US HEADQUARTERS
SunPower Corporation
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San Jose, California 95134 USA
1-800-SUNPOWER
sunpowercorp.com

Established
Incorporated in 1985
Headquarters in Silicon Valley, California
Publicly traded (NASDAQ)
Manufacturing in the Philippines and US
Over 85 patents and over 20 years of R&D

Proven Track Record
More than a quarter-century of experience
Over 400 megawatts installed
Over 500 large-scale systems on 4 continents
Thousands of residential installations worldwide
Largest commercial and residential installed base in North America

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MORE POWER.
A BETTER INVESTMENT.

INVEST IN THE BEST. GET 50 PERCENT MORE POWER WITH SUNPOWER.

By installing a photovoltaic (PV) system, you are helping to supply clean, renewable electricity to meet the world's energy needs. Solar PV is also an excellent investment that can provide a long-term, stable cash flow. The return on investment should be central to the choice of PV systems, and SunPower's unique technology can help maximize economic return.

As a global provider of the world's most efficient solar power systems, SunPower leads the industry in unparalleled, record-breaking solar energy solutions. In fact, we're creating a revolution of greater solar efficiency, thanks to our intelligent engineering and elegant design — inside and out.

With headquarters in San Jose, California, we supply power plant, commercial, and residential customers with the highest efficiency solar panels, roof tiles and tracker systems available today. Our commercial dealers located throughout North America and Europe offer superior service and professional expertise to commercial customers.

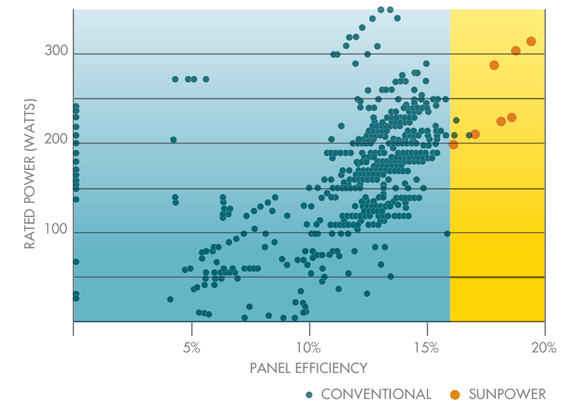
Worldwide, SunPower has thousands of residential, commercial, and power plant systems installed or under contract, rated in aggregate at more than 400 megawatts of peak capacity. These satisfied customers around the globe recognize that with SunPower, they are getting the best return on their solar investment.

THINK HIGHER REVENUE. GENERATE MORE ENERGY IN LESS SPACE.

What if you could deliver more energy in the available space or use less space to deliver the same amount of energy? This is what panel efficiency is all about. The higher the efficiency of a solar panel, the more power generation capacity (peak kilowatts or kWp) it has for a given area.

According to Photon International's Annual Worldwide PV Market Survey, SunPower panels are the most efficient solar panels in the PV industry. We achieve panel efficiencies of up to 19.3 percent. In comparison, conventional panels convert only 12 to 14 percent of available sunlight into electricity. SunPower panels are thus 50% more efficient, generating 50% more power in the same amount of space. When compared to thin film technologies, our cells and panels are up to 100 percent more efficient.

SUNPOWER SOLAR PANELS ARE THE MOST EFFICIENT SOLAR PANELS IN THE PV INDUSTRY.

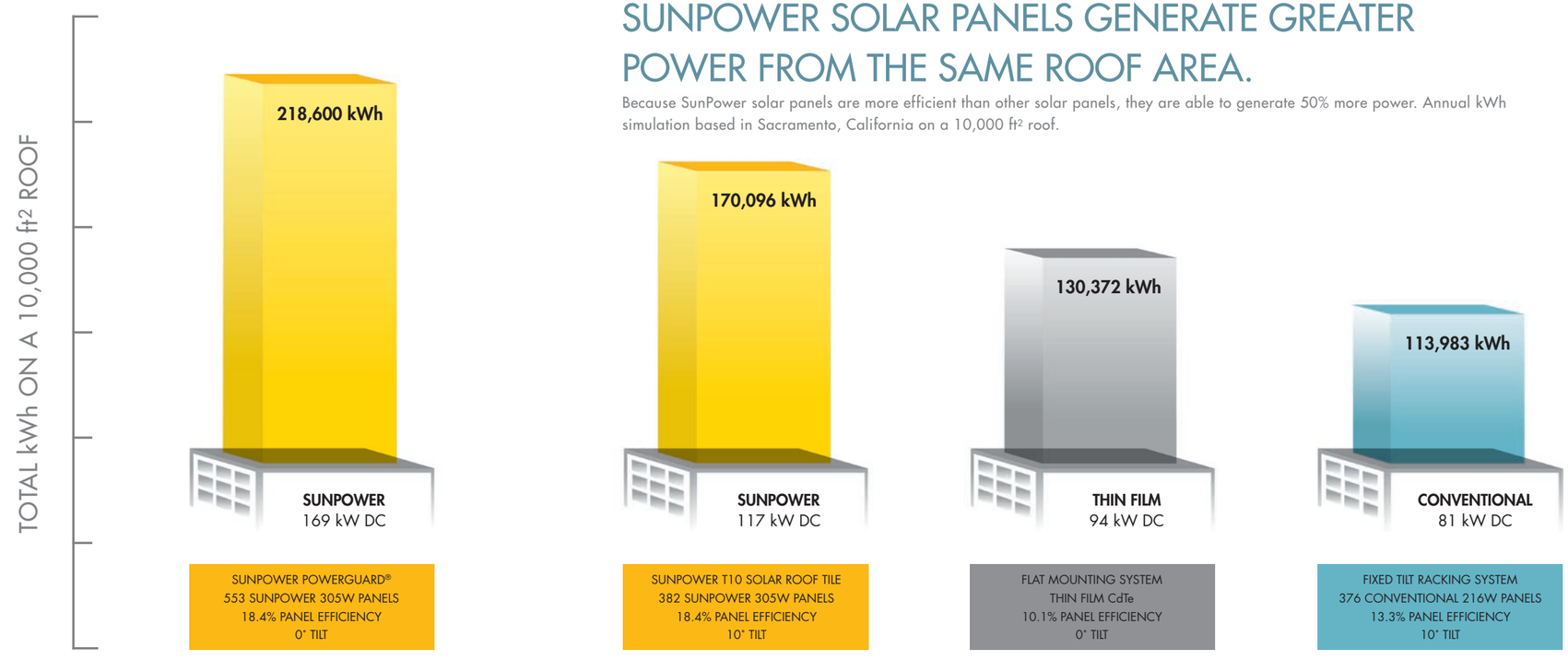


Photon International's Annual Worldwide PV Market Survey, February, 2008.

SunPower's high efficiency panels produce significantly more energy in the same roof space, allowing you to maximize the solar investment and offset a higher percentage of electricity demand.

SUNPOWER SOLAR PANELS GENERATE GREATER POWER FROM THE SAME ROOF AREA.

Because SunPower solar panels are more efficient than other solar panels, they are able to generate 50% more power. Annual kWh simulation based in Sacramento, California on a 10,000 ft² roof.



RADICALLY DIFFERENT CELL DESIGN MAXIMIZES OUTPUT, MINIMIZES WASTED SUNLIGHT.

SunPower solar panels are more efficient because they use available sunlight that others waste. To do this, SunPower's unique all-back-contact cell technology features:

1. MAXIMUM LIGHT CAPTURE

SunPower cells maximize the use of available sunlight by exposing the entire front surface of the cell to the sun. In most conventional solar cells, metal contacts cover up to 10 percent of the front surface of the cell, blocking valuable sunlight from being captured by the cell. It's called shading loss, and can impact the return on your solar investment. At SunPower, we place all electrical contacts on the back of the solar cell, so all the sunlight reaches its destination. Our exceptionally high quality manufacturing process also enhances the texture of the cells, and we apply an anti-reflective coating to the front surface of our cells so they can capture more of the sun's light.

2. REDUCED RESISTIVE LOSSES

To minimize shading, most solar cells use thin electrical connections. But those thinner connections generate more electrical resistance, reducing the transmission of energy. SunPower's unique all-back contact cell design doesn't have to make this compromise. Because the metal contacts are on the back of SunPower's solar cells, they can be extra wide and thick — enhancing the panel's ability to conduct electrical current.

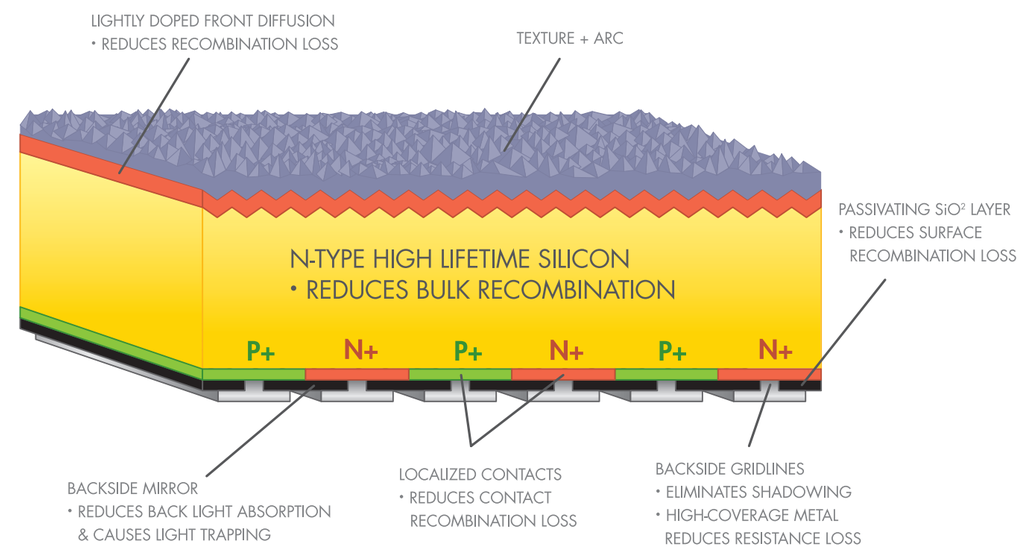
3. MINIMUM RECOMBINATION LOSS

Through a mechanism called "recombination," some electrons are lost before they ever reach the electrical contacts. This reduces the amount of power generated by the solar cell. By placing a "passivating" silicon dioxide coating on the front and rear surfaces of the cell, SunPower's improved technology reduces recombination losses and puts more of these electrons to work.

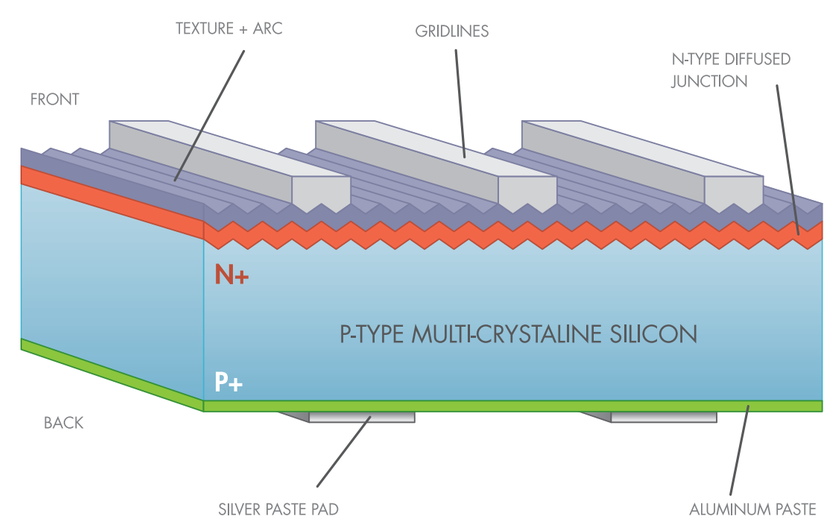
4. IMPROVED MATERIAL ABSORPTION

In SunPower solar cells, some photons that might otherwise be absorbed by the silicon without becoming usable electricity get a second chance to produce electricity. That's because our cells have a unique backside "mirror" that reflects sunlight that has not yet been absorbed back into the cell. With a second chance to reach the contacts, more photons change into electrons and electrical energy.

SUNPOWER
SOLAR CELL 22% EFFICIENCY



CONVENTIONAL
SOLAR CELL 15% EFFICIENCY



SUNPOWER CAPTURES MORE SUNLIGHT, EVEN IN LOW LIGHT AND EXTREME HEAT CONDITIONS.

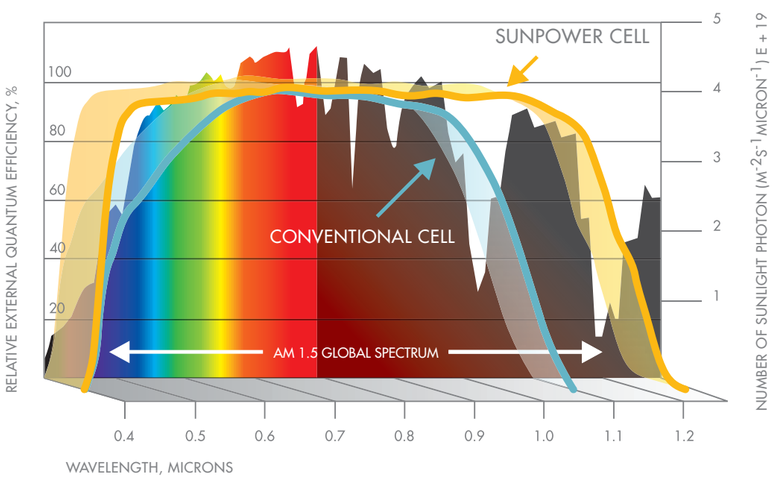
ZERO LIGHT-INDUCED DEGRADATION

Most common solar cells — because they use boron-doped p-type silicon — experience an oxidation reaction when the cell is first exposed to light. This means the energy production capacity for the solar panels that use these cells will drop by about 3 percent within the first few days after installation[1]. Not the case with SunPower's products. We use n-type silicon that contains fewer impurities and uses a phosphorous dopant, eliminating the initial light-induced degradation.

BROADER SPECTRAL RESPONSE

Not only do SunPower cells capture more light, but they also make use of a wider range of the sunlight spectrum. SunPower solar cells convert more of the photons to electricity in the short wavelengths (blue) and long wavelengths (red) of the solar spectrum than conventional solar cells. This means that in wintertime and on cloudy days when the sunshine isn't postcard-perfect, SunPower panels continue to produce high levels of electricity.

SUNPOWER GENERATES MORE ENERGY BY CAPTURING A BROADER LIGHT SPECTRUM.



SunPower cells use more short ultra-violet and long infrared wavelengths.

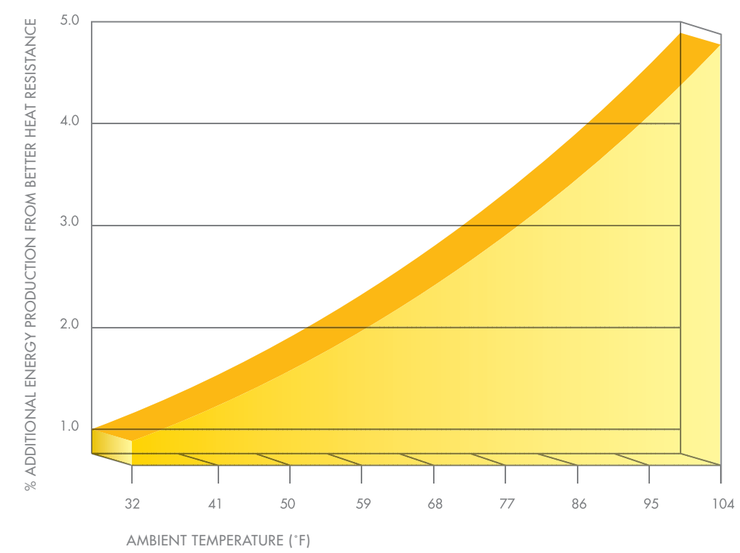
EXCELLENT LOW-LIGHT RESPONSE

SunPower cells offer exceptional performance, even in low-light environments. SunPower's premium monocrystalline cell substrate enables the cell to be very sensitive to very low levels of light. The advantage is that SunPower panels "wake up" the inverter earlier in the morning, and the system is still generating energy later in the day than other technologies. Simply put, you get more solar electricity every day from a SunPower solar system.

HIGHER PERFORMANCE AT HIGHER TEMPERATURES

All solar panels get hot. And when they do, power production falls due to loss of voltage. SunPower panels perform better in higher temperatures than conventional PV panels by having a lower temperature coefficient and a lower Normal Operating Cell Temperature (NOCT)[2]. With our technology, the reduction in energy yield is roughly 0.38 percent per degree Celsius rather than the typical 0.48 percent for conventional solar panels. In addition, SunPower panels run cooler than conventional solar panels given the same ambient temperature. The hotter it is outside, the bigger the difference between SunPower and conventional PV products.

AS THE AMBIENT TEMPERATURE RISES, SUNPOWER'S ADVANTAGE INCREASES.



[1]From "A Call for Quality: Power Loss from Crystalline Module Degradation Causes a Big Headache for the Industry", Photon International, March 2008.

[2]NOCT is measured at continuous sunlight exposure of 800W/m2, 20°C ambient, and wind speed of 1m/second.

SIMPLY BETTER PERFORMANCE— MORE ELECTRICITY GENERATION DAY AFTER DAY.

"Our solar array helps us reduce energy demand, costs and harmful emissions, while we conserve natural resources."

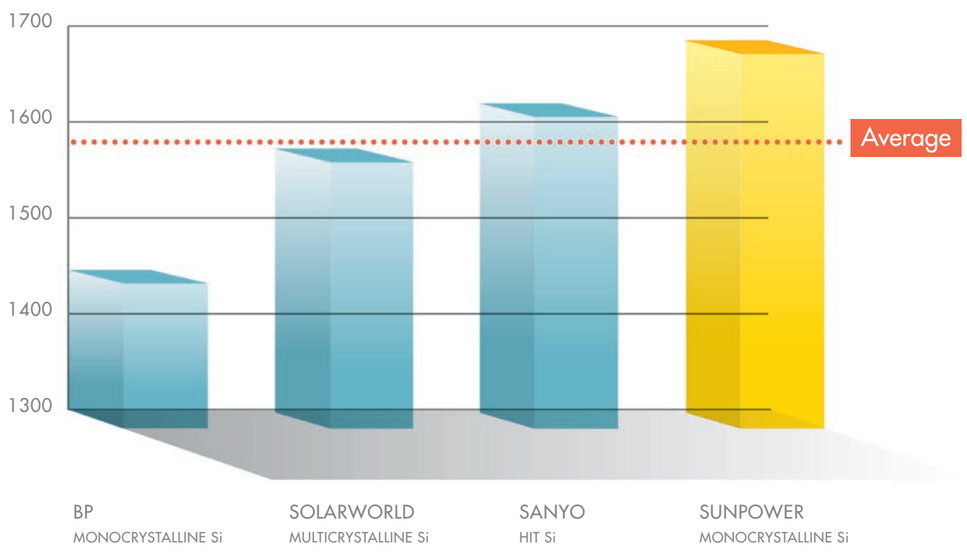
John Matheny, Site Manager
Microsoft Silicon Valley Campus

Electricity is measured in units of kilowatt-hours (kWh). In test after test, SunPower panels deliver not only the highest number of rated watts per square meter, but also more kWh per rated kilowatt (kW) than conventional crystalline solar panels. More kWh per kWp. That means an even greater return on an investment. That's the power of SunPower.

PROVEN REAL-WORLD PERFORMANCE

SunPower's unique technology makes the difference in real-world electricity production, because our products perform better under the most challenging conditions. Here's how:

INDEPENDENT TESTING SHOWS SUNPOWER ENERGY YIELD IS HIGHER.



ANNUAL AC ENERGY YIELD (kWh_{ac}/kWp_{rated})

Source: Department of Electrical and Computer Engineering, University of Cyprus & University of Stuttgart, 2006-2007.
Testing completed in Nicosia, Cypress, over a one-year timeframe.

MORE POWER WITH SOLAR ROOF TILES

Many roof types can benefit from SunPower Solar Roof Tiles, which amplify the benefits of our solar panels even further. SunPower PowerGuard® and T10 Solar Roof Tiles maximize system capacity in a given space, allowing optimal energy production. They install without penetrating the roof membrane and are lightweight, highly durable, resistant to high winds and adaptable to virtually any flat rooftop.

BETTER PERFORMING PANELS ARE ALSO BETTER LOOKING

SunPower's technological advantages have an added benefit — they just look better. Our electrical contacts are on the back of our panels, a strategy that not only delivers more power, but also ensures a more attractive panel that blends harmoniously into the environment.

QUALITY THAT'S BUILT TO LAST, BACKED BY THE LONGEST WARRANTY IN THE PV INDUSTRY

Our global manufacturing facilities focus on producing the highest quality products in energy efficient facilities using environmentally sustainable processes. That focus is reflected in SunPower's ISO 9001 certification. SunPower solar panels are UL (Underwriters Laboratories) listed and have been certified as meeting the requirements of the International Electrotechnical Commission (IEC) 61215, Edition 2, by the TUV Rheinland Group.

Our focus on quality allows SunPower to offer the longest-lasting product warranty in the PV industry. Covering all parts and workmanship associated with the manufacture of SunPower solar panels, this warranty lasts for 10 years, well beyond the payback period of most solar projects. In addition, we have a 25-year limited output warranty to ensure that the SunPower system will perform far into the future.

WHY SUNPOWER?
IT'S THE SMARTEST INVESTMENT.

SunPower designs, manufactures, and delivers the highest efficiency solar electric technology in the world. With over a quarter of a century of innovation and experience, we're delivering proven solar performance not just for commercial customers, but also for residential and utility-scale power plant customers worldwide.

Our technology was developed by Dr. Richard Swanson and his students while he was a professor of electrical engineering at Stanford University. When he founded the company in 1985, he set out to commercialize high efficiency photovoltaic cell technology for use in solar concentrators. Today, SunPower is traded on the NASDAQ stock exchange and is considered the leader in the PV industry, integrating processes and technologies across the value chain — from silicon to installation and monitoring. More power through the highest panel efficiency. Better performance through more energy production per rated watt. And superior quality and manufacturing backed by the best warranty in the industry. All of this from the world's leading designer and manufacturer of highest efficiency solar cells, solar panels, and solar systems. To make a smart solar investment — anywhere in the world — look no further.

SunPower's manufacturing facilities in the Philippines produce the world's highest efficiency solar cells.

TO GENERATE MORE SOLAR POWER AND MAXIMIZE YOUR SOLAR INVESTMENT, CALL YOUR SUNPOWER COMMERCIAL DEALER TODAY!

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