



Maxeon 5 AC Module System

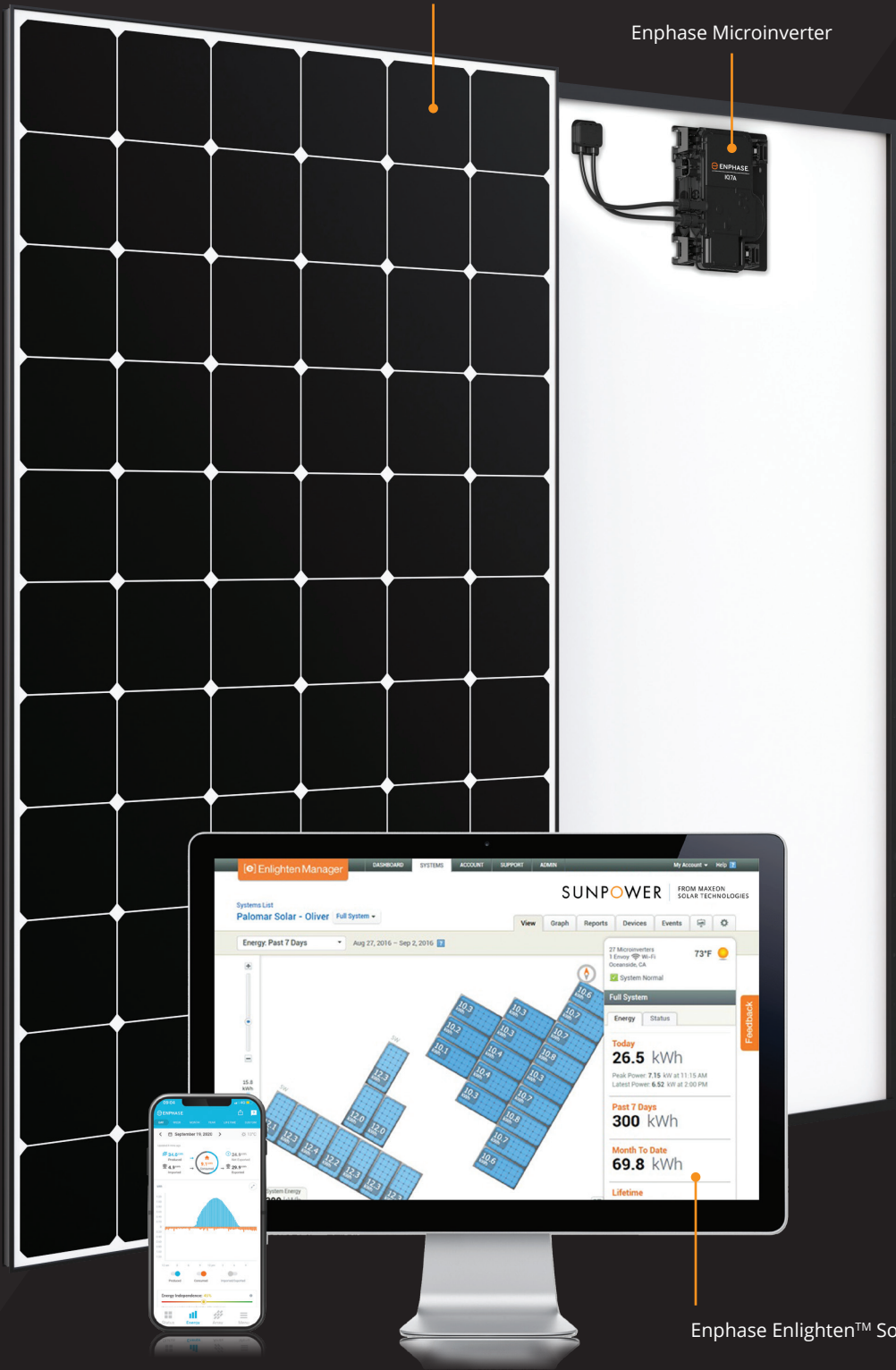
SUNPOWER

FROM MAXEON
SOLAR TECHNOLOGIES

SunPower Maxeon 5 AC Module

SunPower Maxeon 5 Solar Panel

Enphase Microinverter



Enphase Enlighten™ Software

SUNPOWER | MAXEON 5 +



Fundamentally different. And better.

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?

Only the Maxeon 5 AC Module combines Australia's most powerful home solar panels¹ with advanced microinverter technology from Enphase that maximises their individual potential. The result? 50% more energy than conventional solar systems over 25 years², and superior output in real-world conditions. Our system even wakes up earlier and stays on later than conventional home solar³, working as hard as you do.

View your performance online with the confidence of your 25 years of category-leading warranty protection⁴. And our 35 years of solar experience.

Finally. Home solar that works harder. And smarter.

Powering Positive Change™

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

- Operating in Australia since 2008
- **300,000** global customers
- Industry-leading R&D investment⁵
- **900+** solar patents⁶
- **11** solar performance world records since 2007⁷



What is a microinverter?

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



Powerfully Simple.

Powerful panels mean you'll need fewer on your roof. In the case below, just fifteen Maxeon 5 panels equal the same system power of twenty conventional panels.⁸ This gives you a compact design, and space to easily expand your system if you electrify your car or home appliances. And with the microinverters elegantly hidden beneath each panel, you won't need bulky string inverters on your walls. Sometimes less is truly more.

String Inverter System

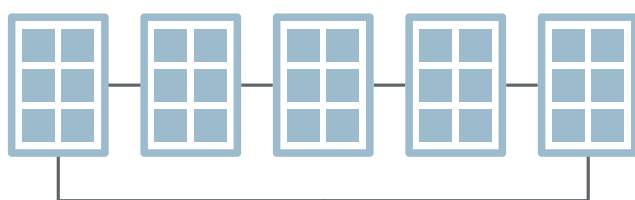
vs

Maxeon 5 AC Module System



In a conventional setup, one inverter controls the output of a whole solar array, a design with a single point of failure.

The Maxeon 5 AC Module distributes this risk across every panel through a far more reliable technology: Enphase microinverters, backed by a 25-year warranty.

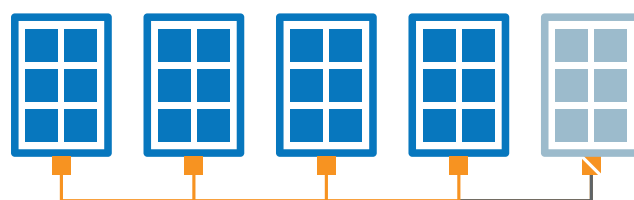


Single point of failure



0% System Power

if 1 string inverter fails



Distributed architecture



80% System Power

if 1 microinverter fails



Maximise your savings, and minimise your headaches.

SunPower Maxeon 5 is the most powerful home solar panel in Australia, with the highest durability you can buy⁹ and an industry-leading warranty.¹⁰ When combined with Enphase microinverters, the system generates 50% more energy than conventional solar over 25 years.² It is, quite simply, the most advanced solar technology for your roof.

Better technology. Better together.

Make the most of every moment.

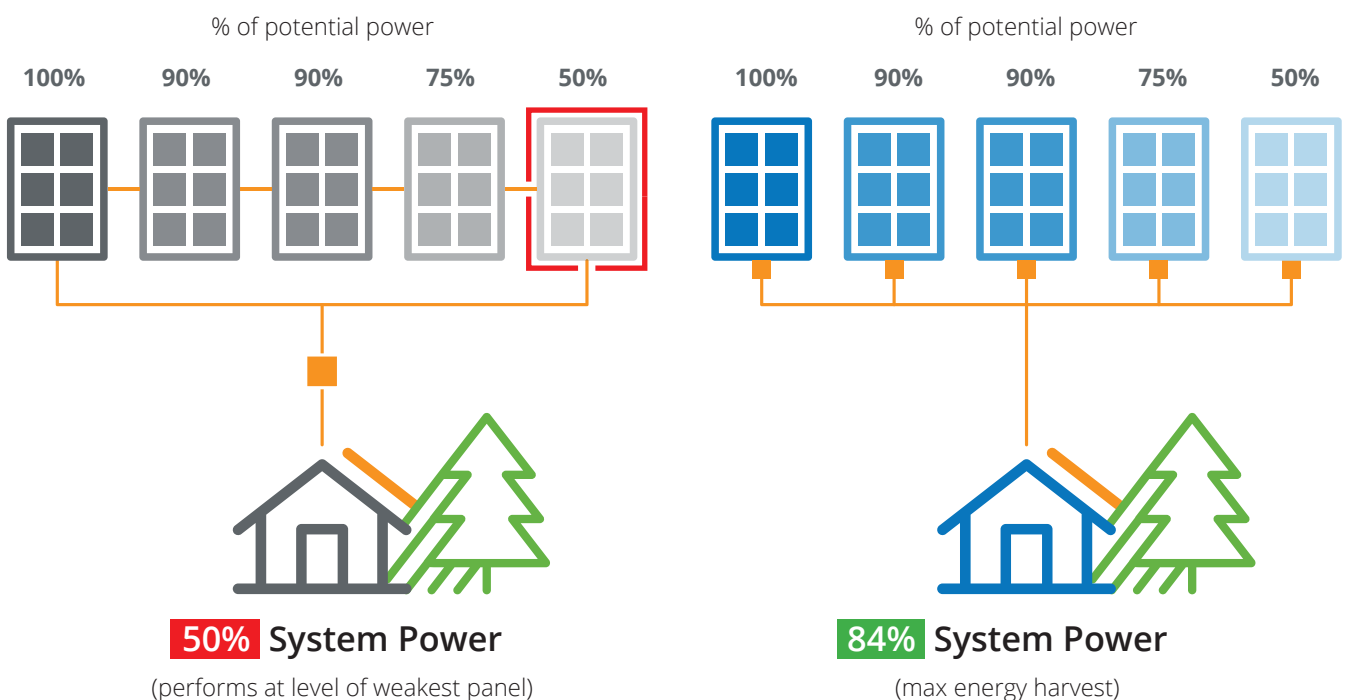
Each Maxeon 5 AC module functions independently, making your whole system more reliable, and your rooftop more productive. With conventional technology, the system performs only as well as its weakest panel. This can dramatically reduce output due to shade or other real-world challenges, even small debris like leaves.



String Inverter System

vs

Maxeon 5 AC Module System



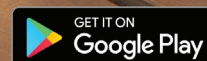
Topology for illustrative purposes only.



Always in Sync

Australia's most advanced solar 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 Maxeon 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 warranty¹¹ from the manufacturer.¹²



SUNPOWER
FROM MAXEON SOLAR TECHNOLOGIES

- #1 durability⁹
- 0.005% panel return rate¹³
- 40-year expected useful life¹⁴
- 3.5 billion cells, 35 million panels shipped
- 25 years of product, power and service warranty coverage¹⁵



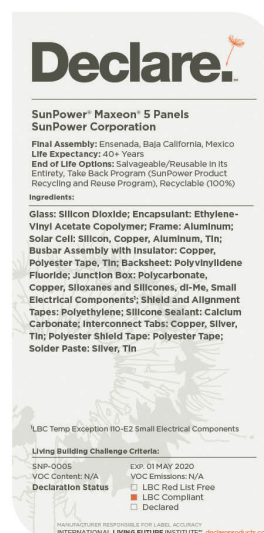
ENPHASE

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

The Leader in Solar Sustainability.¹⁶

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

Declare and Cradle to Cradle labels refer to Maxeon 5 DC panels.





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 optimize 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

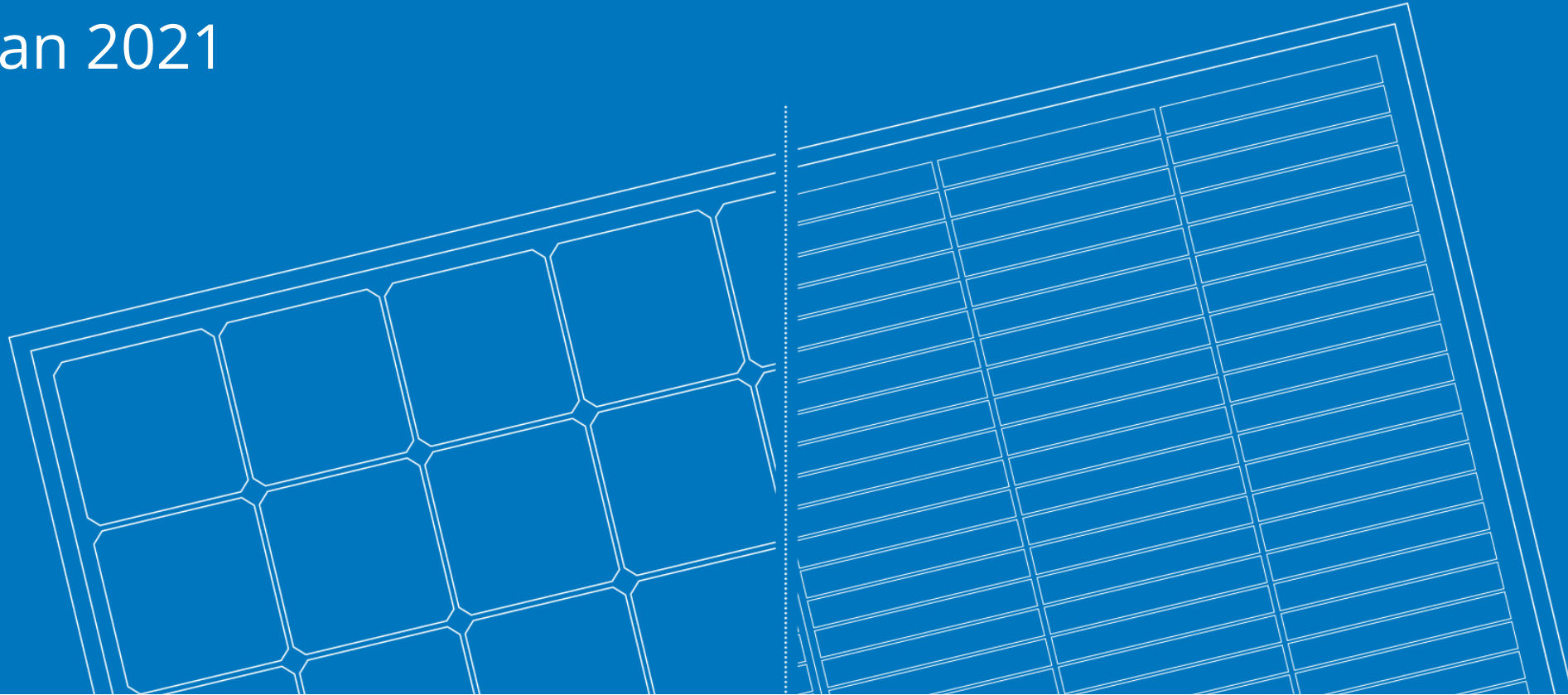
- 1 Based on datasheet review of websites of top 20 66-cell format manufacturers per IHS, as of June, 2020.
- 2 Source: PVsyst simulation. Assumptions: Amsterdam residential roof at 30 deg tilt with portrait installation. Average system size is 6,0 kWp SunPower Maxeon ACM module: Max 5 AC 415W (Enphase IQ7A-72-x-INT). Conventional modules Mono PERC 310W (0,55% annual degradation rate) + leading string inverter.
- 3 SunPower Maxeon solar cells are more receptive to blue and red-light spectrum, enabling higher energy production in cloudy and low-light conditions. Enphase burst technology lets microinverters produce more at dawn, dusk, and in low-light conditions, for a longer solar day.
- 4 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.
- 5 Based on cumulative investment from 2007 through 2018. Osborne. "R&D spending analysis of 21 PV manufacturers." PVTech.com 2019
- 6 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.
- 7 Source: Green, et. al. "Solar cell efficiency tables." Progress in Photovoltaics. Various years.
- 8 Fifteen SunPower Maxeon 5 415 W, 22.2% efficient, compared to twenty Conventional Panels (310 W mono PERC, 19% efficient, approx. 1.64 m²). Both resulting system sizes are 6.2kW DC.
- 9 Jordan, et. al. Robust PV Degradation Methodology and Application, PVSC 2018.
- 10 Based on Oct. 2019 review of warranties on manufacturer websites for top 20 manufacturers per IHS 2019.
- 11 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.
- 12 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.
- 13 A Comparative Study: SunPower DC Solar Module Warranty Claim Rate vs. Conventional Panels." SunPower Corporation. 2019.
- 14 SunPower Panel 40-year Useful Life. SunPower whitepaper. 2013.
- 15 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
- 16 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.

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SUNPOWER
FROM MAXEON SOLAR TECHNOLOGIES

INTRODUCING MAXEON 5 AC

28 Jan 2021



SUNPOWER

FROM MAXEON
SOLAR TECHNOLOGIES



AGENDA

Overview

- 1. The Most Advanced Module on the Market**
- 2. Guaranteed to Maximise what Home Solar Can Do**
- 3. Designed for your Unique Customer Needs**

Summary & STCs

HOME SOLAR'S MOST ADVANCED
TECHNOLOGY. INTEGRATED.

THE FUTURE IS HERE

Differentiate with SunPower

THEN



The old "Good, better, best" offering.

NOW



The full portfolio approach with SunPower.

NEXT

SUNPOWER
MAXEON 5



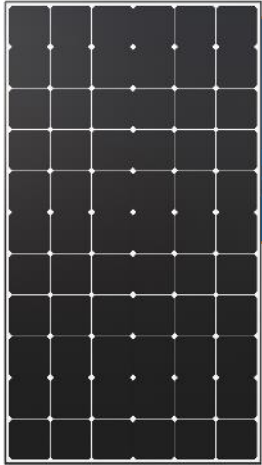
MAXEON 5 AC
415W, 410W, 400W

Making the best, even better.

Introducing Maxeon 5. The first of its kind AC module in Australia.

PREMIER

Differentiate with Two Best-in-Class Category Leaders



SUNPOWER
FROM MAXEON SOLAR TECHNOLOGIES

+ **ENPHASE**

#1 Home Solar
Panel Power¹
(415W)

#1 Global
Microinverter
Market Share²



36 million
solar panels

600,000+

900+



units shipped



global homes



patents

27 million
microinverters

1 million +

370+

Home solar's most advanced technology.

¹ Based on datasheet review of websites of top 20 66-cell format manufacturers per IHS, as of June, 2020. ² Source: Enphase analysis, 2020.

PREMIER

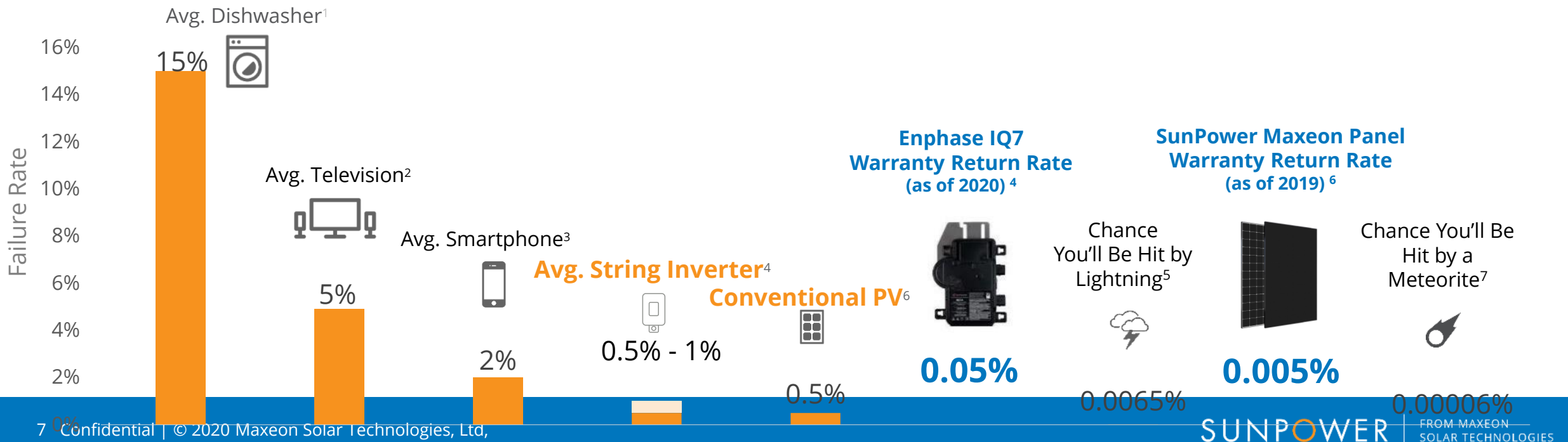
Australia's strongest warranty – a panel and inverter 25-year guarantee

SUNPOWER | MAXEON 5 + ENPHASE IQ 7A



PV Category's Best Combined Power, Product and Service Warranty¹

Microinverter Category's Longest Product Warranty²



GUARANTEED TO MAXIMISE
WHAT HOME SOLAR CAN DO.

STRONGER

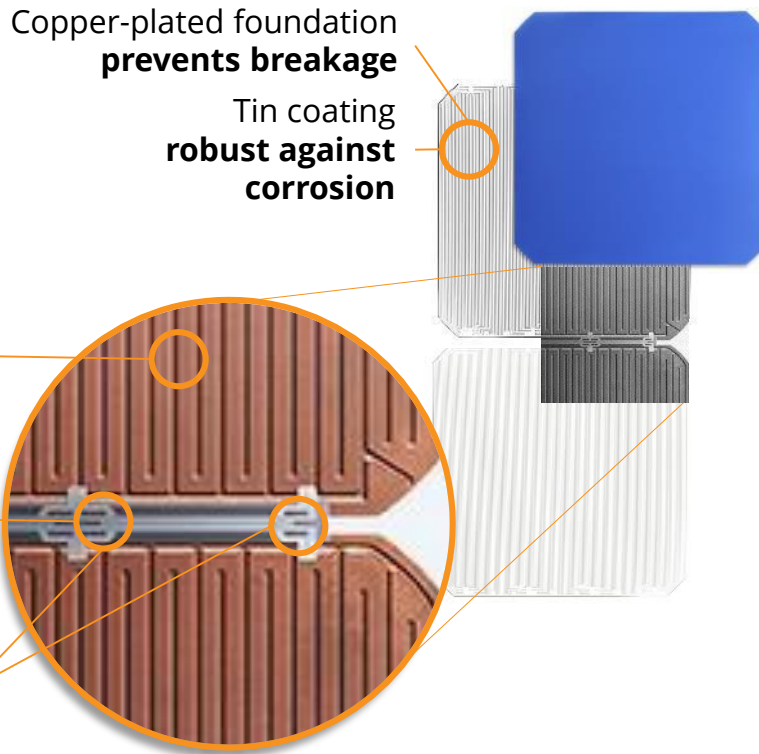
More Reliable - Corrosion and Temperature Swing Risk



SUNPOWER | MAXEON GEN 5
solar cell

+ ENPHASE IQ 7A
microinverter

Protective Metal Foundation



IP67-rated enclosure protects against moisture

Air Gap allows airflow between MI and module

Protective Enclosure



75% fewer components than strings and optimizers¹

No moving parts or fans
Engineered specifically to Maxeon 5 specs

Integrated to solar module at quality-controlled factory, reducing field wiring operations

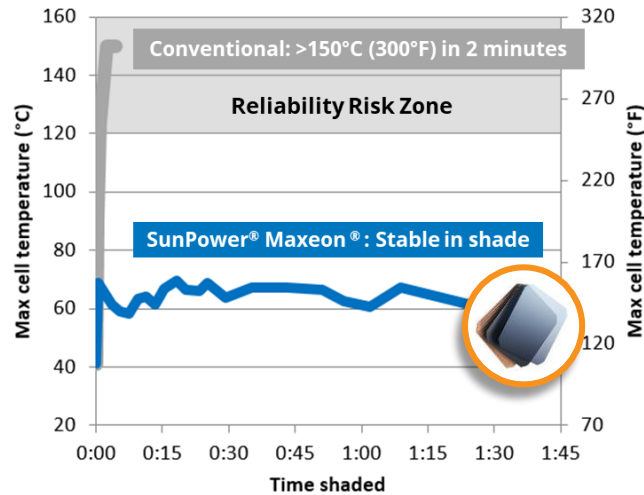
¹ Source: Enphase analysis.

STRONGER

Reliable in Shade – Hot Spot Resistant, Cooler Operating Temps



Shaded Cell Temperature without diodes¹



Each product is demonstrated to **remain cool under partially shaded conditions.**



- ✓ Unique architecture manages shade differently
- ✓ When shaded, generate 90% less heat and spread the heat uniformly across cell, so the temp. stays lower - a key factor in optimizing performance and mitigating hotspots¹

- ✓ Internal temp. typically <10° C over external ambient²
- ✓ Reduces stress on internal components
- ✓ Compares favorably to internal string inverter temps²

¹Campeau, Z. et al. "SunPower Panel Degradation Rate," SunPower white paper, 2013 ²Enphase analysis.

STRONGER

More Reliable | Tested Beyond Industry Standards



SUNPOWER | MAXEON 5
solar panels

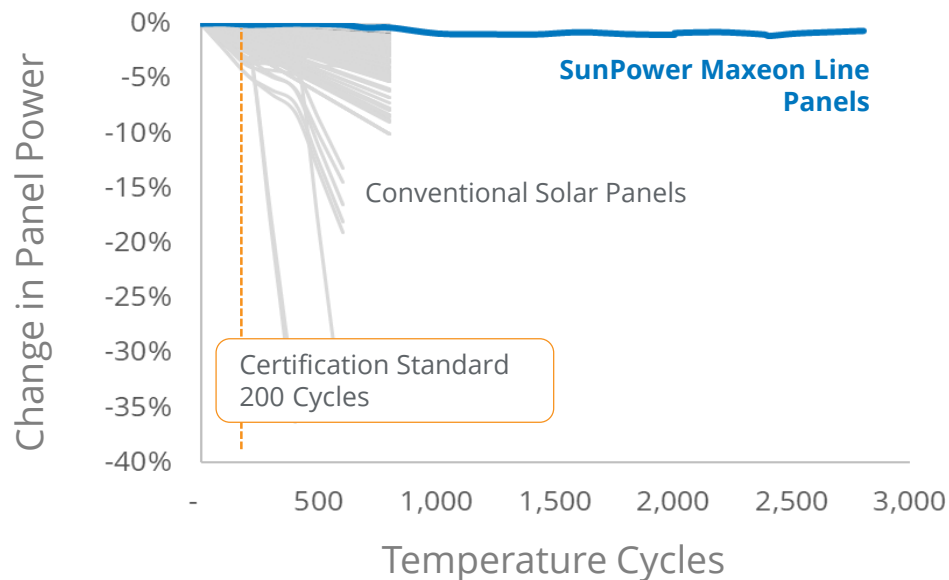


ENPHASE IQ 7A
microinverter

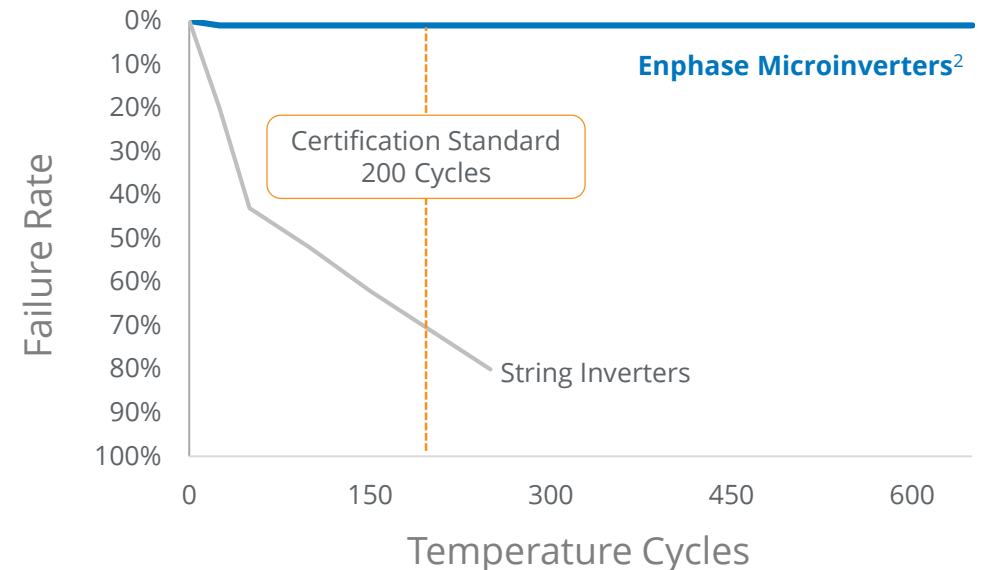
✓ Highest durability panels you can buy¹

✓ More than 1 million hours of testing

Excellent Reliability in Long-Term Thermal Cycling Tests



¹Jordan, et. al. Robust PV Degradation Methodology and Application, PVSC 2018.



² Enphase 1,000,000 Power-On Hours of Rigorous Testing.

SAFER

Reliability - Lower Voltage



Reliably safe during installation

- ✓ Low voltage mitigates arc-fault risk
- ✓ Integrated MIs mean less wiring on the roof
- ✓ No more 600 – 1000V (DC) lines for your crews

Reliable for any roof.



STRONGER

More Reliable | System Design – Shade Risk



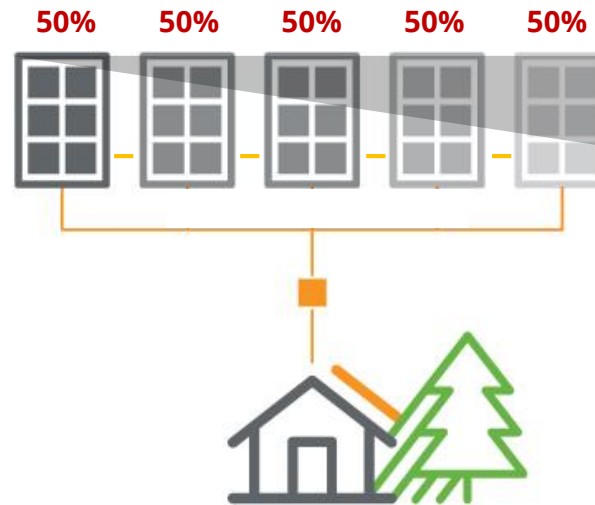
Because they function independently, microinverters create a more reliable system.

No 'Christmas light effect' due to:

- ✓ Shading and obstruction
- ✓ Non-linear degradation
- ✓ Temperature difference
- ✓ Soiling
- ✓ Module mismatch

Don't make your system only as strong as it's weakest link.

String Inverter System

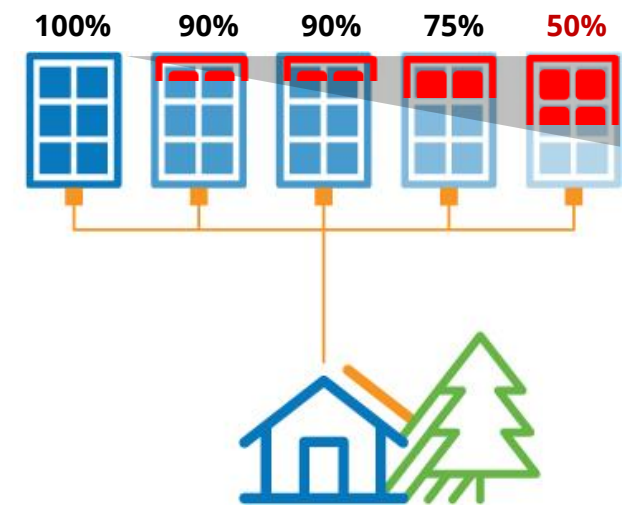


50% System Power

(performs at level of weakest panel)

vs.

Microinverter System



84% System Power

(max energy harvest)

Topology for illustrative purposes only.

STRONGER

More Reliable | System Design – Inverter Risk

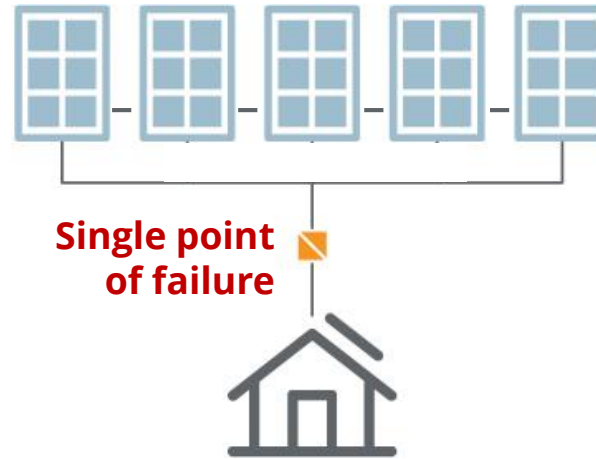


Because they function independently, microinverters create a more reliable system.

- ✓ More system uptime
- ✓ No total system outages

Don't make your system only as strong as it's weakest link.

String Inverter System

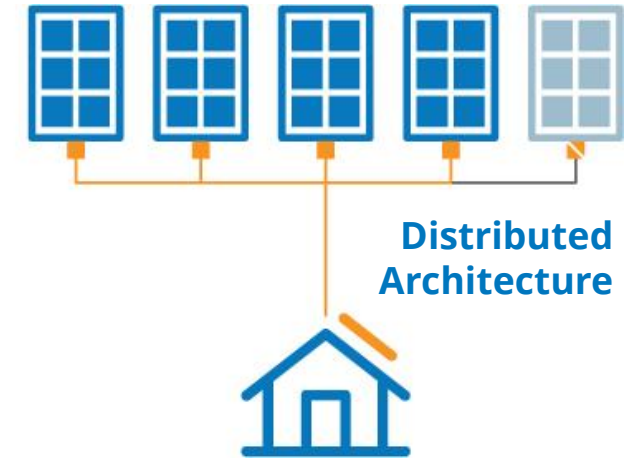


0% System Power

if 1 string inverter fails

vs.

Microinverter System



80% System Power

if 1 microinverter fails

STRONGER

Spectral Response Advantage



Each product is demonstrated to **produce more on cloudy days and during sunrise and sunset.**

Maxeon solar cells

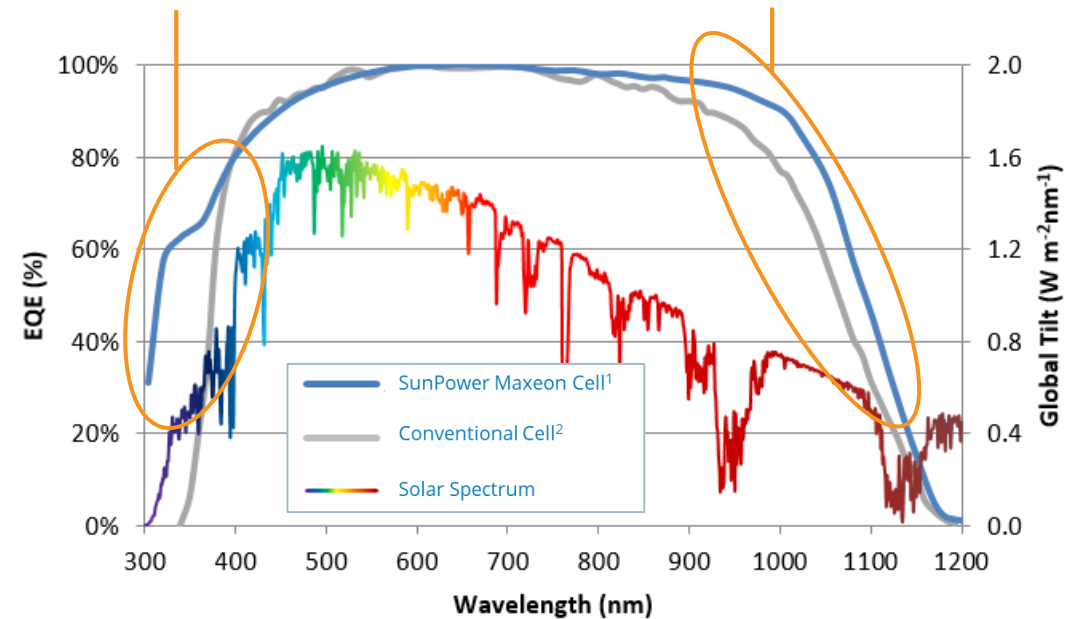
- ✓ More receptive to blue and red spectrum
- ✓ Superior spectral performance

Enphase microinverter

- ✓ 'Burst Mode' increases efficiency under low light conditions
- ✓ Requires only 22V DC to activate

More light from the blue parts of the spectrum, enables higher energy production in cloudy conditions

More light from the red parts of the spectrum, enables higher energy production in low-light conditions



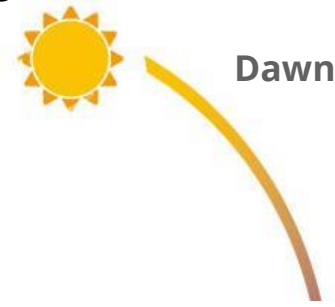
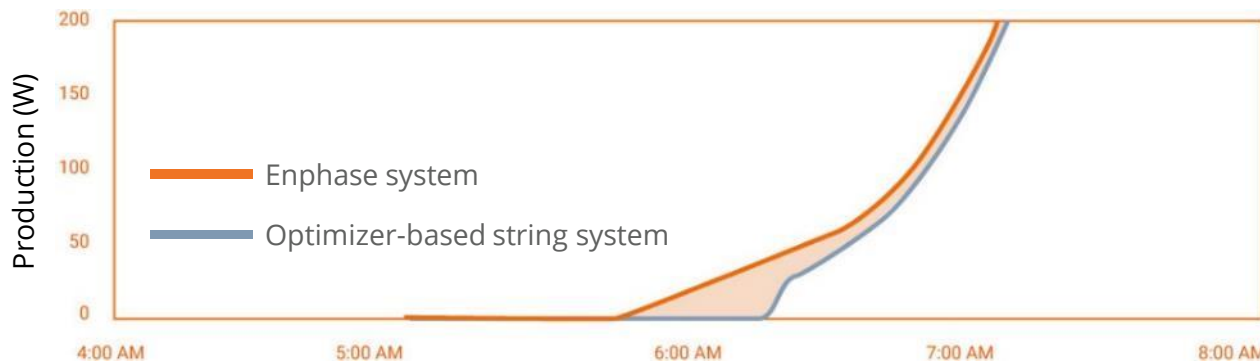
¹ National Renewable Energy Lab measurements. ² Green, M. et al., "Solar cell efficiency tables (version 36)" Progress in Photovoltaics, 18(5), 46-352.

STRONGER

Enphase “Burst Mode” Advantage vs DC Optimizers

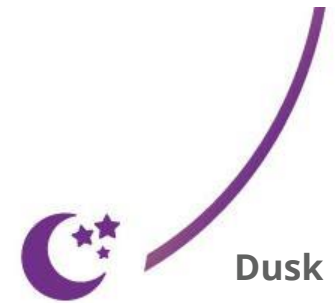
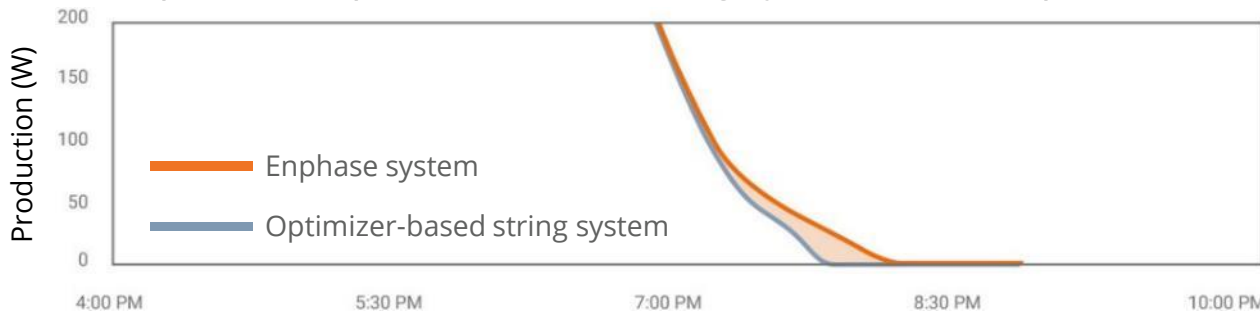


Enphase vs optimizer based string system - Sunrise performance



Burst Mode ensures that Enphase microinverters produce more power and have **more energy yield** on **cloudy days** and during **sunrise** and **sunset**

Enphase vs optimizer based string system - Sunset performance

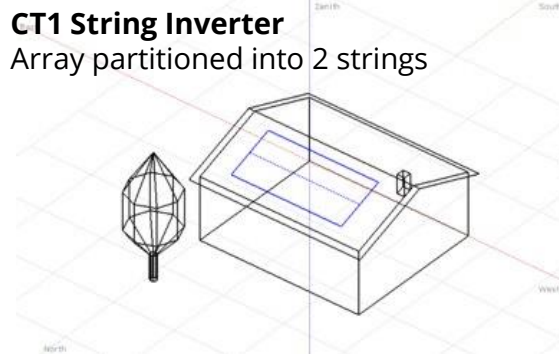
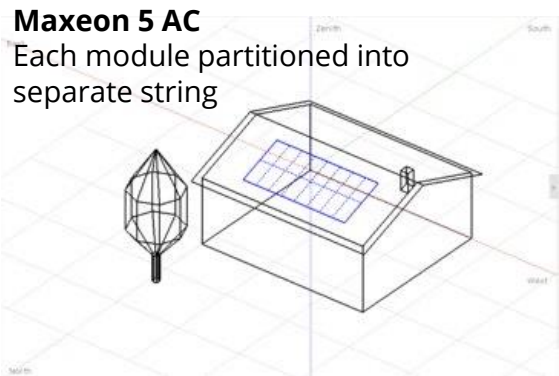


STRONGER

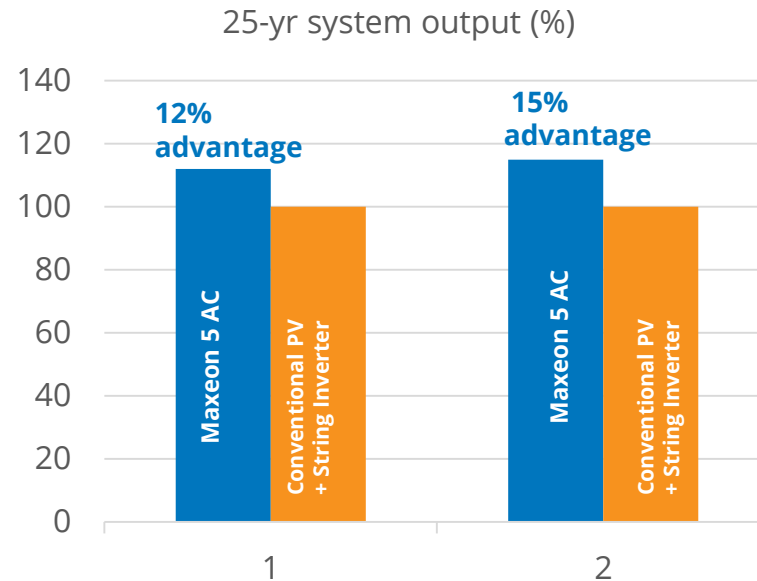
Efficiency advantages exposed by real world environments



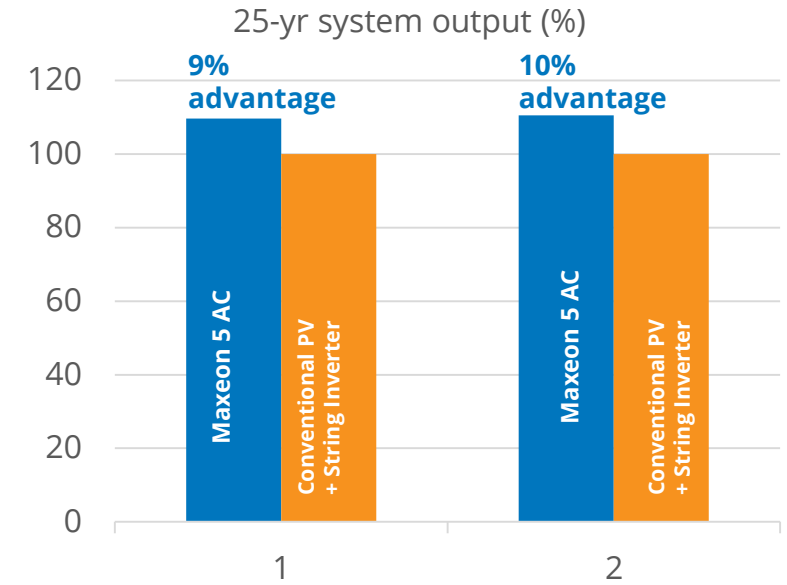
The SunPower AC Module yield advantage is even stronger in partial shade.¹



Maxeon 5 vs CT1 String



Maxeon 5 vs CT1 DC Optimisers

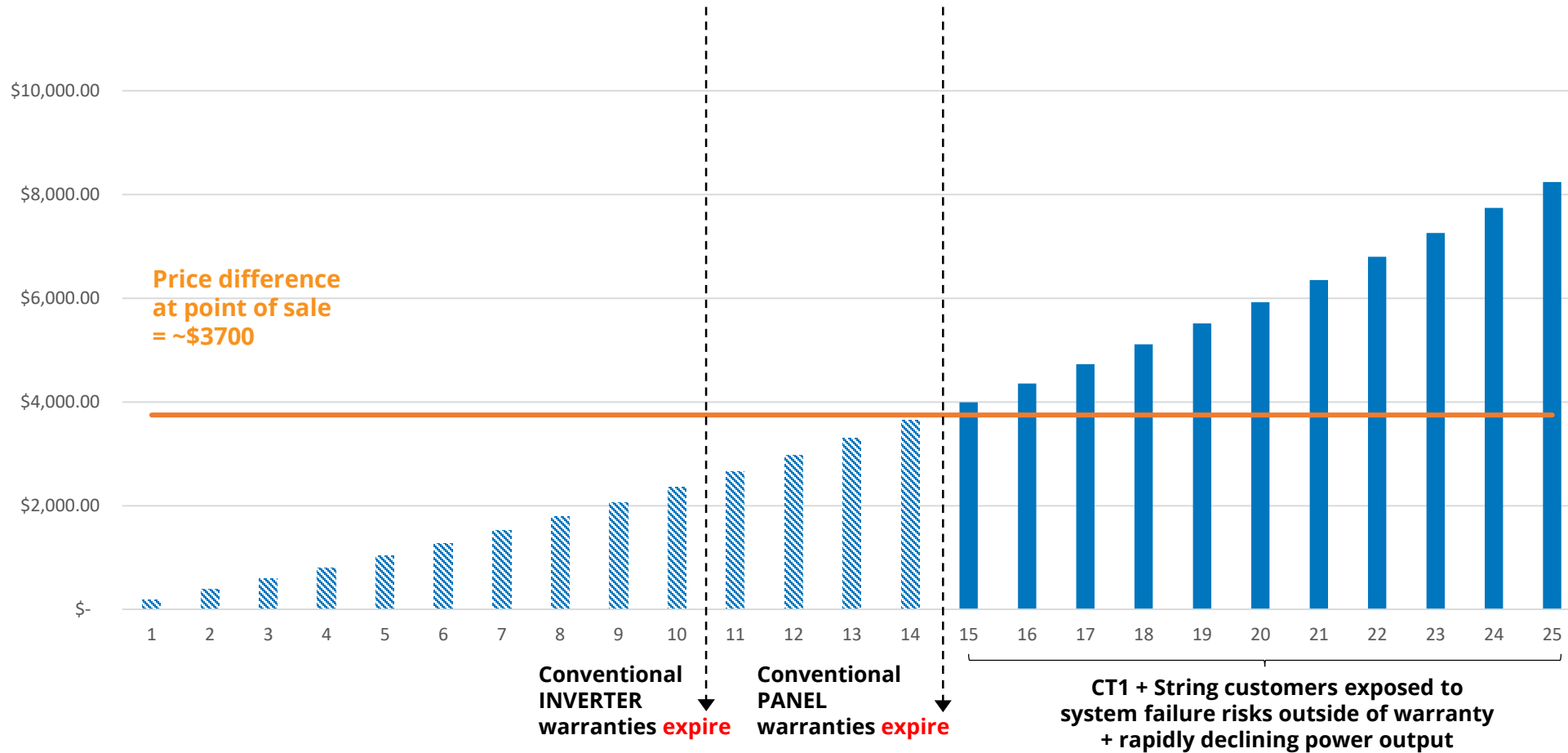


¹Source: PVsyst simulation. Assumptions: Sydney residential roof at 20 deg tilt with portrait installation. Soiling: 0.8% (As per Enphase PVsyst Guidelines), 2% for String Inverter. Azimuth: True North. SunPower Maxeon ACM module: Max5 AC 415W (Enphase IQ7A-72-x-INT). Conventional modules: Mono PERC 370W (0,55% annual degradation rate) + leading string inverter. Feed in tariff rate: \$0.15/kWh. Self-consumption rate: \$0.35/kWh. Self-consumption percentage: 70%. Degradation variation - Module warranted degradation + PVsyst aging degradation (DC string mismatch losses).



WORTH THE INVESTMENT

Cumulative revenue comparing yield & degradation of ACPV vs CT1 370W String



Maxeon 5 customers have:

- **POS premium repaid at year 15**
- **12+% more energy** over the life of your system
- **Peace of mind** their system will work for twice as long

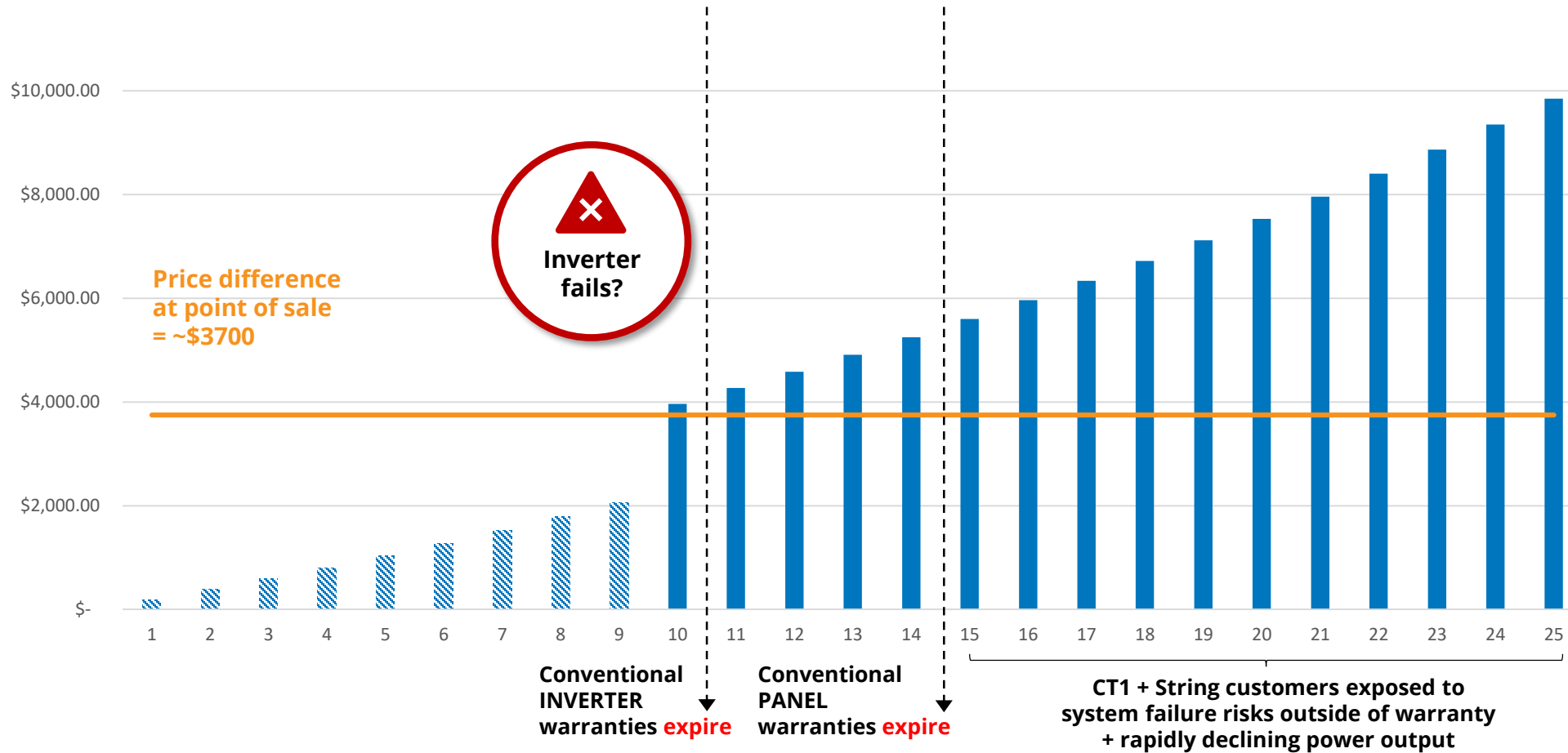


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WORTH THE INVESTMENT

Cumulative revenue comparing yield & degradation of ACPV vs CT1 370W String



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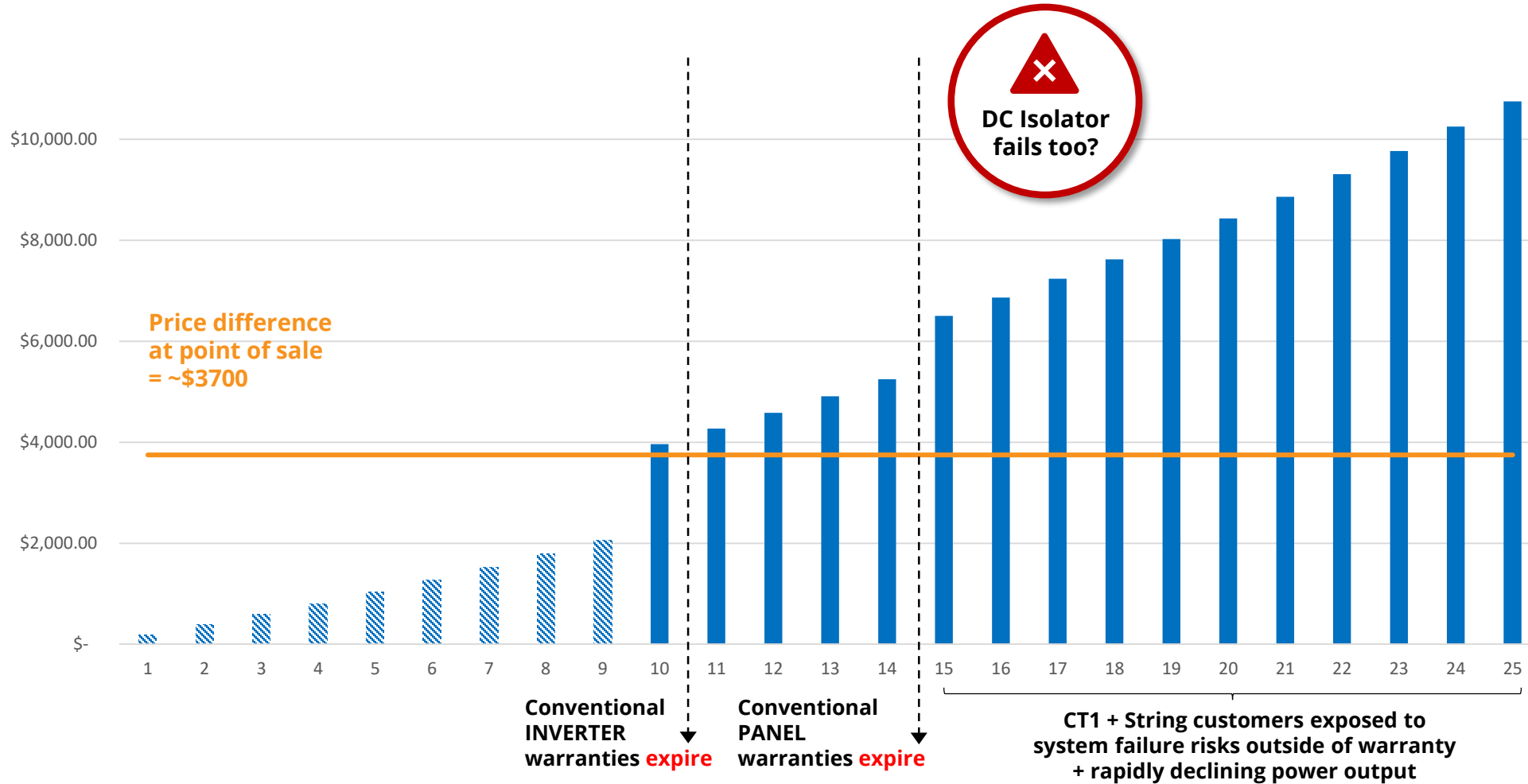


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DESIGNED FOR YOUR UNIQUE
CUSTOMER NEEDS.

SIMPLER

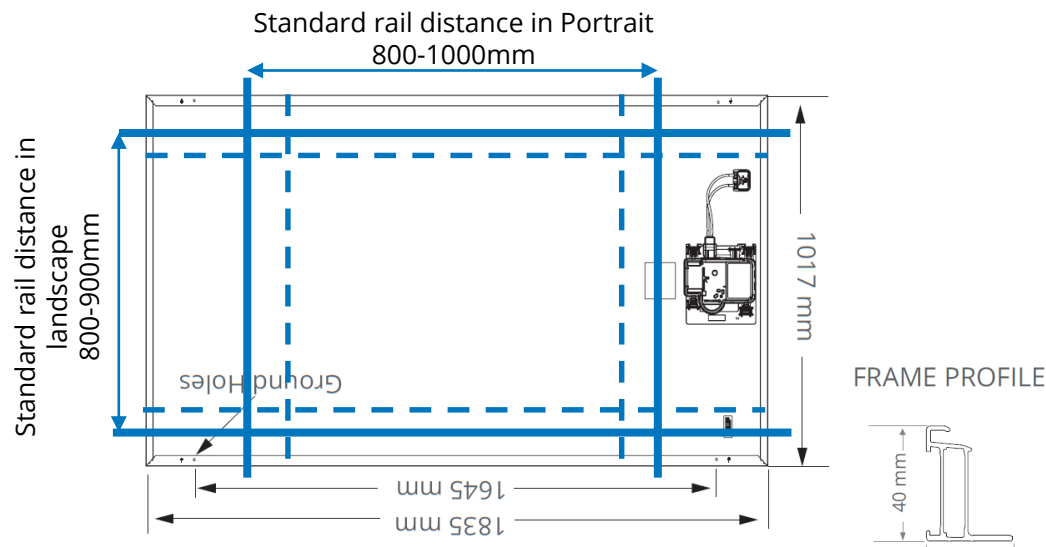


Easy to install

- ✓ Easy fit to portrait and landscape configuration with a module length of 1.83m
- ✓ Easy handling with module width of 1.02m combined with a new frame
- ✓ Easy AC cabling with AC wire close to rail support

Flexible to Design

- ✓ No string sizing
- ✓ All-AC design
- ✓ Flexible panel placement
- ✓ No need to ID string inverter location



SIMPLER

Easy to monitor for the partner and the end customer



Monitoring and Installer Support provided by Enphase



Installer Toolkit

Enable crew to configure and verify the operation of each system.



Enlighten™ manager

Panel level monitoring. Over-the-air firmware updates. Early failure protection.



MyEnlighten™ App

Energy performance and education for the homeowner.



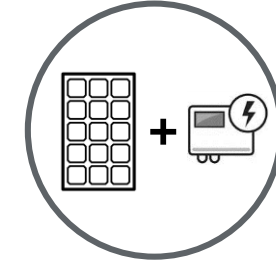
MAXEON 5 AC 100% VISIBILITY

INCLUDED:

- ✓ SYSTEM LEVEL MONITORING
- ✓ PANEL LEVEL MONITORING
- ✓ CONSUMPTION MONITORING

💡 Interested in adding storage in the future?

The only reliable way to estimate the right battery is by having an accurate history of production paired with consumption.



Avg PV + String Inverter ~30% VISIBILITY

INCLUDED:

- SYSTEM LEVEL MONITORING

AT ADDITIONAL COST:

- 💰 PANEL LEVEL MONITORING
- 💰 CONSUMPTION MONITORING

💰 Want to save time and money?

Panel level monitoring and early detection by the customer allows installers to remotely troubleshoot potential issues and efficiently schedule repairs.

TROUBLESHOOTING & CUSTOMER SERVICE

What if I have an issue?



1. Remotely troubleshoot the issue.

Enlighten manager allows panel level monitoring and over-the-air firmware updates.

If the system is connected to the Enlighten monitoring platform you can run diagnosis remotely with or without Enphase support team.

2. If an issue is detected, **contact the Enphase Support Team** to open a ticket before going on site.

3. If there is need for a replacement, **Tier 1 support will be provided through Enphase support team.**

If the issue concern:

- **microinverter:**
Enphase will support the case according to its warranty
- **DC panel:**
Maxeon Solar Technologies will support the case according to its warranty.

4. The issue will be replaced at the component level before replacing the whole panel.

You can replace the microinverter keeping the same PV panel. No need to replace both. Microinverter can be easily swapped with a new one on the roof.

SIMPLER

Simple to Upgrade



Easily expand system and upgrade with total design flexibility.

The solution is designed to be future proof.



Easily add panels



Support home electrification



Electric Vehicle



Air Conditioner, Kitchen Appliances



AC storage

KEY TAKEAWAYS

KEY MAXEON 5 ADVANTAGES



Most Powerful Residential Panel on the Market

- More power in smaller area
- Industry-leading shade performance



Higher Reliability

- Prolonged usable sunlight
- POS premium repaid over time while ensuring reliable system output for 2x the time



100% Visibility at the Panel Level



Flexible Design

- No string sizing
- Unlimited configurations



Greater Durability

- Australia's strongest warranty
- Redundant pathways for energy to flow



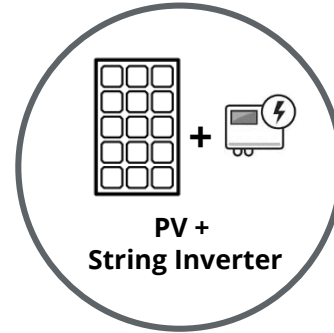
Future proof

- Easily build on to system
- Remote access for future regulations



Increased Safety

- Low voltage on roof
- Rapid shutdown is standard



- ✗ **Less Durable**
 - Single point of system failure
 - On average 5x shorter warranty

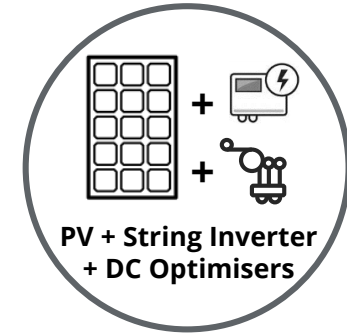
- ✗ **Less Reliable**
 - Productivity varies by string length
 - Performance inhibited by shade/soiling

- ✗ **Incomplete monitoring**

- ✗ **Design Constraints**
 - Dependent on string sizing
 - Minimum of 8 panels

- ✗ **Difficult to expand**

- ✗ **Greater risk of failure**
 - Up to 600 volts DC on roof
 - Additional costs to be shutdown compliant



- ✗ **Less Durable**
 - Single point of system failure
 - On average 2x shorter warranty

- ✗ **Less Reliable**
 - Productivity varies by string length
 - Performance inhibited by shade/soiling

- ✗ **Incomplete monitoring**

- ✗ **Design Constraints**
 - Dependent on string sizing
 - Minimum of 8 panels

- ✗ **Difficult to expand**

- ✗ **Greater risk of failure**
 - Up to 600 volts DC on roof
 - Additional costs to be shutdown compliant


THE DETAILS

DATASHEET REVIEW

DC Version + MI – CEC Listing

SUNPOWER | MAXEON
Fundamentally different, and better

Back Contact White Backsheet Black Frame Residential



MAXEON 5

POWER RANGE: 390-415 W | EFFICIENCY: Up to 22.0%

Hundreds of patents, decades of design and five cell generations have led to the new Maxeon 5 solar panel. Part of the recordsetting SunPower Maxeon product line, Maxeon 5 pushes the boundaries of solar innovation, reliability and sustainability.¹

SunPower Maxeon panels are world-renowned for their energy production and savings advantages that combine unmatched efficiency and reliability with an industry-leading warranty and an estimated 40-year useful life.^{1,2,4}


Maximum Lifetime Energy and Savings
The SunPower Maxeon 5 solar panel is designed to deliver 35% more energy in the same space over 25 years in real-world conditions such as partial shade and high temperatures.^{1,5}

A Better Product. A Better Warranty.
The 25-year SunPower Complete Confidence Panel Warranty is backed by testing and field data from more than 30 million SunPower Maxeon panels deployed—and a demonstrated warranty return rate of .005%.⁶

• Year 1 Minimum Warranted Power Output	98.0%
• Maximum Annual Degradation	0.25%
• Year 25 Warranted Power Output	92.0%

Leadership in Sustainable Manufacturing
SunPower Maxeon panels—and the facilities in which they are produced—raise the bar for environmental and social responsibility. Included below are highlights of the certifications and recognition received by some of our products and manufacturing sites.

sunpower.maxeon.com



Data Sheet
Enphase Microinverters
Region: APAC

Enphase IQ 7A Microinverter

The high-powered smart grid-ready **Enphase IQ 7A Micro**™ dramatically simplifies the installation process while achieving the highest system efficiency for systems with 60-cell / 120-half-cell and 72-cell / 144-half-cell modules.

Part of the Enphase IQ System, the IQ 7A Micro integrates with the Enphase Envoy-S™, Enphase IQ Battery™, and the Enphase Enlighten™ monitoring and analysis software.

The IQ Series Microinverters extend the reliability standards set forth by previous generations and undergo over a million hours of power-on testing, enabling Enphase to provide an industry-leading warranty.



High Power

- Peak output power 364 VA

Easy to Install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling
- Built in rapid shutdown compliant

Efficient and Reliable

- Optimized for high powered 60-cell / 120-half-cell and 72-cell / 144-half-cell modules
- Highest EU efficiency of 96.5%
- More than a million hours of testing
- Class II double insulated (IP2) enclosure

Smart Grid Ready

- Complies with advanced grid support, voltage and frequency ride-through requirements
- Envoy and Internet connection required
- Configurable for varying grid profiles

To learn more about Enphase offerings, visit enphase.com/au



AC Version – Customer Sales Use

SUNPOWER | MAXEON
Fundamentally different, and better

Back Contact AC Module White Backsheet Black Frame Residential



MAXEON 5 AC

Power Range: 400 – 415 W | EFFICIENCY: Up to 22.2%

The new SunPower Maxeon 5 AC Module combines home solar's most powerful panel with the world's most advanced inverter technology. The result is an elegant, optimized solution for any roof.¹

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sunpower.maxeon.com



Please note: While the IEC and the CEC worked to develop a new certification process for ACMs, the SunPower Maxeon 5 module was registered as two separate components: a SunPower Maxeon 5 DC panel and the Enphase IQ7A microinverter.

STC ASSIGNMENT FORM

2 INSTALLATION DETAILS

Address of installation¹:

	State	Postcode
--	--------------	-----------------

Is there more than one Solar PV installation at this address? Yes No

If yes to above, please describe where this system is installed in comparison to previous Solar PV systems at the address:
 e.g. 'Upgrade to original installation – New panels lay to the west of original set' or 'On roof of granny flat'

3

Panel Brand	Maxeon
Panel Model	SPR-MAX5-415
Inverter Manufacturer	Enphase Energy New Zealand Limited
Inverter Series	IQ 7A
Inverter Model Number	IQ7A-72-2-INT
Number of panels	16
Panel serial number/s	Q48M30937280, Q48M30937281, Q48M30937282
Installation date	22 Jan 2021
Rated power output (kW)	6.64 kW



SUNPOWER

MODEL: SPR-MAX5-415-E3-AC

DC Section (certified as of SPR-MAX5-415)

Rated DC Power (Pmax) ¹ (+/-50%)	415	W
Voltage (Vmp)	40.3	V
Current (Imp)	10.3	A
Open-Circuit Voltage (Voc) (+/-3%)	48.2	V
Short-Circuit Current (Isc) (+/-3%)	10.9	A
Maximum Series Fuse	20	

¹Standard Test Conditions: 1000 W/m², AM 1.5, 25° C
 Suitable for ungrounded, positive, or negative grounded DC systems
 Field Wiring: Cu wiring only, min. 12 AWG/4 mm², insulated for 90° C min

AC Section

AC Output (Min./Nom./Max.) @ 230 V	219 V	230 V	264 V
Oper. Freq. (Min./Nom./Max.)	45 Hz	50 Hz	55 Hz
Output Power Factor (Nom.)	1.00		
AC Max. Cont. Output Current @ 230 V	1.52 A		
AC Max. Cont. Output Power @ 230 V	349 VA	349 W	
AC Peak Output Power @ 230 V	366 VA	366 W	
Max. Units Per 20 A Branch Circuit @ 230 V	10 or 11 total (single phase) ²		
Max. Overcurrent Protection	20 A		
Max. Ambient Temp.	+50° C		

²According to local regulation


WARNING SEVERE ELECTRICAL HAZARD

- Caution – Risk of Electrical Shock!
- Refer servicing to qualified service personnel.
- Solar module has a full voltage even in a very low light.
- Connect only to a dedicated circuit
- Each circuit must be individually disconnected before servicing.

Do not remove cover. No user serviceable parts inside.

Both AC and DC Voltage sources are terminated inside this equipment.

SunPower panels are manufactured by Moxeon Solar Technologies. View warranty, patent and trademark information at maxeon.com/legal.

537467 **moxeon** 

20 Enphase Energy New Zealand Limited

Micro Inverter

MODEL NUMBER	CERTIFICATE NUMBER	SERIES TYPE	APPROVAL DATE	EXPIRY DATE	
IQ7-60-E-INT	SAA173188	IQ7	22/10/2020	20/12/2022	1
IQ7X-96-E-INT	SAA173188	IQ7X	22/10/2020	20/12/2022	1
IQ7PLUS-72-E-INT	SAA173188	IQ7PLUS	22/10/2020	20/12/2022	1
IQ7A-72-2-INT	SAA173188	IQ7A	12/08/2020	20/12/2022	1

Source: <http://www.cleanenergyregulator.gov.au/RET/Forms-and-resources/Forms-and-resources-for-agents-and-installers>

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SUNPOWER | FROM MAXEON SOLAR TECHNOLOGIES

QUESTIONS?

Here to help:

- **Madeline Belvin**
Marketing Manager
- **Rob Chew**
Applications Engineer
- **Matt Purvis**
National Sales Director, Australia

SUNPOWER

MAXEON 5



MAXEON 5 AC
415W, 410W, 400W

Making the best,
even better.

Introducing
Maxeon 5. The
first of its kind
AC module in
Australia.

SUNPOWER

FROM MAXEON SOLAR TECHNOLOGIES

Q&A

FAQ

PV panel

- What is the physical size of Maxeon 5 AC? Is it the same as Maxeon 3?
 - Maxeon 5 AC is slightly larger than Maxeon 3. The size is 1835mm x 1017mm x 40mm
- What is the efficiency of the Maxeon 5 415 Wp?
 - The efficiency is 22.2% for the 415 W version.
- Will you introduce the Maxeon 5 for residential without the microinverter?
 - No Residential DC at this time.
- Will you introduce the Maxeon 5 AC with a black backsheet?
 - Maxeon 5 is only available with white backsheet and black frame.
- Is this a SunPower by Maxeon Solar Technologies product or an Enphase product?
 - This is a joint development product. Maxeon Solar Technologies and Enphase worked together to create a high-end solution for residential PV applications. IQ7A was initially designed specifically for Maxeon 5 66c module.

FAQ

Microinverter

- What is the efficiency of the microinverter?
 - IQ7A Microinverter EU weighted efficiency is 96.5%. This efficiency is the same as the combined efficiency of a DC Optimizer (99.0%) X String inverter (98.0%) X DC losses (99,2%) = **96.2%**. The yield is roughly 1% higher than DC Optimizer + String due to the microinverter burst mode function and the perfect pairing with the Maxeon 5 PV panel.
- What is the maximum output power? How long can be sustained?
 - The microinverter can sustain the maximum output power (369 VA) as long as the temperature doesn't exceed the temperature limit for the microinverter. At that point it linearly reduces power to its nominal power.
- Do you have any stats regarding performance in high heat conditions?
 - We have data for different countries in Europe. For the hot climate we chose Madrid for our simulations and the performance of the microinverter is unaffected by the temperature. When the temperature is high the maximum power of the PV panel is much lower than nameplate power, meaning there's virtually no clipping in that conditions. Some clipping may happen in fresh and windy days with really high irradiance (a few hours in May and October) more than compensated by the better performance when the temperature is higher and the days longer.

FAQ

Technical

- Can I use a Maxeon 5 AC to expand a conventional string inverter solution?
 - Yes, this is possible. You will need to install an additional AC line and circuit breaker.
- How are the microinverters connected to the internet?
 - The default option is to use the Wi-Fi infrastructure. You can connect a LAN cable (not provided) if you prefer. It is also possible to pair the Envoy gateway to a cellular connection solution (not provided, yet available through Enphase distribution channels).
- Is an Envoy gateway always needed?
 - Yes, the Envoy gateway is mandatory for system commissioning and product warranty.
- Is there a minimum number of Maxeon 5 AC that I need to install?
 - No. You can install 1 Maxeon 5 AC and it works.
- What happens in three phase?
 - It is possible to install a three phase system using additional Enphase accessories.

FAQ

Warranty

- What is the warranty on the microinverter?
 - Enphase provide 25-years product warranty on the microinverter.

FAQ

RMA process

- Is it possible to troubleshoot an AC panel remotely?
 - Yes. If the system is connected to the Enlighten monitoring platform you can run diagnosis remotely with or without Enphase support team. Please make sure to open a ticket with Enphase support team before actually going on site.
- If there is need for a replacement, who will provide the service?
 - Tier 1 support will be provided through Enphase support team. If the issue concern:
 - the microinverter: Enphase will support the case according to its warranty
 - the DC panel: Maxeon Solar Technologies will support the case according to its warranty.
- Will there be a field replacement or we need to replace the whole panel?
 - You can replace the microinverter keeping the same PV panel. No need to replace both. Microinverter can be easily swapped with a new one on the roof.

FAQ

Datasheet / Certifications

- Is the Maxeon 5 AC panel provided with all PV panel certifications as well as inverter / grid connection certification?
 - You can ask for this document to your PSR (Partner Support Representative)
 - Maxeon 5 AC is tested to answer the future Standard on AC panel (IEC 62109-03), but today Maxeon 5 AC is certified as for DC panel (IEC 61215, 61730) and the microinverter certified as per IEC 62109-1 & 2.



Back Contact



AC Module



White Backsheet
Black Frame



Residential



MAXEON 5 AC

Power Range: 400 – 415 W | EFFICIENCY: Up to 22.2%

The new SunPower Maxeon 5 AC Module combines home solar's most powerful panel with the world's most advanced inverter technology. The result is an elegant, optimized solution for any roof.¹

SunPower Maxeon panels are world-renowned for their energy production and savings advantages that combine unmatched efficiency and reliability with an industry-leading warranty and an estimated 40-year useful life.^{1,2,3,4}

Factory-integrated Microinverter (MI)

- Highest-power integrated AC module
- 25-Year limited product warranty covered by Enphase
- Engineered and calibrated by Enphase for SunPower AC modules



Maximum Lifetime Energy and Savings

The SunPower Maxeon 5 AC Module is designed to deliver 35% more energy in the same space over 25 years in real-world conditions such as partial shade and high temperatures.^{5,6,7}

A Better Product. A Better Warranty.

The 25-year SunPower Complete Confidence Panel Warranty is backed by testing and field data from more than 30 million SunPower Maxeon panels deployed—and a demonstrated warranty return rate of .005%.⁸



- Year 1 Minimum Warranted Power Output 98.0%
- Annual Degradation 0.25%
- Year 25 Warranted Power Output 92.0%

Leadership in Sustainable Manufacturing

SunPower Maxeon panels—and the facilities in which they are produced—raise the bar for environmental and social responsibility. Included below are highlights of the certifications and recognition received by some of our products.⁹



Landfill-Free Facility
NSF P445



AC Electrical Data	
Inverter Model: IQ 7A	@230 VAC
Peak Output Power	366 VA
Max. Continuous Output Power	349 VA
Nom. (L-N) Voltage/Range	219 – 264 V
Max. Continuous Output Current	1.52 A
Max. Units per 20 A (L-N) Branch Circuit	10
Weighted Efficiency ¹⁰	96.5%
Nom. Frequency	50 Hz
Extended Frequency Range	45-55 Hz
AC Short Circuit Fault Current Over 3 Cycles	5.8 A rms
Overvoltage Class AC Port	III
AC Port Backfeed Current	18 mA
Power Factor Setting	1.0
Power Factor (adjustable)	0.8 lead. / 0.8 lag.

DC Power Data			
	SPR-MAX5-415-E3- AC	SPR-MAX5-410-E3- AC	SPR-MAX5-400-E3- AC
Nom. Power ¹¹ (Pnom)	415 W	410 W	400 W
Power Tol.	+5/0%	+5/0%	+5/0%
Module Efficiency	22.2%	22.0%	21.5%
Temp. Coef. (Power)	-0.29%/°C		
Shade Tol.	Integrated module-level max. power point tracking		

Mechanical Data	
Solar Cells	66 Monocrystalline Maxeon Generation 5
Front Glass	High-transmission tempered glass with anti-reflective coating
Environmental Rating	Microinverter Outdoor rated - IP67 (UL: NEMA type 6)
Frame	Class 1 black anodized
Weight	21.1 kg

Tested Operating Conditions	
Operating Temp.	-40°C to +60°C
Max. Ambient Temp.	50°C
Relative Humidity	4% to 100% (Condensing)
Max. Altitude	2000m
Max. Test Load ¹²	Wind: 5400 Pa, 551 kg/m ² back Snow: 8100 Pa, 826 kg/m ² front
Design Load	Wind: 3600 Pa, 367 kg/m ² back Snow: 5400 Pa, 551 kg/m ² front
Impact Resistance	25 mm diameter hail at 23 m/s
Microinverter enclosure	Class II double-insulated, corrosion resistant polymeric enclosure

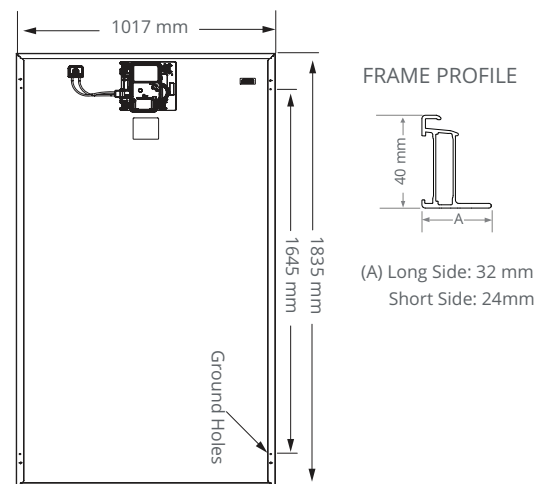
Warranties, Certifications, and Compliance	
Warranties	<ul style="list-style-type: none"> 25-year limited power warranty 25-year limited product warranty
Microinverter Warranty	<ul style="list-style-type: none"> 25-year limited product warranty covered by Enphase warranty¹³
Certifications and Compliance	<ul style="list-style-type: none"> IEC 61215, 61730¹⁴ IEC 62109-1, 62109-2 IEC 61000-6-3 AS4777.2, RCM IEC/ EN 50549-1:2019, G98/G99 VDE-AR-N-4105
Quality Management Certs	ISO 9001:2015, ISO 14001:2015
PID Test	1000 V: IEC 62804
LeTID Test	Draft version IEC 61215 ¹⁵
Available listing	TUV, EnTest
Green Building Certification contribution	Panels can contribute additional points towards LEED and BREEAM certifications
EHS Compliance	RoHS, OHSAS 18001:2007, REACH SVHC-201

1 Based on datasheet review of websites of top 20 manufacturers per IHS, as of June, 2020.
 2 Jordan, et. al. Robust PV Degradation Methodology and Application. PVSC 2018.
 3 Based on Oct. 2019 review of warranties on manufacturer websites for top 20 manufacturers per IHS 2018.
 4 "SunPower Module 40-Year Useful Life," SunPower whitepaper. 2013.
 5 SunPower 400 W, 22.6% efficient, compared to a Conventional Panel on same-sized arrays (310 W mono PERC, 19% efficient, approx. 1.64 m²).
 6 PV Evolution Labs "SunPower Shading Study," 2013. Compared to a conventional front contact panel.
 7 Based on temperature coefficients provided in manufacturer datasheets 2020.
 8 SunPower panels are less than 50 dppm, or 0.005%, on over 15 million panels shipped - Source: SunPower White Paper, 2019. Complete Confidence Warranty applies to SunPower Maxeon DC Module only. Microinverter covered by 25-year limited product warranty by Enphase.
 9 SunPower Maxeon (DC) panels are Cradle to Cradle Certified™ - a certification mark licensed by the Cradle to Cradle Products Innovation Institute. Cradle to Cradle Certified™ is a multi-attribute certification program that assesses products and materials for safety to human and environmental health, design for future use cycles, and sustainable manufacturing. SunPower Maxeon (DC) panels first received the International Living Future Institute Declare Label in 2016. Microinverters are not certified by Cradle to Cradle or ILFI.
 10 Tested per EN 50530 (EU).
 11 Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25°C). NREL calibration standard: SOMS current, LACCS FF and voltage. All DC voltage is fully contained within the module.
 12 Safety factor 1.5 included.
 13 AC modules shall be connected to Enphase Monitoring hardware (ENVOY) to enable Enphase product warranty.
 14 Refer to the DC module, Class C fire rating per IEC 61730.
 15 Panels degraded 0% in extended LeTID testing conducted by PVEL. Test report R10124977G-1, 2020.

Designed in U.S.A. by SunPower Corporation.
 Made in Malaysia (Cells)
 Assembled in Mexico (Modules)

Specifications included in this datasheet are subject to change without notice.

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Please read Safety and Installation manual before using this product.

Limited Warranty for Product SPR-MAX-Ex-AC

-Valid only for consumers in Australia and New Zealand-

Dear Valued Customer,

Congratulations on the purchase of this product. This photovoltaic module and attached AC microinverter represent a teaming of a photovoltaic module by Maxeon together with a microinverter produced by Enphase. The limited warranty for the photovoltaic module is attached as **Exhibit A**. The limited warranty for the microinverter is attached as **Exhibit B**. Though each of the photovoltaic module and microinverter have separate warranties, please contact Enphase at <https://enphase.com/support/> for all support issues pertaining this module and microinverter. Enphase will direct support issues pertaining to the PV Modules to Maxeon.

SUBJECT AT ALL TIMES TO THE LIMITATIONS UNDER APPLICABLE LAW (INCLUDING THE APPLICABLE CONSUMER GUARANTEES IN PART 3-2 OF THE AUSTRALIAN CONSUMER LAW WHICH CANNOT BE EXCLUDED, RESTRICTED, OR MODIFIED), THIS LIMITED WARRANTY (INCLUDING EXHIBITS A AND B) EXPRESSLY CONTAINS THE SOLE AND EXCLUSIVE WARRANTY APPLICABLE TO EACH OF THE PV MODULE MANUFACTURED BY MAXEON AND THE MICROINVERTER MANUFACTURED BY ENPHASE, TOGETHER WITH ALL OTHER PARTS AND WORKMANSHIP INCORPORATED IN THIS PRODUCT; ALL OTHER WARRANTIES, CLAIMS, PROMISES, AND REPRESENTATIONS (IF ANY) ARE EXPRESSLY DISCLAIMED, DENIED AND VOID.

FOR CONSUMERS IN AUSTRALIA, PLEASE NOTE OUR GOODS COME WITH GUARANTEES THAT CANNOT BE EXCLUDED UNDER THE AUSTRALIAN CONSUMER LAW. YOU ARE ENTITLED TO A REPLACEMENT OR REFUND FOR A MAJOR FAILURE AND COMPENSATION FOR ANY OTHER REASONABLY FORESEEABLE LOSS OR DAMAGE. YOU ARE ALSO ENTITLED TO HAVE THE GOODS REPAIRED OR REPLACED IF THE GOODS FAIL TO BE OF ACCEPTABLE QUALITY AND THE FAILURE DOES NOT AMOUNT TO A MAJOR FAILURE.

EXHIBIT A: Limited Warranty for Maxeon PV Modules / SPR-MAX-Ex-AC

1. Limited Product and Power Warranties

Effective Date: **September 1, 2020.**

PV Module(s). This Limited Warranty is effective for SunPower photovoltaic modules from Maxeon Solar Technologies, Ltd. (“Maxeon”) for the products listed in the table below sold after the Effective Date (the “PV Module(s)”). The PV Module(s) exclude any “External Devices,” such as power electronics, external connectors, jumpers or microinverters included with the PV Modules.

Warranty Start Date. The Warranty Start Date is the earlier of: (i) the date of array interconnection or commissioning, and (ii) 6 months following the date of Maxeon delivery. If the delivery date cannot be verified, then the manufacturing date will be used in its place.

Product Warranty. Subject at all times to the terms and conditions in this Limited Warranty, Maxeon warrants the PV Module(s) will be free from defects in materials and workmanship under normal application, installation, use and service conditions that materially impact the functioning of the PV Module(s) during the Product Warranty Term, as set forth in the table below.

Power Warranty. Subject at all times to the terms and conditions in this Limited Warranty, Maxeon warrants the PV Modules will have a Measured Peak Power¹ of at least the Guaranteed Peak Power during the Power Warranty Term, exclusive of defects covered under the Product Warranty, as set forth in the table below.

PV Modules	Product Warranty Term	Power Warranty Term	Guaranteed Peak Power
SPR-MAX-Ex-AC	25 years	25 years	98% of Minimum Peak Power ² for the 1 st year, reduced by 0.25% for each year thereafter, such that the Guaranteed Peak Power for the final, 25 th year will be 92% of the Minimum Peak Power.

LIMITED WARRANTY EXCLUDES AND DISCLAIMS ALL WARRANTIES, CONDITIONS AND GUARANTEES PERTAINING TO THE MICROINVERTER(S) INCLUDED WITH THE PV MODULE(S). ENPHASE ENERGY, INC. (“ENPHASE”) PROVIDES A LIMITED WARRANTY (THE “MICROINVERTER WARRANTY”), WHICH CAN BE REVIEWED AT [HTTPS://ENPHASE.COM/WARRANTY](https://enphase.com/warranty) AND IN APPENDIX A. THE MICROINVERTER WARRANTY IN APPENDIX A SHALL CONTROL IN CASE OF ANY DISCREPANCY WITH ANY VERSION AVAILABLE ONLINE.

2. Customer Support, Claims Process and Coverage

Please contact Enphase at <https://enphase.com/support/> for all support issues pertaining to PV Modules that include an Enphase microinverter. Enphase will direct support issues pertaining to the PV Modules to Maxeon.

If any PV Module fails to conform to this Limited Warranty, provided that any loss in power is determined by Maxeon (in its sole discretion) not to have resulted from one of the excluded events set forth in Section 4 below, then for the applicable Warranty Term, Maxeon will repair, replace or refund the defective PV Module(s) as set forth herein.

If you have a support issue or warranty claim that is not resolved by Enphase, then immediately contact Maxeon at customers@maxeon.com. Upon receipt of a claim, Maxeon may require additional information regarding the claim, including: applicable warranty registration information; itemized proof of purchase, delivery or installation; serial and model numbers; and evidence regarding the basis of claim. All Maxeon obligations hereunder are expressly contingent upon the timely and full provision of such additional information. Returned PV Modules will not be accepted unless prior written authorization has been provided by Maxeon.

For any valid claim hereunder pertaining to any PV Module, Maxeon will, in its sole discretion, repair, replace, or refund the original purchase price of the covered PV Modules. For repairs and replacements, Maxeon will pay reasonable and customary transportation costs for the return of the covered PV Modules from, and the shipment of repaired or replacement PV Modules to, the place where the covered PV Modules were originally delivered by Maxeon. Replacement PV Modules may be refurbished or remanufactured PV Modules, will be electrically and mechanically compatible with the covered PV Modules, and will have a substantially equal or greater power rating.

For PV Modules originally sold by any Maxeon affiliate or authorized reseller thereof and installed in Australia or New Zealand, Maxeon will pay reasonable, necessary, and actual removal and reinstallation service costs of repaired or replaced PV Modules during the applicable Warranty Term, up to AUD 375 for up to 5 PV Modules and AUD 75 per PV Module thereafter, provided that, (a) Maxeon has sole discretion

¹ “Measured Peak Power” is a measurement of the DC watt peak of a PV Module at Standard Test Conditions (1000W/m² irradiance, AM1.5, 25C. SOMS current, LACCS FF and Voltage from NREL calibration), as described in IEC61215, measured per IEC60904, from the DC connectors, and accounting for 3% measurement tolerance. Measured Peak Power measurements require a sweep rate of no less than 200ms to ensure an accurate power measurement. Maxeon can provide a detailed testing procedure or a list of recognized testing agencies upon request.

² “Minimum Peak Power” is the rated DC power shown on the PV Module label.

to select the service provider performing such services, and (b) Maxeon will pay the service provider for such service costs, and (c) in no event will the cost of labor for repair and/or replacement of microinverters be covered under the terms of this Limited Warranty.

If Maxeon issues a refund under a valid Product or Power Warranty claim, Maxeon will refund the original purchase price, minus the market price of any included External Devices (such as a microinverter), for the first five years of the applicable Warranty Term, and then linearly depreciate the refund amount by 4.75% per year (the "Claim Value"), provided that for a valid Power Warranty claim, Maxeon will refund the Claim Value multiplied by the percentage difference between the Guaranteed Peak Power percentage and the Measured Peak Power percentage (both as a percentage of the Minimum Peak Power).

3. General Conditions for Warranty Claims

- a) This Limited Warranty, including any right or obligation, is expressly conditioned upon full and timely payment by the customer.
- b) All warranty claims must be filed within the applicable Warranty Term. Any warranty claim filed outside the applicable Warranty Term, including any claim for a latent or undiscovered defect, is invalid and will be rejected by Maxeon.
- c) The Product and Power Warranty Terms for any repaired or replaced PV Module shall not extend beyond the original terms.
- d) When PV Modules are used on a mobile or vehicle platform of any type, the Warranty Terms are each limited to 12 years.
- e) PV Modules used with floating mounting systems are excluded entirely unless written pre-approval is obtained from Maxeon.
- f) In cases of PV Module replacement, title to any replaced PV Module shall pass to Maxeon.
- g) This Limited Warranty is fully assignable to any third party provided that the warranty holder provides Maxeon, within 90 days of assignment: (i) notice of the assignment; and (ii) reasonable documentation evidencing the assignment.

4. Exclusions and Limitations

The Limited Warranty does not apply to any of the following:

- a) PV Modules subjected to: (i) misuse, abuse, neglect, accident or alteration (misuse includes, without limitation, failure to comply with all installation, repair, operation and maintenance instructions of any type, as may be amended and updated from time to time at Maxeon's or Enphase's sole discretion, and all national, state, and local laws, codes, ordinances, and regulations); (ii) service, repair or modification by someone other than an approved service technician of Maxeon; (iii) conditions exceeding the voltage, wind, snow load, temperature, or any other operational specification; (iv) power failure or surges; (v) indirect or direct damage from lightning, flood, fire, smoke, or acts of nature; (vi) damage from persons, biological activity, or industrial chemical exposure; or (vii) glass breakage from impact or other damage outside Maxeon's control.
- b) Cosmetic defects or effects from normal wear and tear of materials and cosmetic variations that do not cause power output to fall below the Guaranteed Peak Power. Normal wear and tear of PV Module materials includes, but is not limited to, fading of frame color, weathering of glass coatings, and areas of discoloration around or over individual solar cells or any part of the PV Module.
- c) PV Modules installed in locations, in Maxeon's absolute judgment, that may be subject to direct contact with bodies of salt water.
- d) PV Modules for which the labels containing product type or serial number have been altered, removed or made illegible.
- e) PV Modules that have been moved from their original installation location without the express written approval of Maxeon.
- f) PV Modules that do not conform to the Power Warranty as a result of, in Maxeon's sole discretion, defects in materials or workmanship or as a result of any other damage to the PV Modules.
- g) Any defect or malfunction arising out of the microinverter.

Maxeon shall not be responsible or liable to the customer or any third-party arising out of any non-performance or delay in performance of any terms and conditions of sale, including this Limited Warranty, due to acts of God, war, riots, strikes, nature, fire, flood or any other cause or circumstance beyond the reasonable control of Maxeon.

5. Limitation of Warranty Scope and Applicable Law

SUBJECT TO LIMITATIONS UNDER APPLICABLE LAW (INCLUDING THE APPLICABLE CONSUMER GUARANTEES IN PART 3-2 OF THE AUSTRALIAN CONSUMER LAW WHICH CANNOT BE EXCLUDED, RESTRICTED, OR MODIFIED), THIS LIMITED WARRANTY IS EXPRESSLY IN LIEU OF AND EXCLUDES ALL OTHER EXPRESS OR IMPLIED WARRANTIES, GUARANTEES AND CONDITIONS. EXCEPT AS PROVIDED IN THIS LIMITED WARRANTY OR REQUIRED BY APPLICABLE LAW, ALL WARRANTIES, GUARANTEES AND CONDITIONS OF ANY KIND, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR PARTICULAR PURPOSE, USE, OR APPLICATION, COURSE OF DEALING, OR USAGE OF TRADE AND ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF MAXEON ARE EXPRESSLY EXCLUDED AND DISCLAIMED. NOTWITHSTANDING ANY PROVISION TO THE CONTRARY, MAXEON SHALL HAVE NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR DAMAGE OR INJURY TO PERSONS OR PROPERTY OR FOR OTHER LOSS OR INJURY RESULTING FROM ANY CAUSE WHATSOEVER ARISING OUT OF OR

RELATED TO THE PV MODULES, INCLUDING, WITHOUT LIMITATION, ANY DEFECTS IN THE PV MODULE, OR FROM USE OR INSTALLATION. UNDER NO CIRCUMSTANCES SHALL MAXEON BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, HOWSOEVER CAUSED. LOSS OF USE, LOSS OF PROFITS, LOSS OF PRODUCTION, LOSS OF REVENUES ARE THEREFORE SPECIFICALLY BUT WITHOUT LIMITATION EXCLUDED. MAXEON'S AGGREGATE LIABILITY, IF ANY, IN DAMAGES OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID TO MAXEON BY THE CUSTOMER, FOR THE UNIT OF PRODUCT OR SERVICE FURNISHED OR TO BE FURNISHED, AS THE CASE MAY BE, WHICH GAVE RISE TO THE WARRANTY CLAIM. SOME JURISDICTIONS DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES OR THE EXCLUSION OF DAMAGES SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

IF ANY PROVISION OF THIS LIMITED WARRANTY IS HELD UNENFORCEABLE OR ILLEGAL BY A COURT OR OTHER BODY OF COMPETENT JURISDICTION, SUCH PROVISIONS SHALL BE MODIFIED TO THE MINIMUM EXTENT REQUIRED SUCH THAT THE REST OF THIS LIMITED WARRANTY WILL CONTINUE IN FULL FORCE AND EFFECT.

THIS LIMITED WARRANTY SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE JURISDICTION WHERE THE PV MODULES ARE INSTALLED. THE COMPETENT COURTS SITTING IN SUCH JURISDICTION SHALL HAVE EXCLUSIVE JURISDICTION OVER ANY DISPUTES ARISING HEREUNDER.

This Limited Warranty is a voluntary manufacturer’s warranty provided by Enphase Energy, Inc. (“**Enphase**”) to Covered Owners of Maxeon photovoltaic systems in respect of the products set forth below:

- **IQ™7-series Microinverters (“Microinverter”)** which are continuously connected to the internet through the Envoy™ product listed below;
- **Envoy-S Metered (“Envoy”)**;
- **Mobile Connect**; and
- **Consumption CT**;

each a, “**Covered Product**”.

This Limited Warranty applies in addition to guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure of the goods and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods are defective and the defect does not amount to a major failure.

You may also have certain consumer guarantees for goods supplied in New Zealand.

If you are a consumer and your Enphase Energy Covered Product is defective or does not conform with the contract of sale, you may be able to choose to make a claim under consumer laws in your jurisdiction or under this Limited Warranty (whichever is applicable).

Limited Warranty

In addition to your rights under consumer laws in your jurisdiction, subject to the terms of this Limited Warranty (including the limitations and exclusions listed below), Enphase warrants to the Covered Owner (defined below) that the Covered Product will be free from defects in workmanship and materials for the applicable product warranty period set forth below (each a “**Warranty Period**”), provided that the Covered Product i) is purchased from Enphase or an entity expressly authorized by Enphase to resell the covered Product (the “**Authorised Reseller**”), ii) is part of a Maxeon photovoltaic system, (iii) remains at the original End User location (the “**Original Location**”), and iii) the Original Location is located within Australia or New Zealand.

Covered Product (s) and Limited Warranty Period(s).

<u>Covered Product(s)</u>	<u>Limited Warranty Period(s)</u>
IQ7-series microinverters continuously connected to the internet through an Envoy product	25 years commencing on the earlier of (i) 4 months from the date the Covered Product is shipped from Enphase, or (ii) the date the Covered Product is activated* in Enphase’s Enlighten™ system (such applicable date is referred to as the “ Warranty Start Date ”).
Envoy-S Metered	5 years from the Warranty Start Date.
Mobile Connect	5 years from the Warranty Start Date.
Consumption CT	5 years from the Warranty Start Date.

*A Covered Product is considered “activated” when the Maxeon PV solar system has received “permission to operate” by authorities having jurisdiction.

If Enphase repairs or replaces a Covered Product, the Limited Warranty will continue on the repaired or replacement product until the later of (i) the end of the original Limited Warranty Period as set in the table above or (ii) 90 days from the date of receiving the repaired or replacement product, as long as the repaired or replacement product is installed (and where the repaired or replacement product is a microinverter, connected to the internet through an Envoy) within 45 consecutive days from the date on which you receive the repaired or replacement product and remains continuously connected to the internet thereafter.

This Limited Warranty is given only to the end user who acquired and put the Covered Product into use for the first time (the “**End User**”) or to a subsequent end user (the “**Transferee**”) (each of the End User or Transferee being a “**Covered Owner**”) as long as (i) the Covered Product remains at the original location and (ii) the Transferee submits to Enphase a “**Change of Ownership Form**” and pays the applicable fee (the “**Transfer Fee**”) within 30 days from the date of transfer to the Transferee. This submission is a requirement for continued coverage under this Limited Warranty. The Transfer Fee is set out in the Change of Ownership Form and is subject to reasonable adjustment from time to time (as determined at Enphase’s discretion). The Change of Ownership Form and payment instructions are available at <http://www.enphase.com/warranty>.

A claim under the Limited Warranty must be submitted by following the procedures set out in Paragraph 3 below (RMA Process).

This Limited Warranty is subject to certain limitations and exclusions, which are also described below.

1. Warranty Exclusions.

- i. This Limited Warranty will not apply in the following circumstances:
 - a) if the Covered Product is not registered with Enphase and (where the Covered Product is a microinverter) connected to the internet through an Envoy product (as described in the Installation and Operation Manual found at www.enphase.com) within 45 consecutive days following the Warranty Start Date and remains continuously connected to the internet thereafter;
 - b) if the Covered Product is not installed, operated, handled, or used in accordance with the Quick Install Guide (provided with the Covered Product) or Installation and Operation Manual or under conditions for which the Covered Product was not designed;
 - c) if the defect arises after the expiration of the Warranty Period;
 - d) if the Covered Product has been altered, modified or repaired (unless such alteration, modification or repair is made by Enphase or a third party acting on its behalf);
 - e) If the Covered Product has been misused, neglected, tampered with or otherwise damaged;
 - f) If the Covered Product has been used in an unsuitable environment, or in a manner contrary to the Installation and Operation Manual, or otherwise than in accordance with applicable laws or regulations;
 - g) if the Covered Product has been subjected to fire, water, generalized corrosion, biological infestations, acts of nature, or input voltage that creates operating conditions beyond the maximum or minimum limits listed in the Covered Product specifications set out in the Installation and Operation Manual, including high input voltage from generators or lightning strikes;
 - h) if the defect has been caused by another component of the attached solar system not manufactured by Enphase;

- i) if the original identification markings (including trademark or serial number) of the Covered Product have been defaced, altered, or removed;
 - j) if the Grid Profile (utility approved operating parameters) of a Microinverter has been altered, and such alteration causes the product to malfunction, fail, or fail to perform; and/or
 - k) if the defect occurs during shipping or transportation after the Covered Product is sold by Enphase to an Authorised Reseller.
- ii. In addition, this Limited Warranty does not cover:
- a) the cost of labour for removal or installation of a Covered Product,
 - b) normal wear and tear or deterioration, or cosmetic, technical or design defects of a Covered Product which do not materially affect energy production or degrade form, fit, or function of the Covered Product;
 - c) theft or vandalism of the Covered Product;
 - d) the removal, installation or troubleshooting of the End User's or the Transferee's electrical systems; and/or
 - e) software programs installed in the Covered Product and/or the recovery and reinstallation of such software programs and data.

2. Remedies.

If Enphase confirms the existence of a defect that is covered by this Limited Warranty, Enphase will, at its option, either (a) repair or replace the Covered Product free of charge, or (b) issue a prorated credit or refund for the Covered Product to the End User or Transferee in an amount equal to the current market value of the Covered Product at the time the End User or Transferee notifies Enphase of the defect, as determined in Enphase's sole discretion. If Enphase elects to repair or replace the Covered Product, Enphase will, at its option, use new or reconditioned parts or products of original, comparable, or improved design.

3. RMA Process.

To make a claim under this Limited Warranty, the End User or Transferee must (a) notify the Authorised Reseller from whom the Covered Product(s) was purchased; (b) provide proof of the original purchase; (c) provide a description of the alleged defect; and (d) provide the relevant serial number and the Warranty Start Date. End Users or Transferees that are unable to locate the Authorised Reseller from whom the Covered Product(s) was purchased should contact Enphase directly:

For in country support in Australia or New Zealand, please contact Enphase Customer Support at <http://enphase.com/global/au/> or by telephone at +61 1800 006 374 (Australia) or +64 09 887 0421 (New Zealand).

4. Assignment. To the extent permissible under the Australian Consumer Law, Enphase expressly reserves the right to novate or assign its rights and obligations under this Limited Warranty to a third party with the demonstrated expertise and requisite resources needed to effectively discharge the obligations hereunder.

5. Limitation of Liability.

- i. Enphase will not be responsible for any loss or damage which is not Enphase's fault or is not foreseeable. Loss or damage is foreseeable if either it is obvious that it will happen or if, at the time the contract of sale was made, both we and you knew it might happen.

- ii. Enphase only provides the Covered Product for domestic and private use. If you use the Covered Product for any commercial or business purpose, Enphase will not be responsible for business losses including, for example, loss of profits, loss of business, business interruption or loss of business opportunity.
 - iii. Nothing in this Limited Warranty will limit or exclude Enphase's liability for (a) death or personal injury caused by its negligence, (b) fraud or fraudulent misrepresentation, (c) any breach of your legal rights in relation to the Covered Product or (c) for any other liability which cannot be limited or excluded under applicable law.
6. Governing law. This Limited Warranty is governed by and construed under the laws of Australia, and each party submits to the non-exclusive jurisdiction of the Australian courts. However, as a consumer, you will benefit from any mandatory provisions of the law of the country in which you are resident. Nothing in this Limited Warranty affects your rights as a consumer to rely on such mandatory provisions of local law.
7. Severability. If any term of this Limited Warranty is held to be illegal or unenforceable, it will be excluded from this Limited Warranty and the legality or enforceability of the remaining terms will not be affected.

This Limited Warranty is offered by Enphase Energy, Inc.

Contact Details:

Australia	https://enphase.com/en-au/support +61 1800 006 374 (Australia)
New Zealand	https://enphase.com/en-au/support +64 09 887 0421 (New Zealand)

The grant of this Limited Warranty is expressly conditioned upon the acceptance and agreement by the End User and any permitted Transferee to the terms, conditions, and requirements herein.



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