YOUR SUNPOWER® SOLAR SYSTEM GUIDE

SUNPOWER®

MORE ENERGY. FOR LIFE.™

WELCOME TO SUNPOWER

Congratulations on purchasing a new SunPower® solar system.

With over 100,000 solar systems powering homes worldwide, more homeowners are choosing SunPower. Whenever the sun is shining, you will know you are doing your part to improve the environment.

Please do not hesitate to contact your SunPower retailer with questions about your system. We are excited to welcome you to the SunPower family as you are making a change that benefits you and the environment for decades to come.

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GETTING STARTED

Your SunPower® Solar system is a new and important element of your home. The system integrates seamlessly with your home's electrical system to provide clean and renewable solar power.

You can expect many benefits from your system, including:

- Savings On Your Electricity Bill:

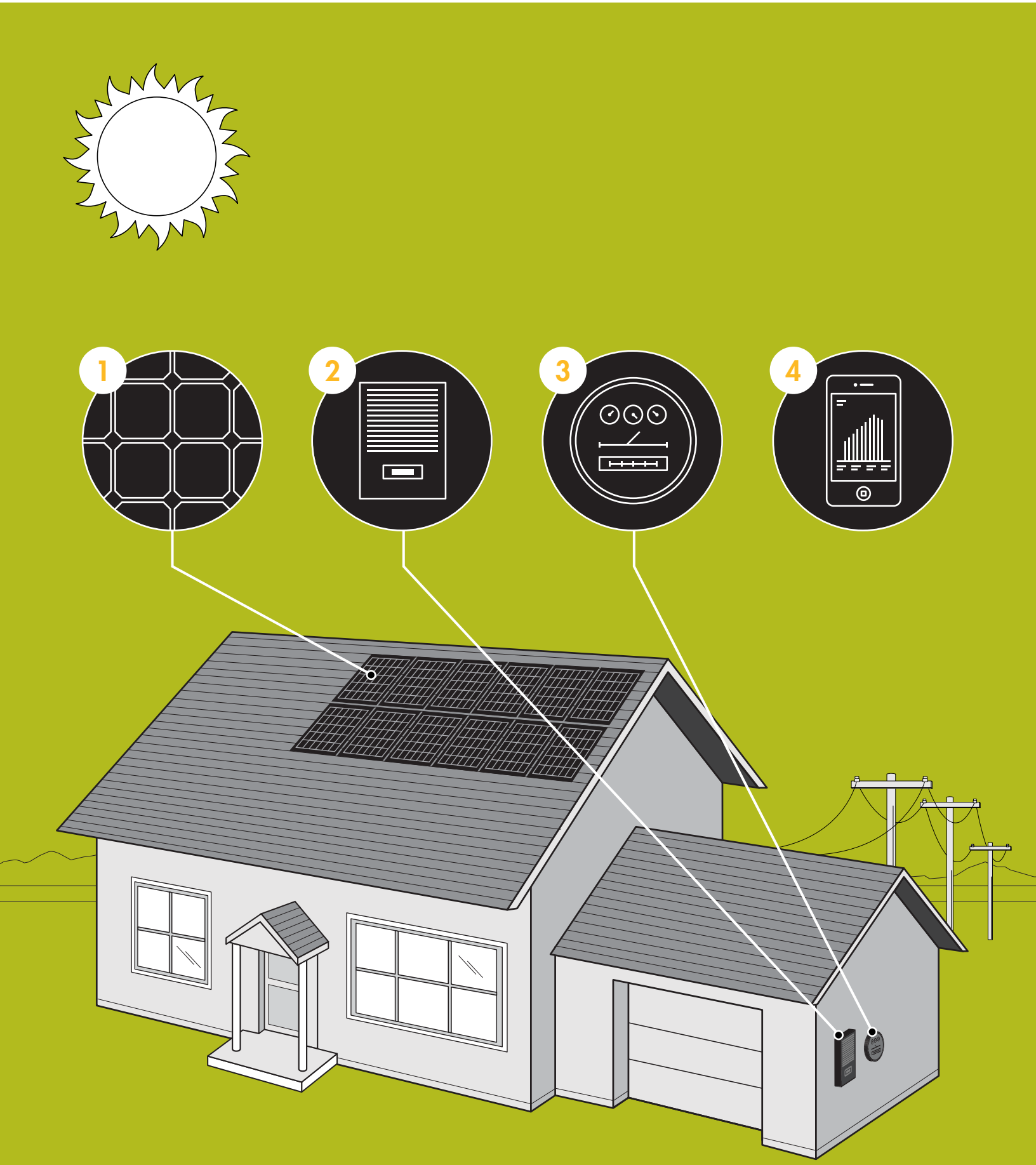
  Your home will consume the energy that comes from your solar system to reduce the energy you take from the utility grid.

- Worry-free Operation:

  With no moving parts, your SunPower system is durable and virtually maintenance free.

- Clean Power Generation:

  Your SunPower system produces clean, emission-free solar electricity that helps to reduce air pollution.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HOW YOUR SUNPOWER® SOLAR SYSTEM WORKS

1. SUNPOWER® SOLAR PANELS

From sunrise to sunset, the SunPower solar system is converting sunlight into electricity. The system turns on automatically in the morning and turns off automatically at night. Solar cells within the panels produce Direct Current (DC) electricity that flows to an inverter.

2. THE INVERTER

The inverter converts the DC electricity being produced by your panels into Alternating Current (AC), which is required for household use. The converted solar electricity is delivered directly to your home's main electrical service panel.

3. YOUR ELECTRIC METER

The electric meter measures the net electricity usage, accounting for the difference between your home consumption and your SunPower system's energy production. The meter will show the electricity that your SunPower system sends to the grid, otherwise known as solar export.

Depending on your electricity retailer,you may receive a credit on your power bill from any solar export measured by your electricity meter.

4. THE MONITORING SYSTEM

The Monitoring System provides you with detailed visibility on the amount of energy your system is producing, in addition to historical data. You can monitor your solar energy information online by the FREE software provided by the solar inverter manufacturer.

HOW SUNPOWER® SOLAR PANELS WORK

CONVERTING SUNLIGHT INTO ELECTRICITY

SunPower solar panel's unique design are designed and built for higher efficiency, allowing them to convert the maximum amount of available sunlight into electricity. Though they are effectively maintenance free, SunPower recommends you take certain precautions to keep the system operating at its optimal level.

SHADING

- SunPower panels should be shade free: trees, plants, or other obstructions – including rooftop antennas or satellite dishes, should be removed if possible.
- If necessary, safely trim any vegetation that might shade the panels during daylight hours.

GENERAL SAFETY PRECAUTIONS AND CLEANING

- Our solar panels do not generally require cleaning to meet your system's annual energy expectations. Seasonal rains are usually enough to adequately clear any soil or dust that might accumulate. When your SunPower Partner designed your system, they took into account the typical soil accumulation for your area.
- If excessive soiling occurrs, or if you would like to try improving annual system output beyond what is typically expected, you can clean your panels by spraying them from the ground with a standard garden hose. Only spray the panels early in the morning or late in the evening when the sun is very low on the horizon or not directly visible at all. Avoid spraying the panels when the sun is at its peak and allow the panels to cool before spraying them. Spraying cold water on a hot panel could result in panel damage, voiding the product warranty. To maximize the energy improvement from cleaning, try performing it during the summer months and in between natural rainfall cycles. Alternatively you could get professional solar panel cleaners to address the soiling issue - contact your SunPower partener to advice.
- Do not use abrasive cleaners or anything that could scratch the surface of the panels. Many SunPower Partners offer professional panel cleaning services, talk to your SunPower Partner to see if this is a service they offer.
- It's not necessary to go onto your roof for panel cleaning or inspection and we strongly recommend you not do so. If you choose to go on your roof, please take all safety precautions and do not touch or disturb the panels or wiring. It is important to remember that only a SunPower Authorized Partner should repair or touch system components. Please remind anyone going on your roof that they should not disturb the panels or wiring.
- Do not use mirrors or any other objects to concentrate sunlight on panels. Doing so will void your warranty.

HOW YOUR INVERTER WORKS

The SunPower® solar system produces Direct Current (DC) electricity power that flows from the roof panels to an inverter. The inverter converts the DC power into Alternating Current (AC). Please consult your inverter instruction manual for information on the display and other features.

STARTING UP THE INVERTER

During normal operation, the unit will remain turned on. It is not necessary to turn the unit on and off each day.

To verify that your inverter is on, look at the front panel. During daylight hours, the green LED on the LCD screen should be lit. If the LED light is Red or Yellow, please contact your SunPower installer. If no LED light is on during daytime, please follow the steps below. (Please note that it is normal for the LEDs to be off during night time)

1. Turn the PV Array DC Isolator into the ON position. If the inverter is already on, cycle the switch OFF to ON.
2. Ensure that the solar AC Main Switch Inverter Supply in your service panel (fuse box) is firmly engaged in the "ON" position. If the breaker is not fully engaged proceed to re-set it. If the breaker is in the "OFF position" move it to the "ON" position.

Note: Your inverter will take approximately 1 to 2 minutes to connect to the grid. After this period of time you will see a solid green LED as long as there is sunlight hitting the panels.

SHUTTING DOWN THE INVERTER **see installer provided shutdown procedure**
If you need to turn off your solar system simply follow the above "Starting up the inverter" in reverse. In other words, do step 2 followed by step 1.

FRONT PANEL INVERTER DISPLAY

Depending on the type of inverter that's been installed, you will be able to access basic information by pressing the appropriate button, or by opening the screen near the inverter's lid. Some inverter units will automatically scroll through this information every 5 seconds

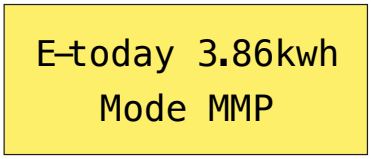
READING THE INVERTER DISPLAY

· Depending on the size of the system installed, you may have one or more inverters. During daylight hours, the inverter displays system production data.

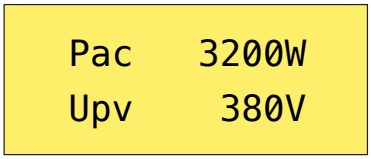
The inverter has an LCD display and three LED lights indicating the inverter status.

The screen continuously scrolls through operating data during daylight hours, displaying readings that indicate its current energy production.

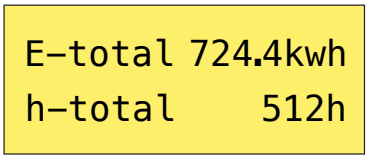
Message #1: "E-Today"– total energy produced on this day measured in kilowatt hours (kWh).



Message #2: Actual instantaneous AC power output and DC input voltage.



Message #3: System total energy production and total hours of operation since installation.



INVERTER HEAT

- During the day, the inverter will become warm to the touch. This is part of the normal system operation. The inverter has been certified to ensure the maximum temperature will not exceed safety limits, though you should be cautious not to touch or leave any heat-sensitive or flammable items on or near the inverter.
- Small children and pets should be kept away from the inverter.

"INVERTER-OFFLINE" OR BLANK DISPLAY

- At night, the inverter display screen is blank. This is part of normal inverter operation. If the display is blank during daylight hours, contact your SunPower Partner to determine if your inverter is operating properly.

MAINTENANCE

- Do not cover or limit the airflow around the inverter, as this will prevent adequate cooling. Keep a minimum of 1 metre, including top and bottom, around the inverter free. Please refer to the inverter manual for additional information.
- Very dusty conditions may require cleaning the inverter's air intake filter. Do not attempt to open your inverter. Please contact your SunPower Partner for guidance; inverters should only be serviced by a trained technician.

POWER OUTAGES

- Your solar system does not provide backup power.
- The inverter is designed to shut down in the event of a grid outage or blackout. This feature protects your home from power surges and the utility workers who might be working to restore power to the area. Your SunPower system will not be able to produce electricity during such conditions.
- When utility power resumes, the inverter will automatically re-connect to the utility grid, and normal operation should begin within about five minutes. As the inverter synchronizes with utility power, there will be a momentary delay before returning to normal operation.

HOW THE MONITORING SYSTEM WORKS

The Monitoring System provides detailed visibility into the system's performance, enabling you to monitor your solar energy information anytime, anywhere. You can track performance online.

REGISTER ONLINE

· Your monitoring equipment must be connected to internet connection for the monitoring system to display data. To view your home's system performance, 24 hours a day, 7 days a week, visit your solar inverter monitoring site and follow the registration instructions. Once you've registered simply enter your email address and password when you visit the site.

INTUITIVE MONITORING WEBSITE

· Your inverters monitoring system provides convenient access to your solar system's performance from any computer connected to the Internet. After the system is installed and commissioned, log in to your solar inverter monitoring site to view your energy production and environmental savings.
You can see how much solar power you are currently producing, review historical energy production, track the overall performance of the system and system components, as well as create reports. You will also see how much you've benefitted the environment over the lifetime of your solar system.

TECHNICAL QUESTIONS OR PROBLEMS RELATED TO YOUR SYSTEM PERFORMANCE

If you have technical questions about the your monitoring system visit the troubleshooting guide at your solar inverter monitoring site. Or please call your SunPower retailer and speak with a customer care representative.

ELECTRICAL UTILITIES

Your electrical switchboard uses the electricity produced by your solar system to power your home. If your home needs more power than your solar system provides, your local utility will supply the balance. And, if your SunPower® system generates more energy than your home consumes, the surplus electricity travels through the meter and into the local power grid.

GENERAL SAFETY PRECAUTIONS

Your SunPower system is fully automatic and comes with built-in safety features. Do not attempt to work on, alter, or repair the system; doing so could expose you to dangerous electrical currents and void manufacturer warranties.

- Do not attempt to service any portion of the system. Only a trained and certified professional should service the system.
- It's not necessary to go onto your roof for panel cleaning or inspection and we strongly recommend you not do so. If you choose to go on your roof, please take all safety precautions and do not touch or disturb the panels or wiring. It is important to remember that only a SunPower Authorized Partner should repair or touch system components. Please remind anyone going on your roof that they should not disturb the panels or wiring.
- Do not step on the panels or allow objects to fall on the panels.
- Do not disassemble or remove any part of the system. This will void manufacturer warranties.
- Small children and pets should be kept away from the inverter.

EMERGENCIES

- Should there be a fire, explosion, gas leak, system damage, or fuel spill around the system components, dial 000 first, then shut down the system immediately by turning your inverter off. Please check your inverter manual to learn how to turn off your specific model inverter.
- Use your best judgment when shutting off the inverter during an emergency. If the emergency requires you seek safety immediately, do so first and then alert emergency personnel to the inverter's location in your home. For assistance in restarting your system after an emergency, please contact your SunPower Partner.

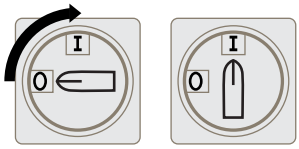
FREQUENTLY ASKED QUESTIONS

HOW IT WORKS

How Do I Turn On My Sunpower® System?

Your SunPower Partner will turn on the system for the first time to test it at installation. Once permission has been given from your utility you need to start it, please follow these steps.

Move the PV Array DC Isolator to the "ON" position, make sure that any external DC or AC disconnects are also on the "ON" position, finally move the inverter AC Main Switch Inverter Supply into the "ON" position. Depending on your inverter type, instead of "ON" you may have an on-line sign such as "I" (like a roman numeral 1).



How Do I Know If My System Is Working Properly?

You can verify the energy production via your inverter monitoring system or by reading the energy production levels directly from the inverter screen.

Will My System Work at Night?

No. Sunlight must be present for the system to generate electricity. At night the inverter displays a blank screen.

Will My System Work On Cloudy Days?

Yes. However, it will produce less electricity depending on the density of the cloud cover.

Will My System Work During Blackouts?

Safety requirements prohibit the system from producing electricity during blackouts since there is a chance the SunPower system could feed electricity into the electric grid while workers are accessing it. The system will restart automatically when power is restored.

Why Should I Limit Shading From Trees?

The entire surface of a solar panel must receive full sunlight for the panel to work at its peak efficiency. If any portion of the panel is shaded, the entire panel's electrical output — even those sections still exposed to sunlight — decreases.

Can I Increase the Size of My System?

Increasing the size of your SunPower system is possible subject to local regulations. Please contact your Partner for additional information.

How Long Will My Sunpower Panels Last?

The combined 25-year warranty on materials, workmanship and power output protects your system for decades to come. SunPower controls the entire production process to ensure the highest quality product reaches your rooftop and produces the most energy.

What Are Solar Cells and Solar Panels?

A solar, or photovoltaic (PV), cell is the smallest element of a system that converts sunlight into electricity. Each cell is made of silicon, the same material found in computer chips. Silicon in photovoltaic cells is treated so that it generates a flow of electricity whenever it is exposed to light. A series of solar cells are wired together to form solar panels.

Does My Sunpower System Make Hot Water?

No. SunPower solar panels convert sunlight directly into electricity to operate appliances, light fixtures, televisions, and other electronic devices.

ELECTRICITY & THE LOCAL UTILITY

What is a Kilowatt-Hour (kWh)?

A kilowatt-hour is a unit of measure for electricity. It is the amount of power (kilowatts) used over a period of time (hours).

A 100-watt light bulb that is illuminated for one hour uses 100 watt-hours of electricity, or 0.1 kilowatt hours. If it is illuminated for 30 minutes, the bulb will consume 0.05 kWh of electricity, or half as much.

Are Solar Electric Systems Good for the Environment?

Yes. Energy created through the SunPower system produces no pollutants. By offsetting peak electricity demand, SunPower systems reduce the need for pollution-producing power plants.

Are Solar Electric Systems Safe?

Yes. Solar cells are mostly silicon, the primary component of sand. Solar electric systems produce no exhaust and no toxic materials. The electricity coming through the inverter is just like the electricity coming from household wall sockets. Homeowners should use the same care they would with any electricity. All components are approved and installed according to the best construction practices.

Is Solar a New Technology?

Modern solar cells were invented in the early 1950s and were used to power satellites. In the 1970s, they were used for remote telecommunications and navigational aids. In the 1980s, they were used for roadside emergency telephones and traffic signs. Now in the 21st century, they help power your home. Currently, over 100,000 homeowners worldwide enjoy a SunPower solar system.

NOTES

SunPower Corporation