



## SolarAssistant Inverter Driver

This driver workd in conjunction with the SolarAssistant Interface Driver ([Click here](#))

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### Getting Started

- Be sure to have the SolarAssistant Interface driver in the project file first.
  - All configuration is setup on the SolarAssistant Interface driver.
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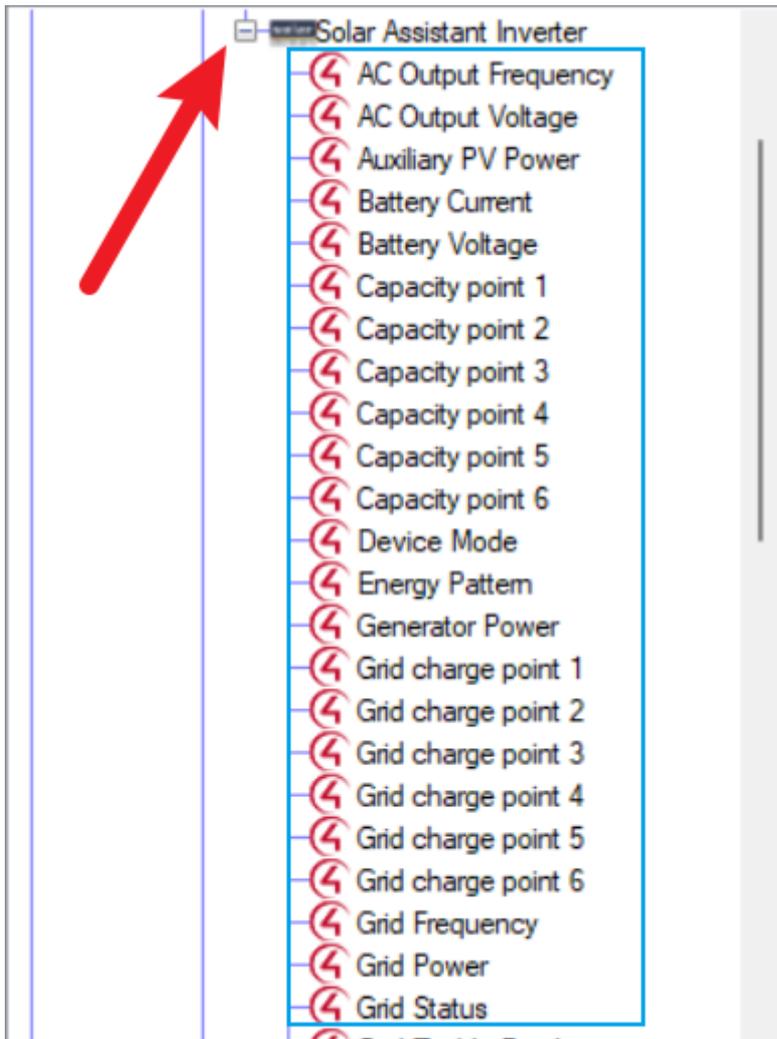
### Driver Properties:

- **Inverter Address:** This is the inverter number according to SolarAssistant on the Dashboard > Inverter page. This is a number usually between 1 to 6.
  - **Last Update:** Timestamp of when there was last an update to this drivers Properties or Variables.
  - **Work mode:** The Work Mode setting as per the SolarAssistant Conifguration.
  - **Use Workmode Timer:** If the Work Mode time is used as per the SolarAssistant Conifguration.
  - **Solar Export When Battery Full:** Allows you to emulate a received command & pass it to the driver.
  - **Energy Pattern:** Energy Pattern setting as per the SolarAssistant Conifguration.
  - **Max Sell Power:** Max Sell Power setting as per the SolarAssistant Conifguration.
  - **Grid Trickle Feed:** Grid Trickle Feed setting as per the SolarAssistant Conifguration.
  - **Grid Voltage Threshold Settings:** Thresholds of where you would like Grid Alarms to trigger.
    - For example, if a voltage under the "Loss Threshold" would trigger the "Grid Loss Alarm" in programming.
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### Available Readings

These readings are totals and are read directly from the Solar Assistant Device. Depending on your setup, some readings might not show any values.

These readings are available in the **Programming** section of Composer as Events (left side) and Actions (right side) by expanding the Interface Driver like this:



Name	Type	Programming Values
AC Output Frequency	Number	Any number
AC Output Voltage	Number	Any number
Auxiliary PV Power	Number	Any number
Battery Current	Number	Any number
Battery Voltage	Number	Any number
Capacity Point 1	Number	0 - 100
Capacity Point 2	Number	0 - 100
Capacity Point 3	Number	0 - 100
Capacity Point 4	Number	0 - 100

<b>Name</b>	<b>Type</b>	<b>Programming Values</b>
Capacity Point 5	Number	0 - 100
Capacity Point 6	Number	0 - 100
Device Mode	Text	Hybrid/
Energy Pattern	Text	Battery first/Load first
Generator Power	Number	Any number
Grid Charge Point 1	Text	false/true
Grid Charge Point 2	Text	false/true
Grid Charge Point 3	Text	false/true
Grid Charge Point 4	Text	false/true
Grid Charge Point 5	Text	false/true
Grid Charge Point 6	Text	false/true
Grid Frequency	Number	Any number
Grid Power	Number	Any number
Grid Status	Text	Unknown/Overvoltage/OK/Undervoltage/Loss
Grid Trickle Feed	Number	0-1000
Grid Voltage	Number	Any number
Load Power	Number	Any number
Load Power Essential	Number	Any number
Load Power Non-Essential	Number	Any number
Max Sell Power	Number	0-16000
PV Current	Number	Any number
PV Current 1	Number	Any number
PV Current 2	Number	Any number
PV Current 3	Number	Any number
PV Power	Number	Any number
PV Power 1	Number	Any number
PV Power 2	Number	Any number
PV Power 3	Number	Any number
PV Voltage	Number	Any number

Name	Type	Programming Values
PV Voltage 1	Number	Any number
PV Voltage 2	Number	Any number
PV Voltage 3	Number	Any number
Temperature	Number	Any number
Solar Export When Battery Full	Number	Enabled/Disabled
Use Workmode Timer	Number	true/false
Work mode	Number	Selling first/Zero export to load/Zero export to CT

## Programming Examples

The screenshot displays a programming environment with three main panels:

- Programming (Left):** A list of device events including 'Grid Voltage', 'Grid Power', and 'Grid Status'. A blue arrow labeled '1' points to 'Grid Voltage'.
- Script (Middle):** A script titled 'When the variable Garage->Solar Assistant Inverter->Grid Status changes'. It contains two conditional actions:
  - `? If Garage->Solar Assistant Inverter->Grid Status EQUAL TO Overvoltage` with a comment: `# Grid voltage is getting high, turn some relays off and send a notification`
  - `? If Garage->Solar Assistant Inverter->Grid Status EQUAL TO Loss` with a comment: `# There's no utility power, set the house to load shedding more and send a notification`
 A blue arrow labeled '2' points to the script title.
- Actions (Right):** A list of device actions including 'Grid charge point 1-6', 'Grid Frequency', 'Grid Power', 'Grid Status', 'Grid Trickle Feed', 'Grid Voltage', and 'Load Power'. A blue arrow labeled '3' points to 'Grid Status'. Below this is a 'Grid Status Actions' section with a condition:
  - `? If Garage->Solar Assistant Inverter->Grid Status EQUAL TO Loss`
 A blue arrow labeled '5' points to this condition. Below the condition are tabs for 'Commands', 'Conditionals', and 'Loops'. Under 'Conditionals', there are two options:
  - `Is = Loss` (selected)
  - `Is = the size of Backup->LAST_MESSAGE`
 A blue arrow labeled '4' points to the 'Loss' option.

## Changelog:

- 1
  - Initial Release