



SunPower AC Energy Solutions

Make the most  
of every moment

**SUNPOWER**

FROM MAXEON  
SOLAR TECHNOLOGIES



# Better technology. Better together.

You want to live up to your potential. To put your energy into the things you care about. To be at your best—even on the tough days.

Why should your home solar be any different?

SunPower AC modules combine industry-leading solar panel technology with advanced microinverter technology from Enphase to maximise your roof's potential. The result? Greater reliability over your system's lifetime, with superior output in real-world conditions—not to mention the enhanced curb appeal that comes with a simpler, cleaner system design.

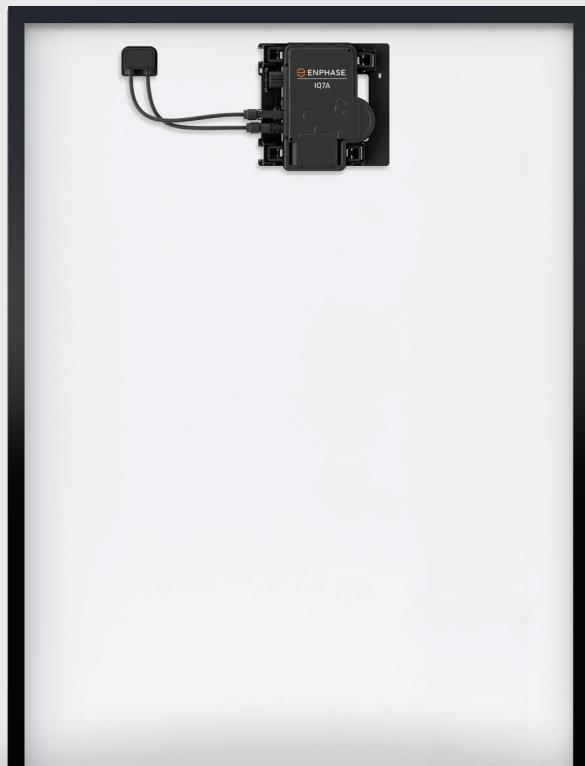
Easy-to-use real-time monitoring lets you view your system's performance and environmental impact anytime, anywhere.

And it's all backed by the peace of mind that comes with 25 years of category-leading warranty coverage<sup>1</sup> and the professional expertise gained from 35+ years in solar.

Finally. Home solar that works harder. And smarter.

## What is a microinverter?

A microinverter is a small electronic device that sits beneath each solar panel. Its main task is to convert the electricity generated by your solar panels from direct current (DC) into alternating current (AC) that you can use directly in your home or export to the grid.



# SunPower AC Energy Solutions

Maximise your savings and minimise your headaches with the leading performance, reliability and durability of SunPower solar technology.



## SUNPOWER | MAXEON 5

Home solar's most advanced technology

- #1 in solar panel efficiency<sup>2</sup>
- Unmatched Reliability<sup>3</sup>
- 40-year expected useful life<sup>4</sup>

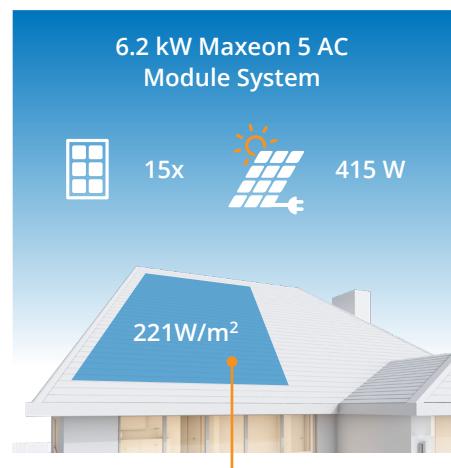
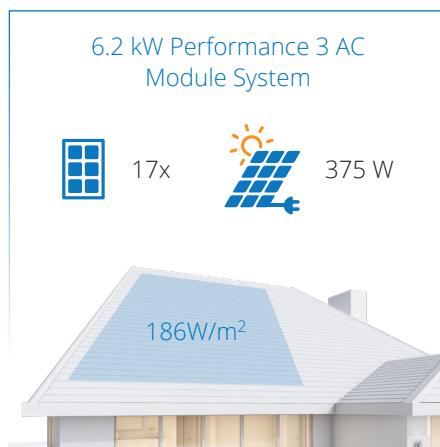
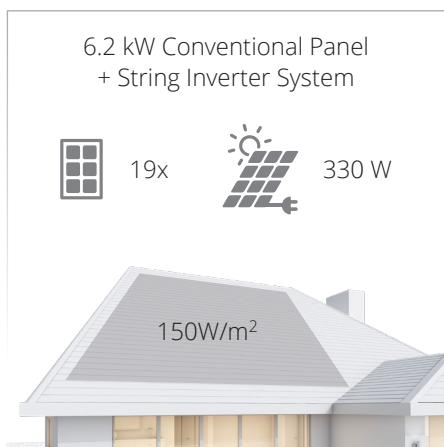
## SUNPOWER | PERFORMANCE 3

Uncompromised performance, exceptional value

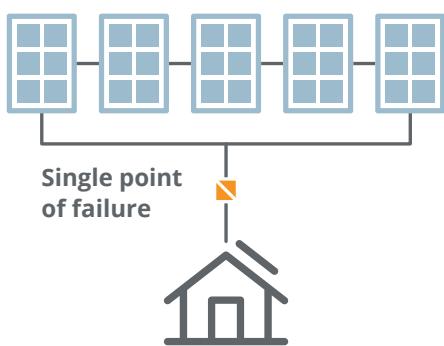
- High efficiency at a value price
- Proven results in real-world conditions
- 35-year expected useful life<sup>4</sup>

## Powerfully Simple.

Powerful panels mean you'll need fewer on your roof. In the case below, just fifteen Maxeon 5 AC or seventeen Performance 3 AC modules deliver the power of nineteen conventional panels.<sup>5</sup> This gives you a compact design, leaving more space to easily expand your system in the future. And with the microinverters elegantly hidden beneath each AC module, you won't need bulky string inverters affixed to your walls either. Sometimes less is truly more.

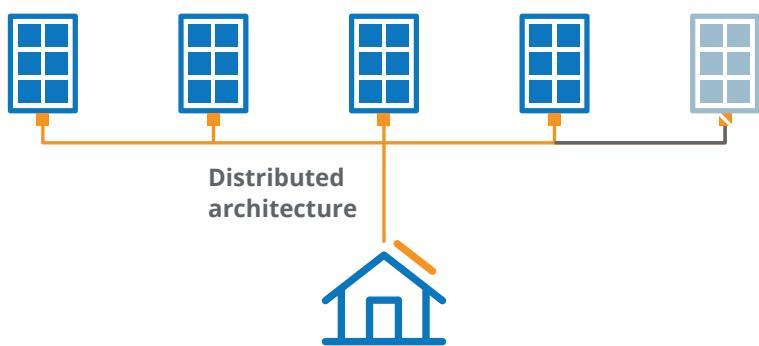


Maxeon 5 AC maximises available space for future energy needs



**0% System Power**

if 1 string inverter fails



**80% System Power**

if 1 microinverter fails

In a conventional setup, one inverter controls the output of the entire solar array, creating a single point of failure.

Enphase microinverters enable each SunPower AC Module to operate independently, with both technologies backed by 25-year warranties.

## Make the most of every moment.

Each SunPower AC module functions independently, making your whole system more reliable, and your rooftop more productive.

With conventional technology, the system performs only as well as its weakest panel. This can dramatically reduce output due to shade or other real-world challenges, even from small debris such as leaves.

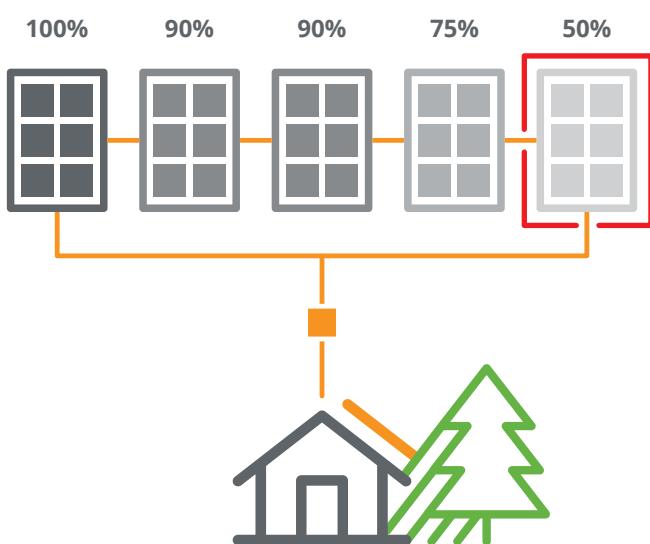


### String Inverter System

vs

### SunPower AC Energy Solutions

% of potential power



#### 50% System Power

(performs at level of weakest panel)



#### 84% System Power

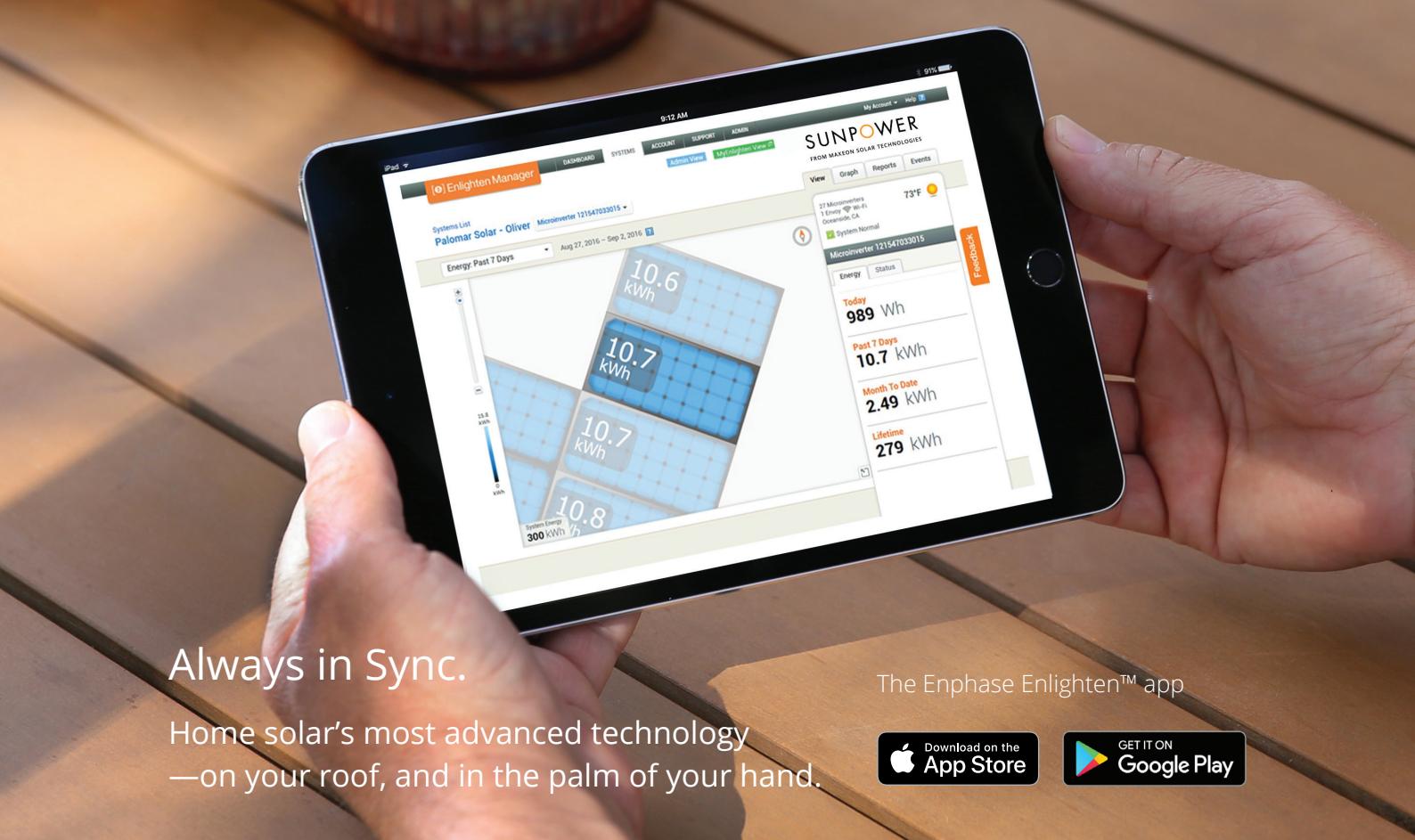
(max energy harvest)

Topology for illustrative purposes only.



## Future-proof your home's energy supply.

As your energy needs evolve, your SunPower AC energy solution offers the flexibility to increase the amount of electricity it delivers to your home. Additional panels can be added without reconfiguring system cabling or hardware, easily expanding to accommodate EV charging, AC storage, or the electrification of home appliances to name a few.



## Always in Sync.

Home solar's most advanced technology  
—on your roof, and in the palm of your hand.

The Enphase Enlighten™ app



### Panel-level monitoring\*

Have confidence in your system performance through individual data on each panel.

\*Energy consumption data, financial savings data, and module level performance data may not be available to some customers.



### Real-time views\*

See your energy and environmental data on any connected device, and share your results on social media.

\*Data provided, on average, in 5-minute intervals.



### Automatic software updates

Remain current on all utility rate updates and system improvements, hassle free.

## Remote technical support.

The Enphase Envoy™ communication gateway connects your solar array to the internet, facilitating live access to Data on system performance and critical issues.

The Envoy communication gateway sends out automatic alerts about technical issues to your installer and enables remote troubleshooting.



# The Best of Both Worlds.

Invest with confidence, knowing that the quality is proven for both SunPower panels and Enphase microinverters. Each is uniquely designed for climate extremes, tested beyond industry standards, and proven by actual field results. Each is also backed by a category-leading warranty<sup>6</sup> from the manufacturer.<sup>7</sup>

**SUNPOWER | MAXEON**

**25-yr  
SunPower  
Complete  
Confidence**

- Leading durability<sup>3</sup>
- #1 lowest degradation rate in the industry at 0.25%<sup>8</sup>
- 92% warranted power output in year 25 of operation
- 0.005% panel return rate<sup>9</sup>
- 40-year expected useful life<sup>4</sup>
- More than 3.5 billion cells, 35 million panels shipped

**SUNPOWER**  
FROM MAXEON SOLAR TECHNOLOGIES

25 years of product, power and service warranty coverage<sup>10</sup>

**SUNPOWER | PERFORMANCE**

- Leading reliability in real world conditions
- 87.2% warranted power output in year 25 of operation
- 35-year expected useful life<sup>4</sup>
- Industry's most deployed shingled cell panel



**25  
YEAR  
GUARANTEE**

**ENPHASE**

- Tested for 1 million hours
- 0.05% microinverter return rate
- No moving parts or fans
- 28 million microinverters shipped
- Category-leading inverter warranty

## A Leader in Solar Sustainability.<sup>11</sup>

We believe that solar panels should be as clean as the energy they produce. SunPower panels have helped pioneer new standards for solar industry transparency, responsible material use and recycling programs.





## Powering Positive Change™

SunPower solar technology is designed and manufactured by Maxeon Solar Technologies, a global leader in solar innovation.

- 35+ years of solar experience
- **367,000** global customers
- Industry-leading R&D investment<sup>12</sup>
- **1,000+** solar patents<sup>13</sup>
- **11** solar performance world records since 2007<sup>14</sup>

## Ready to go solar?

As a leading designer of the world's most advanced solar panels, we know quality when we see it. That's why we partner with the finest local sales and installation partners who will customise your solar system to optimise for sunshine, building materials and local regulations. Our partners are members of your community, and understand the best way to achieve your unique energy and environmental goals.

[sunpower.maxeon.com](http://sunpower.maxeon.com)

1 Solar warranty provided by Maxeon Solar Technologies. Claim based on datasheet review of websites of top 20 manufacturers per IHS, as of May, 2019. Microinverter warranty provided by Enphase. Claim based on Enphase competitive review, 2020.

2 Based on search of datasheet values from websites of top 20 manufacturers per IHS, as of January 2019.

3 Jordan, et. al. Robust PV Degradation Methodology and Application, PVSC 2018.

4 Performance panels expected useful life of 35 years. Source: "SunPower P-Series Technology Technical Review," Leidos Independent Engineer Report, 2016. SunPower Maxeon panels expected useful life of 40 years. Source: "SunPower Module 40-Year Useful Life," Useful life is 99 out of 100 panels operating at more than 70% of rated power.

5 Fifteen SunPower Maxeon 5 415 W, 22.2% efficient, compared to nineteen Conventional Panels (330 W mono PERC, 19% efficient, approx. 1.64 m<sup>2</sup>), compared to seventeen SunPower Performance 3 375 W, 19.1% efficient panels. All resulting system sizes are 6.2kW DC.

6 SunPower Maxeon claim based on datasheet review of websites of top 20 manufacturers per IHS, as of May, 2019. Enphase claim based on internal competitive review, 2020.

7 DC solar panel covered by SunPower Complete Confidence Warranty (25-year limited power and limited product warranty). Microinverter covered by 25-year limited product warranty by Enphase. AC modules shall be connected to Enphase Monitoring hardware (ENVOY) to enable Enphase product warranty.

8 As of 2018, Jordan, et al, "Robust PV Degradation Methodology Application" PVSC 2018 and "Compendium of Photovoltaic Degradation Rates" PIP 2016.

9 A Comparative Study: SunPower DC Solar Module Warranty Claim Rate vs. Conventional Panels." SunPower Corporation, 2019

10 Service applicable only to PV Module originally installed in Belgium, France, Germany, Italy, The Netherlands, or the United Kingdom. Scope of warranty coverage varies by country. For more information about the warranty terms and conditions available in your country, visit [maxeon.com/legal](http://maxeon.com/legal).

11 SunPower Panels won the 2019 Sustainability Award from pv magazine, a solar trade publication. The award recognized that SunPower DC panels were made with the first manufacturing to achieve Cradle to Cradle certification, NSF certification for a landfill-free solar factory, product life expectancy and recyclability. Details can be found on pv magazine's website.

12 Based on cumulative investment from 2007 through 2018. Osborne, "R&D spending analysis of 21 PV manufacturers." PVTECH.com 2019.

13 Includes patents from U.S. and other global markets. U.S. Patents are exclusively licensed from SunPower Corporation to Maxeon Solar Technologies. Non-U.S. Patents are owned by Maxeon.

14 Source: Green, et. al. "Solar cell efficiency tables." Progress in Photovoltaics. Various years.