Expert Energy Tasmania



SOLAR SYSTEM TROUBLESHOOTING GUIDE

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SMA Network Connection

These steps will assist you with reconnecting your SMA inverter to your local internet network. This helps resolve portal communication issues which are essential for remote monitoring and application functions.

Download the SMA 360 Application on your smart device.

Open the application and navigate to:

Setup > Network Set-up >Enable Scanner > Scan the QR Code on the Front of your inverter or on the right hand side name plate > Join the network as prompted > Login Usergroup: Installer Password: Should be printed in your SMA manual > Top right hand corner select the hamburger menu >Device Configuration>WLAN>Perform WLAN Scan> Enter the password for your new network>

The light on the inverter should flash blue while it is connecting and then be solid blue when it is connected. If it goes blank try entering the password again making sure it is correct.

When Logging into SMA Hybrid inverters the default username is admin. The password will be printed in your SMA manual.

Apple App Store

Google Play Store

Catch Power Network Connection

Download the CATCH Power Configurator application

Switch the hot water circuit breaker off and then on again - this should restart the device and get it warming the hot water heater again. Then we will connect it back to the network to ensure proper operation and this will enable me to ensure it's still configured correctly.

Follow the steps in the following video:
https://www.youtube.com/watch?v=Z74J9YjncII

Apple App Store

Google Play Store

Grid Connect System Reboot

If you are experiencing issues with your solar system, often they can be resolved with a system restart. Carry out the following steps to restart your system.

1. Turn Off the Solar Supply Main Switch
This will be located in your main switchboard or a nearby sub board if its installed to a shed or studio. This is usually labelled:
Solar Supply Main Switch, Inverter AC Isolator or something similar.

2. Turn Off the Inverter DC Isolator.
This is usually on the left hand side of the inverter, on the front face of the inverter or mounted separately depending on the make and model. This is usually labeled: *DC Isolator , PV Array DC Isolator or something similar.*

3. Wait 10 minutes
This allows the inverter to fully power down and drain of residual energy.

4. Turn the System Back On
You must turn switches back on in the reverse order:

DC Isolator ON (at the inverter)
Solar Supply Main Switch / Inverter AC Isolator ON (in the switchboard)

5. Wait for the Inverter to Reboot

The inverter will run through its startup sequence.
This can take 1–3 minutes.

Battery Hybrid System Reboot

If you are experiencing issues with your solar system, often they can be resolved with a system restart. Carry out the following steps to restart your system.

Shutdown Procedure:

Switch off “INVERTER A.C. ISOLATOR” switch located either next to the inverter or in the switchboard. Sometimes labelled “Inverter Supply” or “Main switch Inverter”

Switch off the battery DC supply utilising the green DC breakers on the side of the battery unit.

Switch off (0) the “PV ARRAY D.C. ISOLATOR” on the left hand side of inverter

Your system will now power down. Leave it for 5 minutes to drain power completely.

Startup Procedure:

Switch on (|) “PV ARRAY D.C. ISOLATOR” located on the left hand side of inverter

Switch on battery supply by flicking the green DC breakers followed by the red start switch.

Switch on the “INVERTER A.C. ISOLATOR” in the main switchboard. Sometimes labelled “Inverter Supply” or “Main switch Inverter”

Your System should now power up.

To perform a power cycle in the event of a system error where a restart may be required carry out the shutdown procedure. Wait 15 minutes. Then carry out the startup procedure.

Battery Hybrid System Reboot

If you are continuing to experience system issues such as your battery not charging or discharging run through the shutdown procedure as stated on the previous page. While the system is off we will reset the energy meter.

To do this we will locate the SMA Energy Meter in the switchboard. Inline and below the green LED lights is a small reset button (Circled in red below). You will need a paper clip or similar to press it. Gently press the button for 6 seconds.

The energy meter should now reset and you can proceed to restart your inverter and battery as described on the previous page.



Off Grid Restart

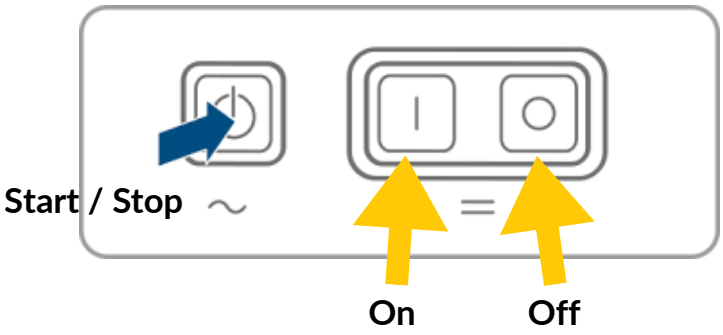
If you are running one of our SMA Off Grid setups there are some extra considerations when restarting your system. Your system will comprise of a PV system run by a SMA Sunny Boy (Red) as well as a battery system run by a SMA Sunny Island (Yellow).

If you are experiencing issues with your Sunny Boy PV system you can follow the steps listed previously for the SMA Grid Connect Restart.

If you are experiencing issues with your Sunny Island Battery system follow the steps below to restart it:

1. Disconnect AC Sources: Turn off the “Main Switch Standalone Supply” for the Sunny Island (at the sub-distribution) and any generator breaker if applicable, ensuring no AC power reaches the unit.
2. Disconnect DC Source: Turn off the battery DC isolator/breaker, cutting power from the batteries.
3. Wait for Capacitor Discharge: This is crucial. Wait at least 10-15 minutes for the internal capacitors to fully discharge; applying power too soon will prevent a restart.
4. Apply DC Power: Turn the battery and its DC isolator/breaker back on.
5. Start the Unit:
   - Press and hold the Start/Stop button on the master Sunny Island until you hear an acoustic signal (a beep) and see the screen light up.
   - For multi-unit systems (clusters), press the Start/Stop button on each subsequent slave unit to bring them online
6. Check Display: The unit will go through its startup sequence. The top LED should eventually turn orange (standby) or green (operational).
7. Restore Loads: Turn on AC loads/breakers.

Instructional Video Here



Battery Hybrid System Reboot

Shutdown Procedure:

Switch off “INVERTER A.C. ISOLATOR” switch located to the right of the inverter

Switch off the battery supply following the battery shutdown procedure printed on the BYD battery. This unit does not have an air switch. Push and hold the LED illuminated light on the front of the unit for 5 seconds.

Switch off (0) the “PV ARRAY D.C. ISOLATOR” on front of inverter

Your system will now power down.

Startup Procedure:

Switch on (|) “PV ARRAY D.C. ISOLATOR” located on front of inverter

Switch on battery supply following the startup procedure printed on the BYD battery. This unit does not have an air switch. Turn on the ““BATTERY SYSTEM DC ISOLATOR” on the side of the battery stack.

Switch on the “INVERTER A.C. ISOLATOR”

Your System is now on.

To perform a power cycle in the event of a system error where a restart may be required carry out the shutdown procedure. Wait 15 minutes. Then carry out the startup procedure.

Other Systems

If you’re experiencing issues with another inverter make or model the steps outlined in this document can be easily adapted to suit your system. Follow the same steps as outlined under the grid connect or hybrid system instructions listed in this manual. The DC isolators may be located in alternative positions as will the battery power on buttons. You can find additional information for your system including the owners manual via the manufacturers website or Google.

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Still having issues?

If you are still experiencing issues after running through these steps and checking all circuit breakers and isolators please contact our office.

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