Solar Communication Solution

Trouble Shooting Guide

Utilising a SIM installed in a modem a portable Ethernet LAN is created to provide backhaul. A link is established between the Modem and the Inverter via an Ethernet cable.

Set up at the Inverter side:

For installation at the inverter side of the Ethernet cable follow the instructions for establishing an Ethernet LAN connection for your specific inverter. Install guides for RFI inverters can be found as downloadable from the RFI Solar website: https://rfisolar.com.au/. Install guides for other inverters can be procured from manufacturer's websites.

Set up at the Modem side:

For all modems SIM Insertion and any configuration of the modems is completed at RFI. Modems should just need to be connected via ethernet cable and powered up.

If there are any issues experienced during the setup contact RFI on 1300 000 734 or by email at Solar@rfi.com.au for assistance.

MA-2055 Dualmax modem

- Screw the SMA male connector of the cellular antenna(s) to the female SMA connector(s) of the Router with labels "MAIN" and "AUX".
- Ensure the modem has sufficient power (9-48V) and power up the modem.
- Allow the modem to stabilise and connect to the network (this can take a few minutes), lights should appear as below:
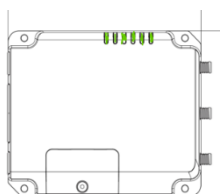
LED	Indication	LED Displayed
POWER	Power	SOLID GREEN
SYSTEM	System status	BLINKING GREEN
SIM	SIM Card/s Status	SOLID GREEN Or SOLID ORANGE
SIGNAL STRENGTH x3 LEDs	Signal Strength	GREEN / GREEN / OFF or ALL GREEN

- Once the modem is online, plug the ethernet cable into the modem.
- Lights should be as below:
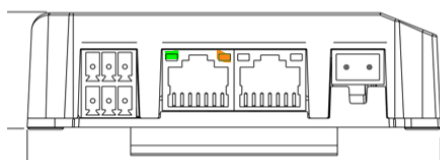
Ethernet port	RIGHT LIGHT ORANGE with PERIODIC BLINKING
	LEFT LIGHT SOLID GREEN

- Refer back to your inverter manual for instructions on validating if the connection has been successfully established.

For further details on modem user guides can be downloaded from:
https://www.rfiwireless.com.au/dualmax-dual-sim-ethernet-router-ma-2055

Troubleshooting

The modem is registering as on, but communications have not been accepted by the inverter.

- Power cycle the inverter
- Power cycle the modem
- Ensure these are done one at a time (ie power cycle the inverter, check the connection, power cycle the modem check the connection)

Signal strength indicators on the modem indicate low or no signal.

This is an indication that the signal to the modem is poor.

- Check the antenna connection – are the antennas correctly installed?
- Check antenna positions – are they in a place where they can receive reception? Can they be moved to a better position for receiving reception? Is there separation between the antennas?
- Is there any reception in the area?

SIM light indicator does not show a SIM is online (see section on LED indicators for status indicators for chosen modem)

SIM cannot connect to the network

- Power cycle the modem
- Check the SIM is correctly inserted

If still not responding call RFI for support 1300 000 734 or by email at Solar@rfi.com.au

No orange light at the ethernet port

The modem has not been able to register the inverter connection

- Is the inverter on?
- Are there any settings in the inverter that need to be changed?
- Power cycle the modem
- Power cycle the inverter

If there is still no connection after the above contact RFI for further assistance on 1300 000 734 or by email at Solar@rfi.com.au

Note: Do not perform a Factory reset on the modems unless advised by RFI techs. Configuration of the modem will need to be manually reset if a factory reset is performed. If a reset has been performed please contact RFI on 1300 000 734 or by email at Solar@rfi.com.au for assistance.