



# **How to Read your Solar Inverter**

Developed by Energy Trust of Oregon

**This document provides directions for how to read total kilowatt-hour production for many of the most common solar inverters:**

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**Sunny Boy SMA Inverters ([www.sma-america.com](http://www.sma-america.com))**

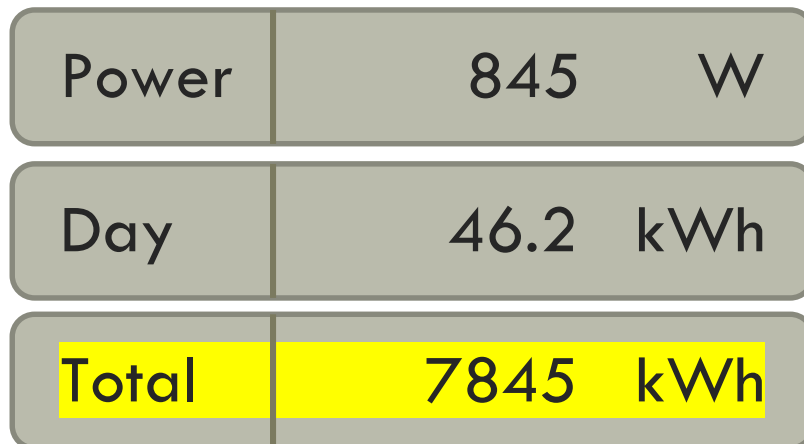


To read the LCD display of your SMA Sunny Boy inverter, tap the face of your inverter near the display. The LCD screen will illuminate and begin displaying information.

Most models display only two lines of text at a time and scroll through several informational messages. Every message is displayed for 5 seconds, but knocking once will advance you to the next message. Look for the message labeled **E-Total**. This is the total energy produced since the system was installed, and the amount is shown as either **kWh** or **MWh**.



Some newer models of Sunny Boy inverters have larger displays. Total energy produced is labeled **Total** and the amount is shown as either **kWh** or **MWh**.



**Power-One and ABB Inverters ([www.abb.com/solar](http://www.abb.com/solar))**



Power-One and ABB inverters have identical LCD displays and controls. Most models display only two lines of text at a time and cycle through 15 different messages. Every message is displayed for five seconds, but you can use the UP and DOWN buttons on the keypad to scroll manually. Pressing ENTER locks the display at the current message.

Look for the message labeled **E-tot**. This is the total energy produced since the system was installed, and the amount is shown as either **kWh** or **MWh**.



## SolarEdge Inverters ([www.solaredge.us](http://www.solaredge.us))



To read the LCD display of your SolarEdge inverter, press the LCD light button located on the bottom of your inverter. If you have an integrated DC disconnect with a red ON/OFF switch on the front, the LCD light button will be located on the bottom of the top part of the inverter, just below the LCD screen.

The LCD screen will illuminate, displaying four lines of information. Press the LCD light button again to move to the next screen.

The third screen displays the total energy produced over various time periods. Look for the message labeled **Total [KWh]**.

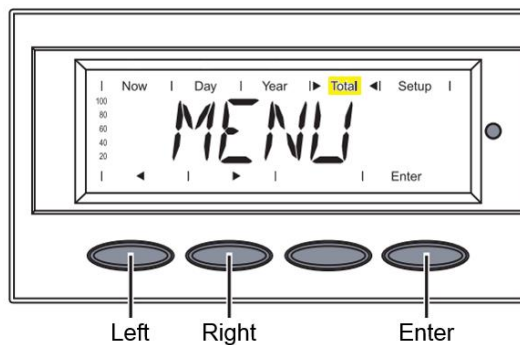
Day [Wh] :	41.2
Month [KWh] :	327.6
Year [KWh] :	4625.1
<b>Total [KWh] :</b>	<b>5376.3</b>

## Fronius Inverters ([www.fronius.com](http://www.fronius.com))

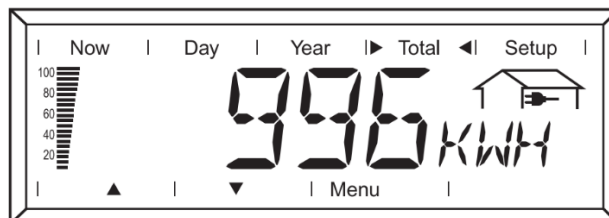


To read the LCD display of your Fronius inverter, press any of the buttons below the display. If you have an older model with a blue cover, lift the cover to access the buttons. The LCD screen will illuminate.

Press the “menu” button (second button from the right) to access the main menu. Press the “right” button (second button from the left) several times to select **Total** from the options shown at the top of the display. Press “Enter” (far right button).



The value that appears is the total energy generated since your system was installed. The amount is shown as either **kWh** or **MWh**.

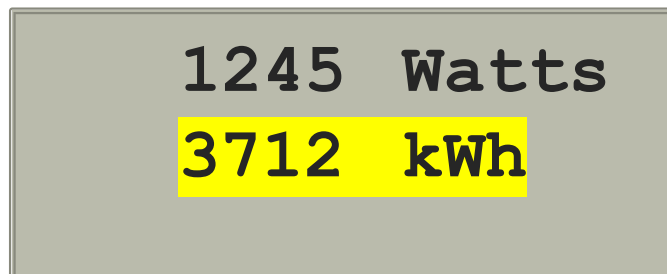


## PV Powered Inverters



The display on your PV Powered inverter continuously cycles through three displays. The screen will change every two seconds to show a different set of information.

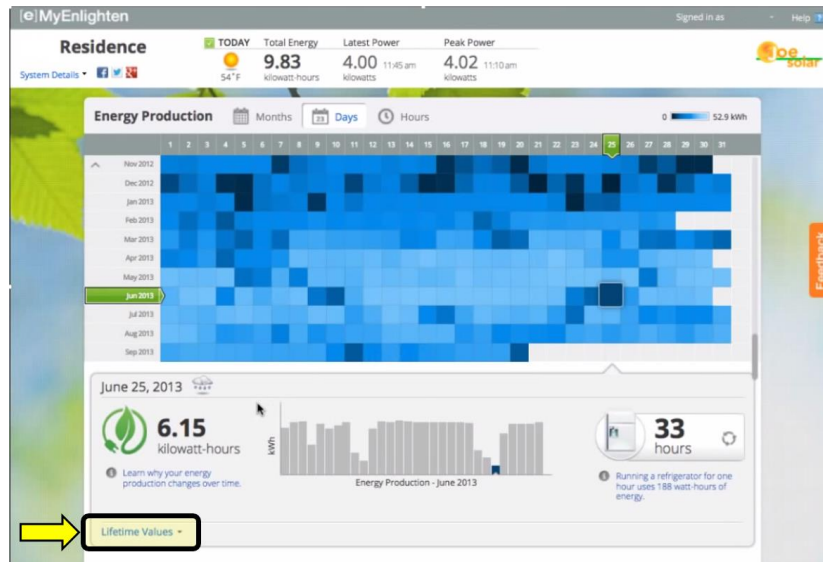
Look for the screen showing **kWh** or **MWh**. This is the total energy produced since the system was installed.



## Enphase Microinverters ([www.enphase.com](http://www.enphase.com))

If you have Enphase microinverters, the easiest way to determine your production is to log into the Enphase Enlighten software included with your system.

Click the **Lifetime Values** link below the Energy Production grid to view your total system production since installation.



You can also read your system’s production from the Enphase Envoy Communications Gateway; a white, oval-shaped device that is plugged into an outlet somewhere near your main electrical panel.

The main screen on the LCD display will show the lifetime energy production of your system in **kWh**.

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1407W 4874kWh 16



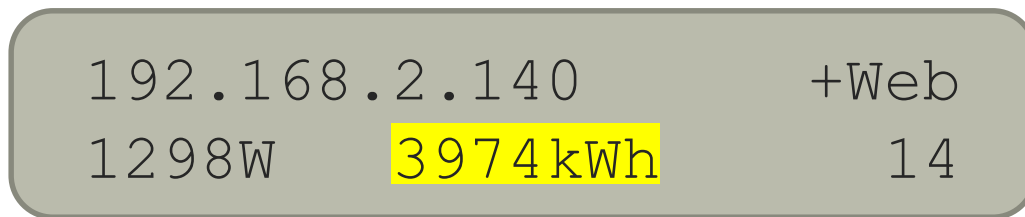
## Other Common Inverters

### Solectria ([www.solectria.com](http://www.solectria.com))

- Consult your Installation or Owner's Manual for instructions on how to read the lifetime production of your system from your inverter.
- If you do not have a hard copy, you may be able to download a copy from the Solectria website at <http://solectria.com/support/documentation/>

### Altenergy Power Systems Microinverters ([www.apsystems.com](http://www.apsystems.com))

- Altenergy Microinverters are installed with an APsystems Energy Communication Unit (ECU); a small, rectangular device that is plugged into an outlet somewhere near your main electrical panel.
- The main screen on the LCD display will show the lifetime energy production of your system in **kWh**.



### Siemens Microinverters ([www.energy.siemens.com](http://www.energy.siemens.com))

- Siemens Microinverters are typically installed with an Envoy Communications Gateway; a white, oval-shaped device that is plugged into an outlet somewhere near your main electrical panel.
- The main screen on the LCD display will show the lifetime energy production of your system in **kWh**.

