Sungrow Commercial systems in Cascading Mode

Part 1 – Data wiring

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.

Cascading function and zero export:

By using a Sungrow Logger1000, it is possible to control the export of multiple inverters in different buildings from a master Datalogger.

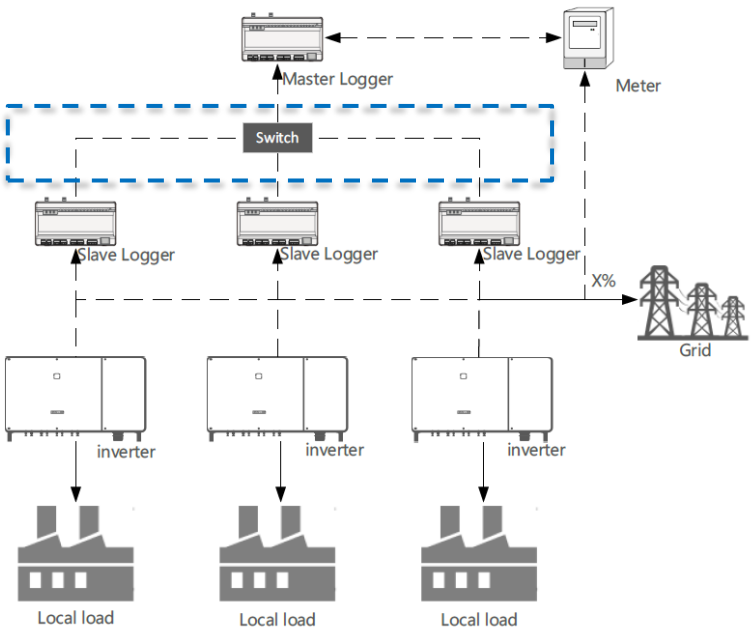
Please read this document in conjunction with the install manual.

For this document, each Logger location will be referred to as a *'station'.*

Requirements:

In order for the system to communicate, all stations must be on the same physical LAN network, and each station must have a Logger1000.

Please consult the installation manuals and guides for all wiring.



Basic coms network. LAN in blue area

In the above drawing, the meter is, for example, at the MSB, and the inverters are on remote buildings.

All areas are connected on the same ethernet network.

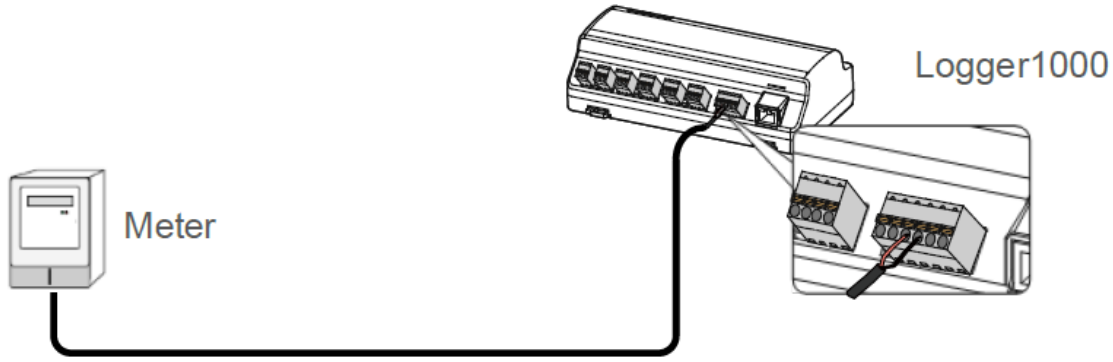
Please consult Sungrow documentation for a list of suitable meters.

Data wiring – Master Logger/Meter

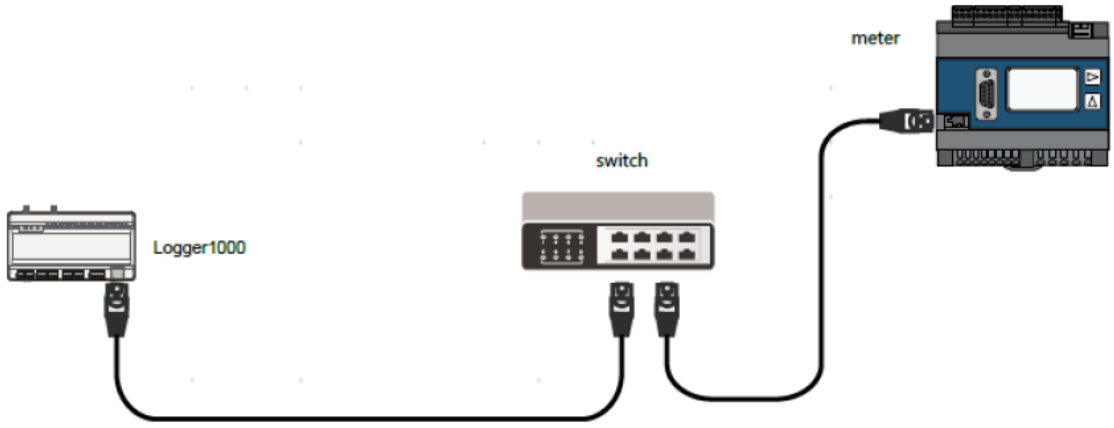
The Logger1000 that will be connected to the meter in the MSB shall be the 'Master Logger'.

All other Loggers will be 'slave Loggers'.

The meter can be connected to the Logger via either RS485 or, if the meter has an ethernet port, via an ethernet switch. Always use A2/B2 (COM2) as a default for meters.

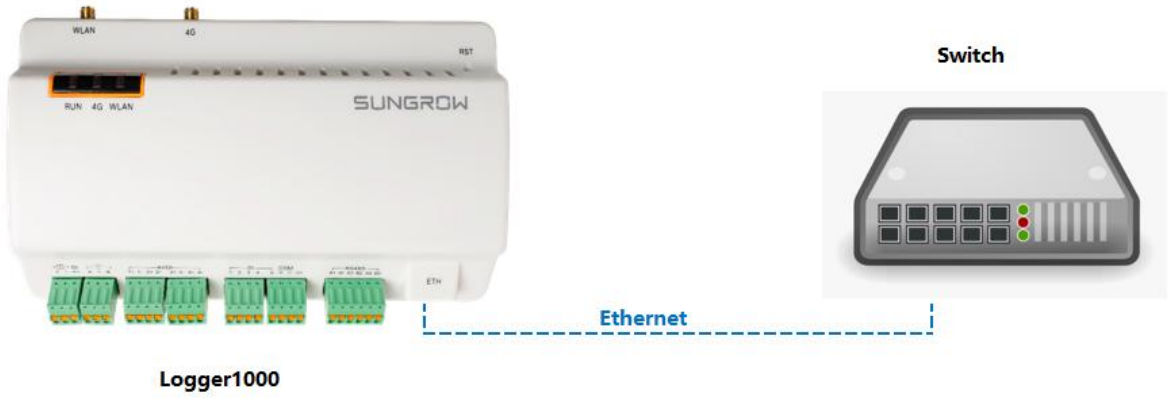


RS485 communication (A2/B2)



NET communication.

Connect the Logger(s) to the Local Switch via ethernet.



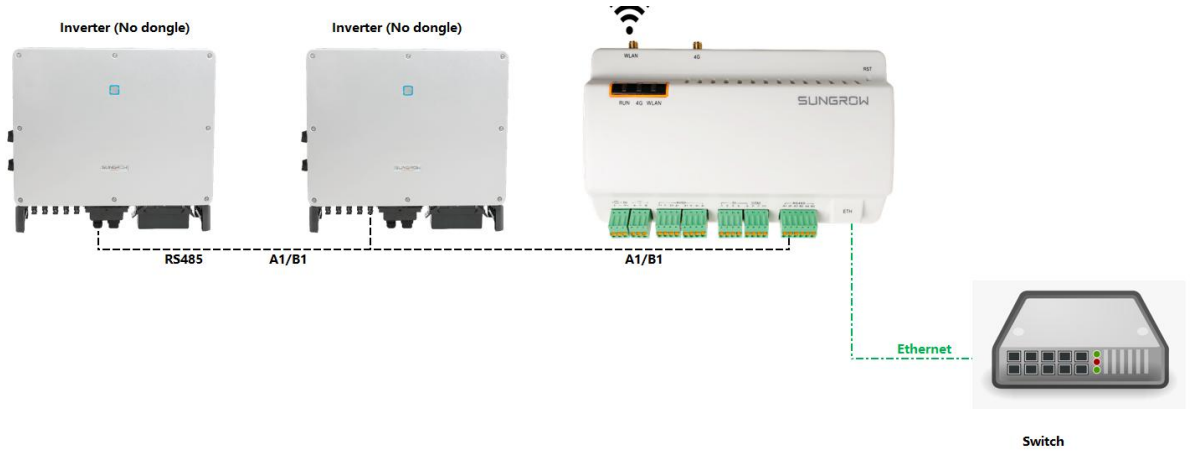
IT network:

Important! Please discuss with the owner if they require specific IP address settings to be used.

Inverter coms – Slave Loggers:

For this example, we will be connecting commercial Grid inverters only. Please refer to the document in relation to Hybrid inverters if they are being installed.

The inverters communicate with the station (Slave) logger1000 via RS485 on the A1/B1 channel and the Logger1000 connects via patch-lead to a local switch.



Always use the correct RS485 cable i.e. Shielded twisted pair. If the total length is longer than 10m, terminate one end with a 120 Ohm resistor.

Repeat process for all other Slave Logger stations.

Refer to part 2 for networking and commissioning.

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.