SunPower Solar

Brand: SunPower Solar
Product Code: SPR -MAX5-400-E3
Availability: 2 - 3 Days
Weight: 21.20kg
Dimensions: 1,835.00mm x 1,017.00mm x 40.00mm

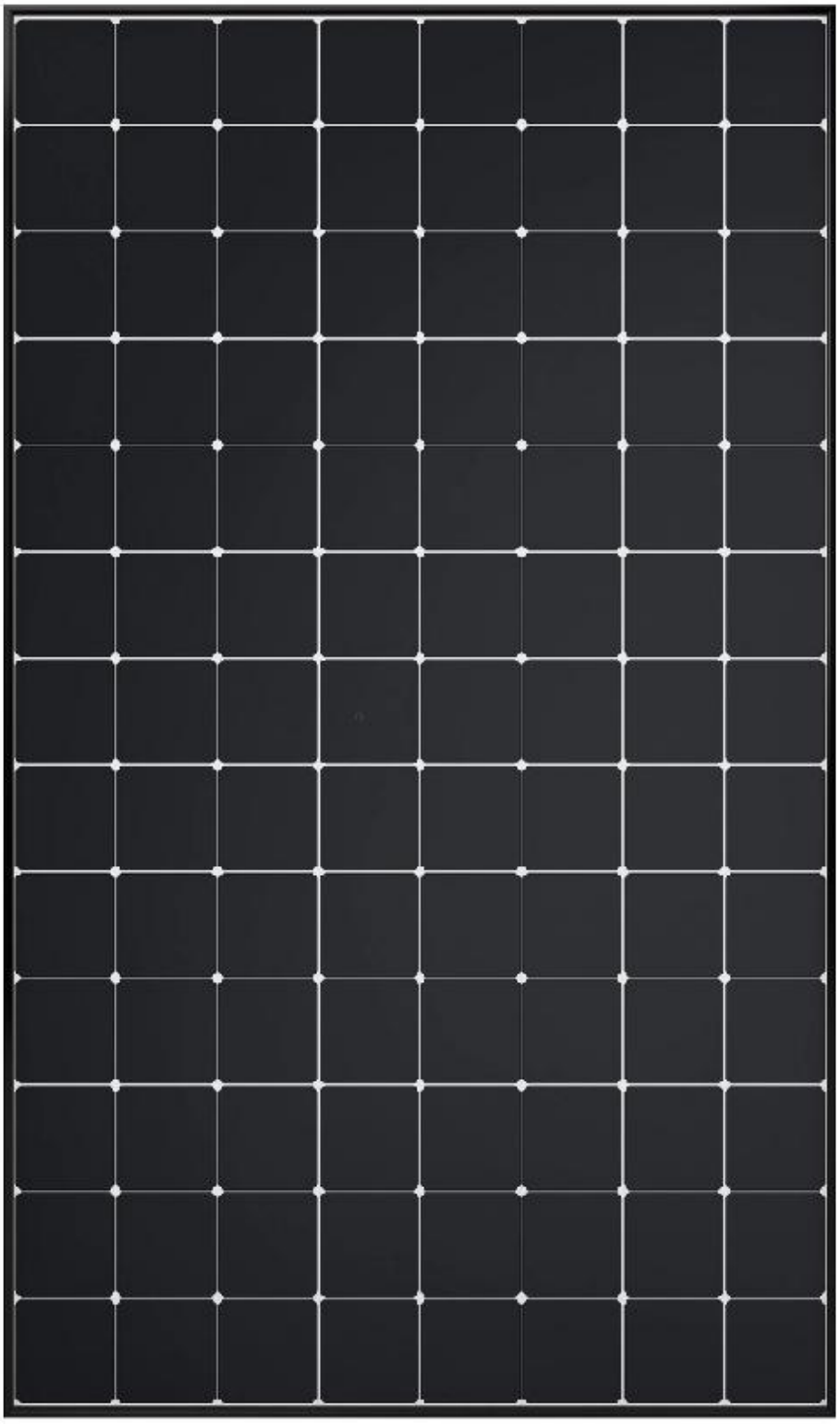
Price: $620.00

Ex Tax: $620.00

Description

Clean ingredients, responsible manufacturing, and lasting energy production for 40 years make SunPower Maxeon panels the most sustainable choice in solar. SunPower Maxeon panels are covered by a 40-year warranty1 backed by extensive third-party testing and field data from more than 33 million panels deployed worldwide.

SUNPOWER®



SunPower Maxeon 5 AC Module Performance

The SunPower Maxeon SPR-MAX5-400-E3 module has a power max output of 400 W. The modules are manufactured in Malaysia and the Philippines, then assembled in Mexico before being shipped to the U.S. These N type silicon, monocrystalline modules create a traditional looking solar display on the roof.

In independent third-party testing, all Maxeon SPR-MAX5 models test at or above their reported electrical output. Some panels produced as much as 5% over their reported rating. Reports indicate that some of the 400-watt panels tested near or at 420W production potential level. This is especially encouraging, not only for overall electricity production, but also when considering the future impact of degradation.

- **Approximate cost per watt: $3.85**

Efficiency 21.5%

The SunPower/Maxeon flagship N-type silicon Maxeon 5 modules' efficiency ratings are between 21.5% and 22.2%. This puts them on the highest end of average solar panel efficiency. The Maxeon5 range achievement is due to using a rear Interdigitated Back Contact (or IBC configuration).

Unlike its more affordable Maxeon 3, the Performance series - made of P-type silicon with shuttered cell and front-mounted bus bars, - the IBC cells use a micro grid of integrated conductors, connected to the bottom of the cell.

In side by side comparisons, the SunPower/Maxeon shuttered cell P-type silicon Maxeon 3 modules' efficiency ratings range between 22.1% and 22.6% also putting them on the highest end of average solar panel efficiency. In fact, according to Sunpower’s own spec sheets, when comparing efficiency the more affordable Maxeon 3 series performs as well or better than the IBC Maxeon 5 series.

Power Tolerance +5/0%

Power tolerance refers to the amount of electricity it will produce either above or below its rated power capacity at Standard Test Conditions (STC). The smaller the power tolerance deviation or range, the more accurate the rated power capacity is.

Maxeon SPR-MAX5-400-E3 modules have a power tolerance of -0/+5%.

The Max5 panels will, at the very minimum, operate at their rated capacity. However, these panels have exceeded, by as much as 5%, their rated capacity.

For example this panel is rated at 400 W and will operate anywhere from 400 W to 420 W (or 5% higher than 400) under STC.

With a -0% tolerance rating, this panel operates at, or above, 400 W.

In a side-by-side comparison of power tolerance, the Maxeon3 panel performed as well as the more expensive Maxeon 5 panel.

Temperature Coefficient PMax: -0.29

Solar panels perform best at 77°F (25°C). In Texas, obviously, roofs see temperatures far in excess of 77°F for most of the year. A solar panel's temperature coefficient is a measurement indicating how well a specific model of solar panel will perform outside of ideal operating conditions.

The panels temperature coefficient along with the temperature of the panel allows you to predict your panels performance during the dog days of summer.

Temperature coefficients are calculated in Celsius.

With each degree above 25° C /77° F, a given solar panel's electric output will be diminished by its temperature coefficient.

Using the above methodology, the MAXEON SPR MAX5 400 E3 AC panel has a temperature coefficient of -0.29%/°C. Hence, when this panels temperature increases from 25°C to 26°C (77° F to 79° F) expect a 0.29% reduction in potential electric output.

When it's July in Texas and temperatures have climbed to 95° F/35° C, expect electric output to decrease by 2.9%. During the hottest hours of summer, when the mercury climbs into the triple digits - 113° F/ 45° C - the will decrease approximately 5.8%.

With respect to Temperature Coefficient, in hot weather the SPR MAX3 400W performs

better than the more expensive N-type, MAXEON SPR MAX5 400 E3 AC.

Sunpower Maxeon SPR-MAX5-400-E3

Product Name and Model Number	SPR-MAX5-400-E3
Manufacturer Name and Rating	Maxeon
Rated Power Output	400 watt
Efficiency Percentage	21.5%
Power Tolerance	+5.0%
Temperature Coefficient	-0.29%
Resiliency Specs	Snow load 5400Pa, Wind load 3600Pa
Output Warranty Term Length	25 year
Output Warranty Decline Rate	-0.58%
Materials Warranty Term Length	12 years
Cell Color(s)	Black
Frame	Black Anodized Aluminum Alloy
Backsheet Color(s)	Black
Cell Type (e.g. monocrystalline)	Monocrystalline N-Type
Panel Dimensions	1835X 1017 X 40mm
Weight	46.7. lbs/ 21.2 kg
Number of Cells	66 Maxeon GenV
Connector Type	Staubli MC4
Manufacturer Location	Phillipines, Mexico
Certifications Received (UL, IEC, ISO)	IEC, CE UL, PVEL
Average Cost per Watt	1.10
Marketplace Average Pricing	.90 - 1.50

Please note that the Maxeon 5; panels come “pre paired” with a slightly dated IQ7 series inverter. In other words, the inverer is already connected; you don't have an option to choose the newer IQ8 series inverters that allow for enhanced monitoring options with vastly improved battery storage options in a grid down situation.

***Consumers beware: because the IQ 7 inverter comes pre attached to the panel, it is not currently covered by the Maxeons 25-year warranty.**

For more about the IQ7 and IQ8 inverters, please see our inverter reviews.

Warranty Specifications

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The Maxeon 5 offers a 25-year, linear production warranty. This warranty covers all solar panels for any defects with normal use and proper installation for 25 years from date of purchase.

Maxeon is currently offering the 40-year warranty to other countries, however US customers still must settle instead for the industry standard 25-year warranty.

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Product Warranty 25 year

Linear Warranty

Rate of Degradation

- Year 1 2.0%
- Years 2 to 25 0.25%
- Output at End of Warranty Term 92.%
- Materials Warranty Term 25 years

Specification

Solar Panel Configuration	
Cell Type	Monocrystalline N-Type
Panel Dimensions	1835X 1017 X 40mm
Power Rating	400W

Power Rating	21.5%
Snow load	5400Pa,
Wind Load	3600Pa
Solar Panel Warranty	
Linear Production Warranty Term	25 Years
Product Warranty Term	25 Years
PV Product Performance	
Power Tolerance	+5/0%
Temperature Coefficient	PMax: -0.29
Others	
Average Cost / Watt	1.10
Where it’s Made	Made in Phillipines, Mexico