Solis - Active Power Control Setup

Overview

This function is used to set the active power generation output of the inverter.

The inverter has two settings for this "Set Output Power" and "Output_P with Restore".

Always select the settings **Output_P with Restore** - This is the setting that is maintained even when the inverter has lost power (kept in flash).

Do not select - Set Output Power – This is just a temporary setting (kept in RAM) that is lost when the inverter goes to sleep at night.

The setting is percent-based.

Calculation

It is the desired active power limit divided by the nominal power of the inverter, as shown in the equation below.

$$Active\ Power\ Setting_{percent} = \frac{export\ power}{nominal\ power} \times 100\%$$

For example, this means if a user wants the inverter to only generate a maximum of 3.6kVa (for EEG2012, 70% of the kWp of the PV array) and the inverter has a nominal rating of 5kVA. The user must calculate the percent as shown below.

$$Active\ Power\ Setting_{percent} = \frac{3600}{5000} \times 100\%$$

$$Active\ Power\ Setting_{percent} = 72\%$$

Therefore, the user must enter 72% into the interface on the inverter.

Instructions

The user interface for the Solis inverters are similar for all our ranges.

Each inverter has a keypad shown in the figure below.

Figure 1: Keypad for Solis inverters

Follow these steps to get to the Output_P with Restore settings:

- Press the ESC key to turn on the backlight of the display
- Press the ENTER key to navigate to the menu for the inverter
- Scroll down using the DOWN key to "Advanced Settings"
- Press ENTER key to continue into Advanced Settings
- Enter in the code "0010" by pressing DOWN, DOWN, UP then ENTER keys
- Scroll down using the DOWN key to "Power Control"
- Press ENTER key to continue into Power Control settings
- Scroll down using DOWN key to "Output_P with Restore"
- Press ENTER key to continue into Output_P with Restore settings
- Use the following guide to set percentage as required:

Please note the functions of the buttons change here

The functions are as follows:

- The ESC key exits with no change
- The UP key **decreases** the value that is selected
- The DOWN key changes which digit is selected
- The ENTER key saves the new value

- Once value is set press ESC to return back to home page