

# NEOVOLTA<sup>®</sup>

## Solarman SMART App User Guide

[www.neovolta.com](http://www.neovolta.com)

Support: 800-364-5464





## System Overview - Basics:

- When the sun comes up, the inverter prioritizes where the power goes.
- AC Solar powers the home critical loads first. Once these loads are satisfied, the inverter then recharges the battery.
- Once the home critical loads are satisfied and the battery is fully recharged, the AC Solar is sent to the Main Service Panel (MSP). It is either used or it is sent to the Utility for a Net Energy Metering (NEM) credit.
- DC Solar powers the battery first. Once the battery is fully recharged, the inverter inverts the DC Solar to power the home critical loads and also sends solar to the MSP.
- Excess solar is also sent to the Utility for a NEM credit.
- After 4pm, per setting, the battery will be ready to first augment solar power to satisfy the home's needs. Upon sunset, the battery will power the home.
- The installer can adjust settings to select a higher battery reserve in case of grid outage.
- The installer can adjust settings to charge the battery from the grid.

## Grid Outage:

- If the grid outage occurs during the day, your solar will remain on (AC and/or DC Solar).
- If the grid outage occurs when the battery is discharging, then the battery will continue to discharge down to set minimums.
- If the battery becomes depleted during a grid outage, then there is enough battery reserve to continue powering the inverter.
- Both AC and DC Solar will come on once solar system voltage reaches 125 Volts. Once the battery recharges to 26%, home critical loads will again be powered.

## Main Dashboard Page (Top):



### Descriptions:

#### DC Solar:

Shows DC Solar Production in Watts/Kilowatts

#### AC Solar:

Shows AC Solar Production in Watts/Kilowatts

#### Battery:

Shows Battery Percentage and Charging or Discharging in Watts/Kilowatts

#### Main Service Panel (MSP)/Utility:

Shows AC power (to or from) in Watts/Kilowatts

#### Home Consumption:

Shows Home usage in Watts/Kilowatts

#### NV14 Inverter:

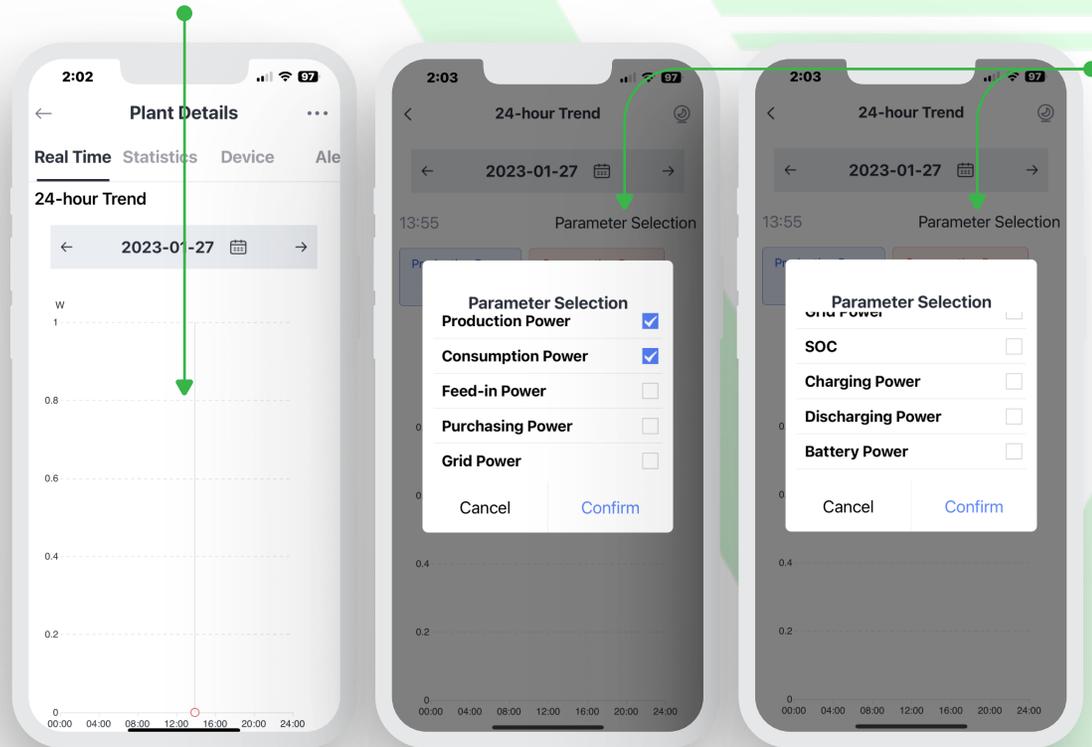
Central Decision Maker

## Main Dashboard Page (Bottom):

Select "Statistics" to view Historical Data

Default shows DC Solar if any.

Tap on chart area to open other Parameters.



### Parameter Selection (Up to 2 at a time)

**Production:**  
DC Solar only on Daily Chart

**Consumption:**  
Home Use

**Feed-in:**  
Solar going to the MSP/Utility

**Purchasing:**  
Power being bought from Utility

**Grid Power:**  
Power coming from the Utility

**SOC:**  
Battery State of Charge in %

**Charging Power:**  
Battery charging in kWhs

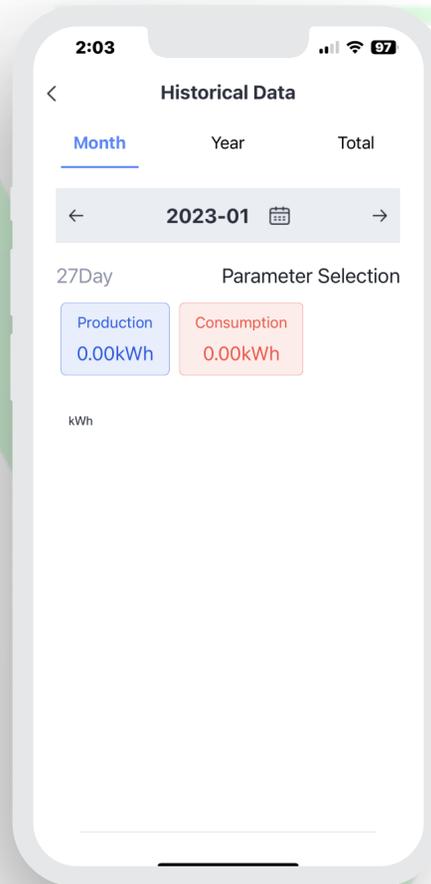
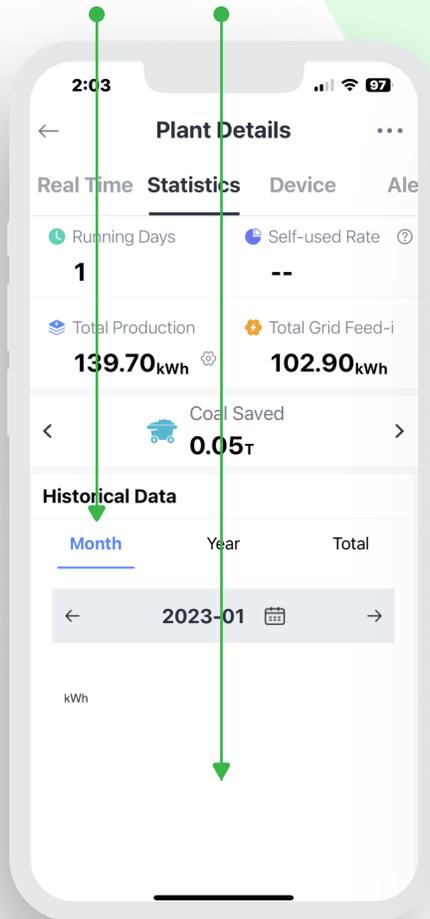
**Discharging:**  
Battery discharging in kWhs

**Battery Power:**  
Battery aggregate charging/discharging

Select **CONFIRM** to show values

### Main Dashboard Page (Statistics) to view historical data:

Tap Month, Year, or Total and then tap the chart area to view Parameters.



#### Default Shows:

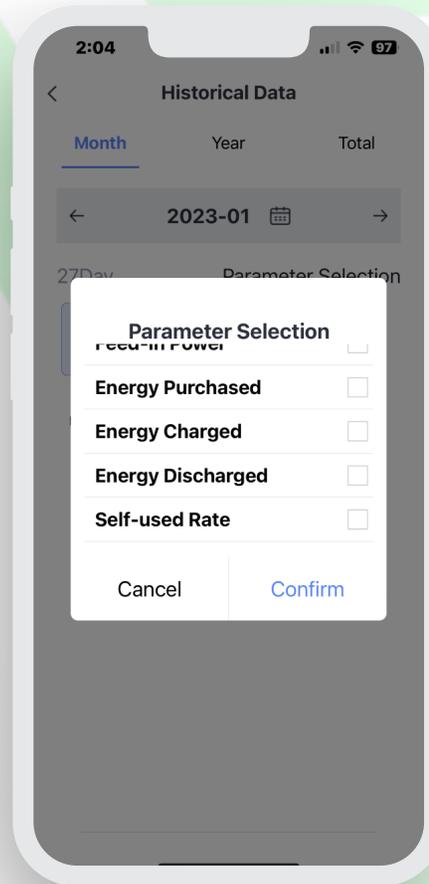
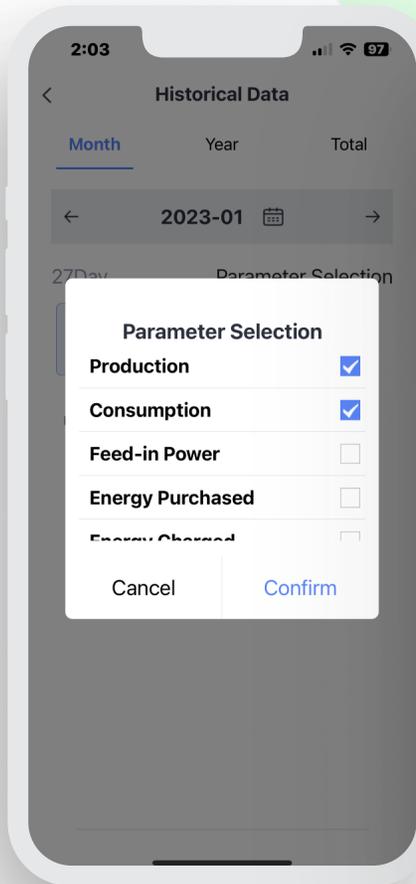
##### Production:

Both AC and DC Solar totals in kWhs

##### Consumption:

Home usage in kWhs

Main Dashboard Page (Statistics) to view historical data:



### Parameter Selection (Up to 2 at a time)

#### Production:

Both AC and DC Solar totals in kWhs

#### Consumption:

Home Use in kWhs

#### Feed-in:

Solar going to the MSP/Utility in kWhs

#### Energy Purchased:

Power being bought from Utility in kWhs

#### Energy Charged:

Battery charging in kWhs

#### Energy Discharged:

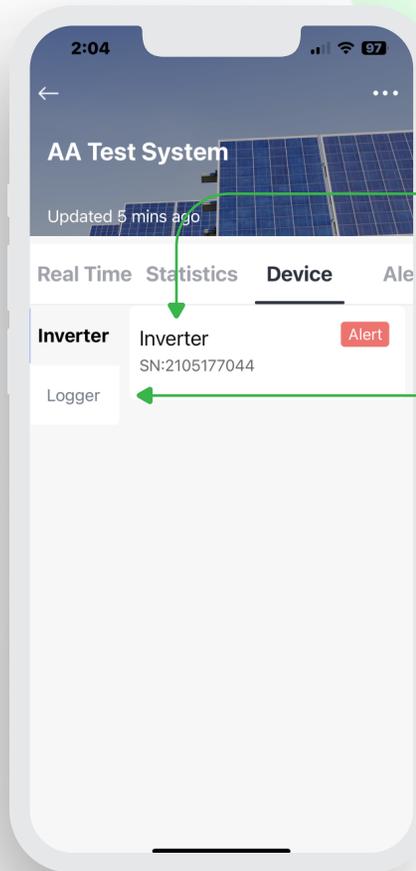
Battery discharging in kWhs

#### Self Use Rate:

Shows Home Solar and Battery usage in kWhs

Select **CONFIRM** to show values

## Main Dashboard Page (Device):

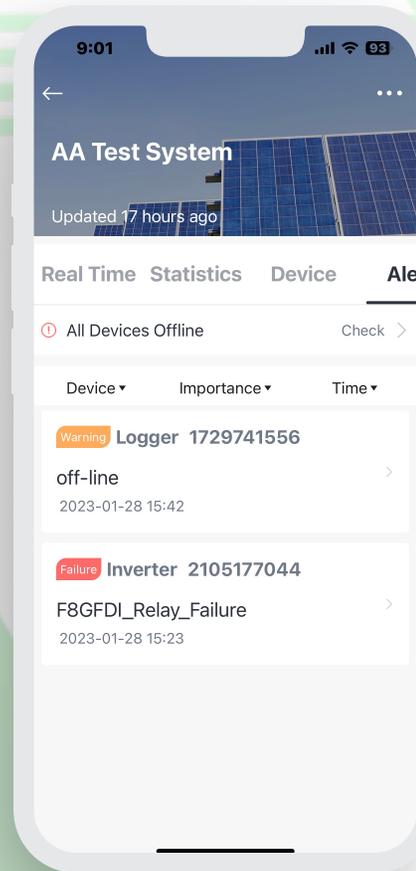


Tap Inverter or logger to view:

Shows Connected Inverter Serial Number

Shows Connected Logger/Antenna Serial Number

## Main Dashboard Page (Alert):



Tap Alerts to view:

**Logger off-line** means that the antenna is no longer communicating with WiFi router (likely changed service provider or WiFi router).

**F8** means the inverter ground with the MSP has been lost.

**F18** means Grid Outage or Spike/Surge in Power was experienced (Volts, Amps, or Hertz). Shows Connected Inverter Serial Number.

**F56** is low battery.

If Alerts persist, then contact Installer for assistance.

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