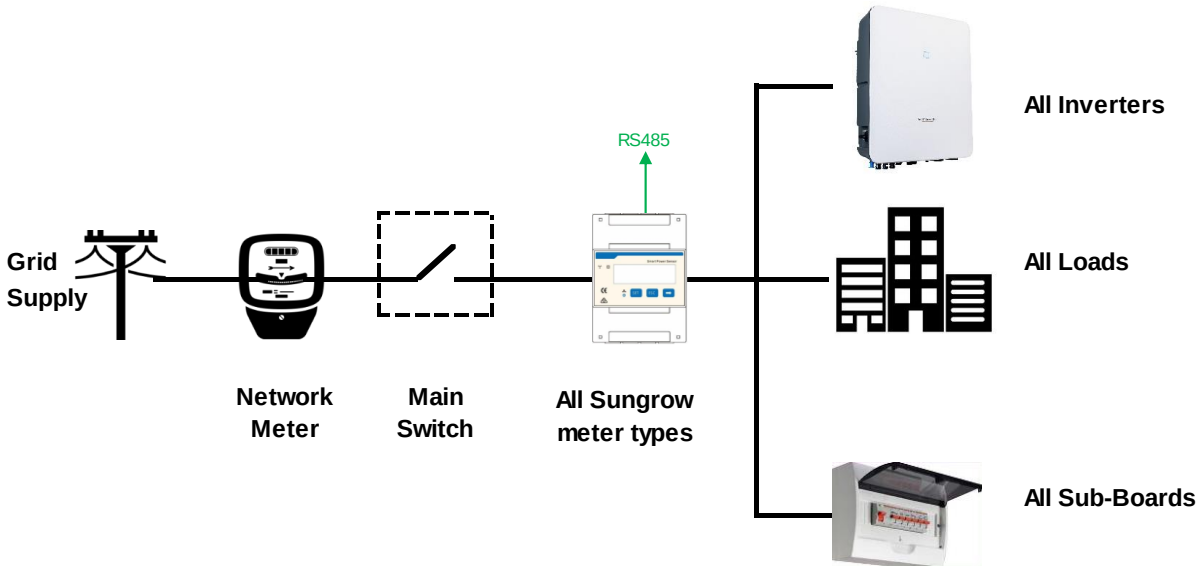

Diagram 1 – Energy Meter Location

Ensure the wiring complies with local Standards.

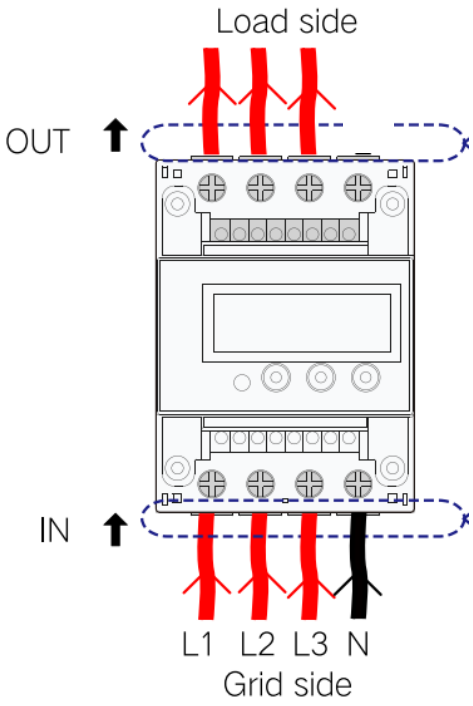

Diagram 2 – Meter Electrical Connections

Meter Comms Connections:

The communication protocol between Sungrow Energy Meters and Inverters is RS485.

Sungrow recommend Shielded Twisted Pair with a cross sectional area of 0.75mm and rated to the appropriate voltage for the electrical enclosure.

Connect the other end of the RS485 (**marked A and B**) to connections 24 and 25 respectively on the meter.

24 = RS485A+ and **25 = RS485B-**

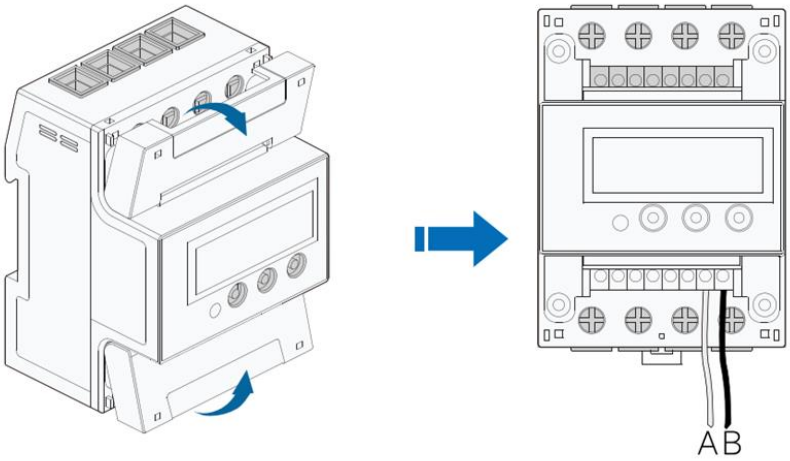

Diagram 3 – Meter Side Comms

Communications:

Connect the **RS485A+ to 'Meter A2' (Pin 8)**, and **RS485B- to 'Meter B2' (Pin 6)** terminals of the Multi-Com port plug. The pin layout of the plug is as follows:

RSD		NS		DRM			RS485-1	DO
RSD-1	RSD-2	NS-1	NS-2	D1/5	D3/7	R	A1	NO
B3	A3	B2	A2	D2/6	D4/8	C	B1	COM
RS485-3		Meter						

Diagram 4 – Meter Connections on Multiplug

Secure after connecting the com cables and ensure there is an audible click.

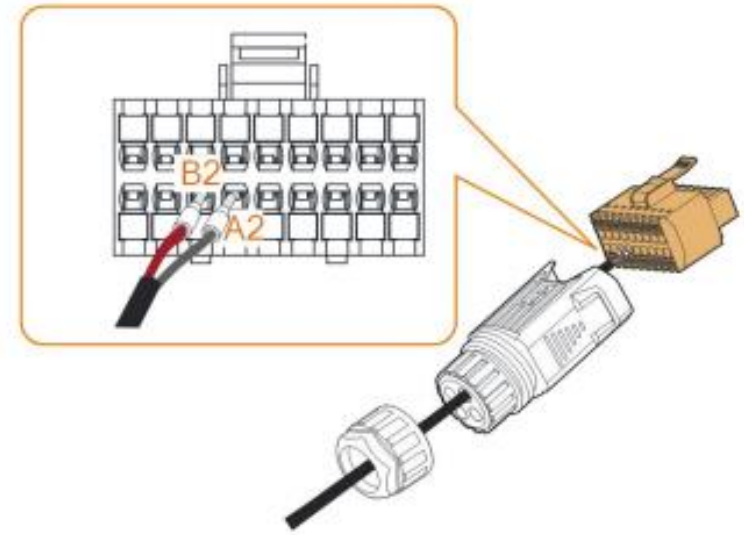

Diagram 5 – Assemble the multiplug

If the issue persists after following above procedures, please take photos testing on site and contact Sungrow Service Department at *https://www.sungrowpowerservice.com/Page/Contact/contact-us-global*