# EG4® HYBRID INVERTERS

ZERO EXPORT EXPLAINED

When using the EG4® 18kPV in a scenario where you do not have Permission to Operate (PTO), the inverter will need to be set up for Zero Export. Even in Off-Grid Mode, there are instances where you could potentially export to the grid when you do not intend to, and this guide is built to circumvent that.

Disabling Grid Sell Back, Enabling Fast Zero Export and then setting the inverter to Off-Grid Mode is the first step to take when trying to achieve Zero Export, but this eliminates the option for Grid Assist without the use of other settings. In this situation, the Grid Input relay stays **open**. This keeps power from flowing in or out of the Grid Input. See the image below for the settings in question:
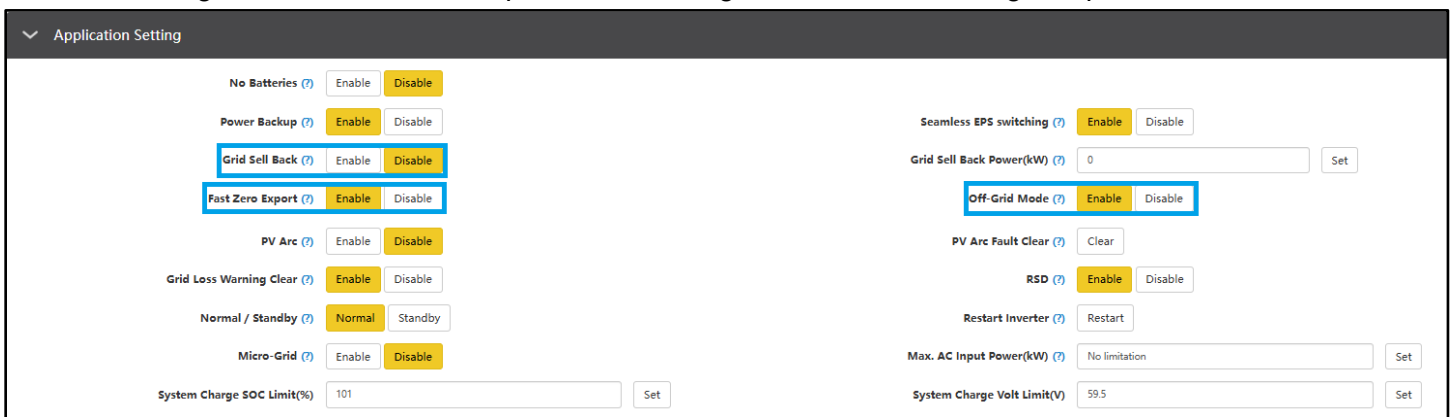
In this scenario by default, you will not be able to charge batteries with grid power, but we can change just a few settings to allow us to Grid Assist and charge the batteries with grid power.
See the image below:
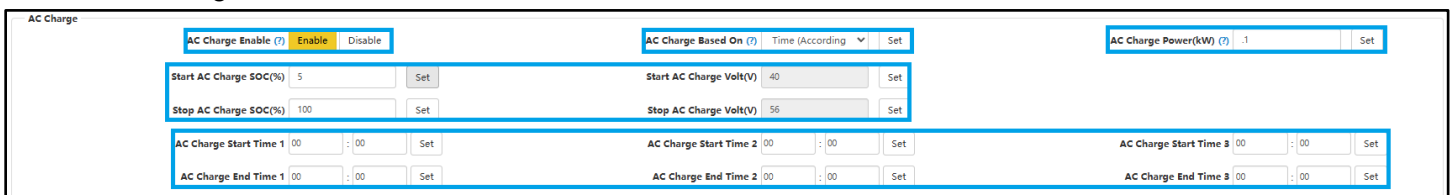
Setting the AC Charge setting to "Enable" will allow for the Grid Relay to **close** once you have hit the Start AC Charge SOC/V or the AC Charge Start Time triggers. These can be selected under the AC Charge Based On drop down menu.

NOTE:
AC Charge Power must not be 0!

If the AC Charge Power is left at 0, the AC Relay will **close** once you hit the TOU or SOC/V trigger, allowing power to flow back towards the grid. Setting the AC Charge Power to "0.1Kw" will push 100W towards the battery but keep power from flowing out of the Grid Input terminal.

You may also see unwanted power being exported to the grid in circumstances where your CTs are in the wrong location. Installing your CTs between your meter and Main Service Panel will give you a more accurate depiction of where your power is coming from, and where it is going, though this may change depending on the type of installation. Please review the inverter specific wiring diagrams on the inverter's product pages at https://eg4electronics.com/categories/inverters/ for additional information.