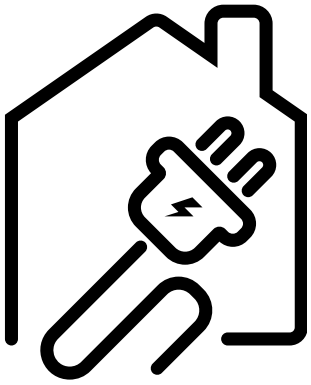
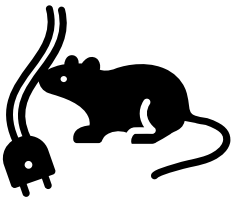
OFF-GRID TROUBLE SHOOTING GUIDE



SYSTEM SHUTS OFF...WHERE'D MY POWER GO?

- Did you run too many appliances at once? This can cause an inverter overload and shut down your system.. Turn some loads off! Your inverter should automatically restart on it's own.



- Do a visual inspection of wires where you can - do you see any damage, such as a mouse chewed on one? - Have someone install new wires. Breakers are there to protect the wires from causing a fire.

- Are any circuit breakers in the "OFF" position? Switch the breaker back on. If this keeps happening, the breaker isn't properly sized, or there is damage to the wire. Call someone to inspect your system.

- Batteries are too low. You may have depleted your battery bank and need to bring the State Of Charge (SOC) back up by running your generator.

Emergency Situation!

If you smell smoke, assess the situation and, only if it is safe,
Turn OFf system immediately by:

1. **Turn OFF Main Battery Switch**
2. **Use Bluetooth App if applicable**
3. **Switch OFF ALL Breakers if Possible**

WHY ISN'T MY MONITORING SYSTEM WORKING?

- Loose Cable - check the RJ45 and VE.Direct Cables to ensure they haven't come loose.
- A very common issue is that the internet just needs to be recycled. If you have internet, turn it off and back on (reboot) your internet.

INVERTER ISSUES

INVERTER OVERLOAD LIGHT IS ON

Just a refresher...if you turn on too many appliances and are not within the limits of your inverter, the OVERLOAD light will turn on and your system may shut down. You will need to reduce your loads. Your inverter should start again on it's own.

INVERTER LOW BATTERY LIGHT IS ON

Reduce your loads and use your generator to bring your battery SOC back up. Once the voltage is at an acceptable parameter, your LOW BATTERY light should turn off.

INVERTER TEMPERATURE LIGHT IS ON

You many have overloaded your inverter again! Turn some loads off! Your inverter is likely too hot. Opening a door or window to where the system resides may help.

Temperatures over 77 degrees F can affect your inverter and cause it to limit it's power output. The MultiPlus/Quattro 3000 will output 2400W continuous @ 77 degrees F.

MPPT/SOLAR ISSUES

MPPT/SOLAR NOT WORKING & NOT VISIBLE ON TOUCH SCREEN?

- ·Check VE. Direct cables are properly seated in Cerbo GX and MPPT.
- ·MPPT breakers are tripped in VE Panel. If off, try turning them on once. If they trip again, leave them off and call a technician.
- ·If breakers stay on and you still don't see the Solar on your Touch Screen – was there a thunderstorm recently? If yes, let the technician know there might have been a lightening strike on the solar array.

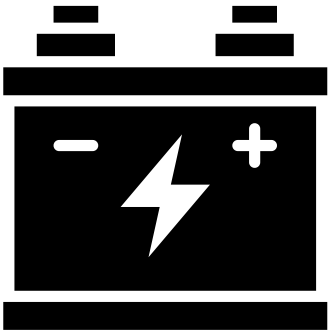
MPPT/SOLAR NOT WORKING BUT IS LIVE ON TOUCH SCREEN?

- ·It may not be an issue at all. If your batteries are full or close to full the MPPT will throttle back solar production.
- ·If your batteries are not full or close to full and still showing 0 Watts solar production on your Touch screen, check MPPT breakers on the VE Panel. Turn them on once. If they trip again, leave them off and call a technician. If they are on or stay on, check the breakers at the combiner. Turn on. If they trip again, call a technician.
- ·Check the solar wire and MC4 connections. Make sure visible wires are not damaged and the connections are all secure. If you see any damage, call a technician.

BATTERY ISSUES

BATTERIES ARE TOO COLD

Lithium batteries will not charge at temperatures below 38 - 41 degrees F (5C). The Battery Management System (BMS) will shut the charging down.



BATTERIES ARE AT A LOW SOC

Reduce your loads and use your generator to bring your battery bank back up to an acceptable state of charge (90% is a fantastic SOC!)

BATTERIES ARE TOO HOT

Lithium batteries will not charge or discharge at temperatures above 130 degrees F (50C). The Battery Management System (BMS) will shut the batteries down.

FUN FACT

The Battery Management System's (BMS) job is to do these 4 things

- Shut down the batteries if they are too hot
- Shut down the batteries if they are too cold.
- Shut down the batteries if the voltage is too high
- Shut down the batteries if the voltage is too low.