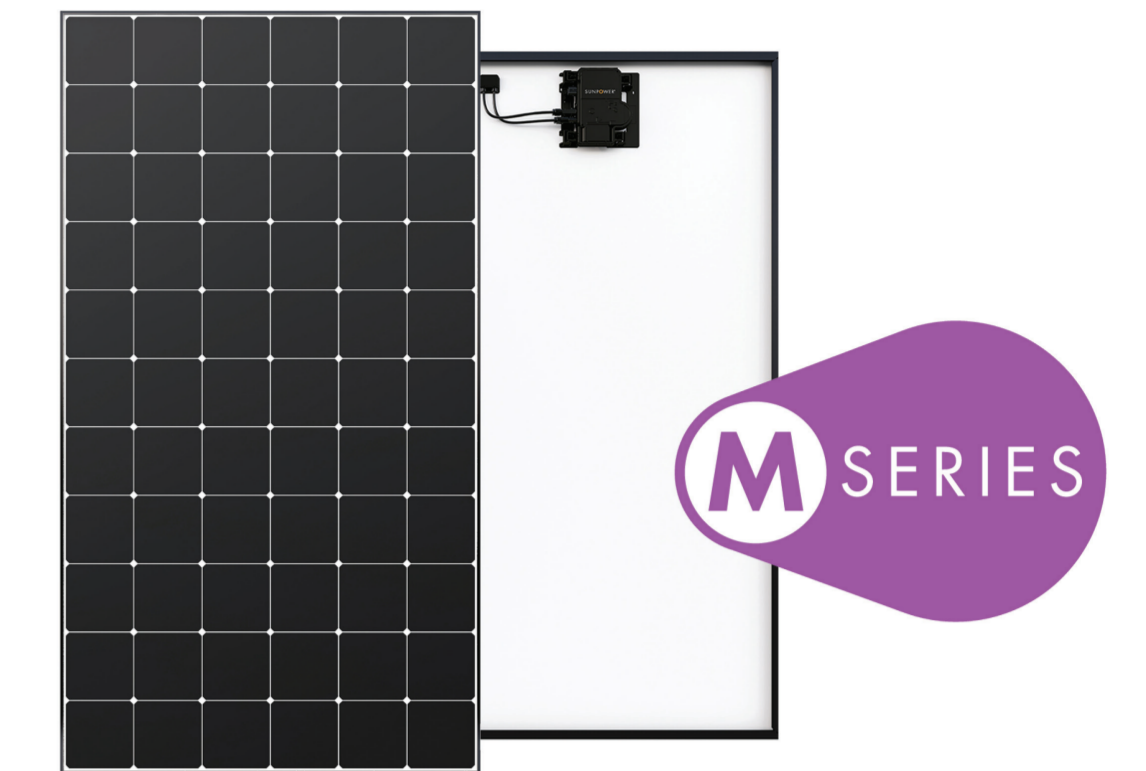
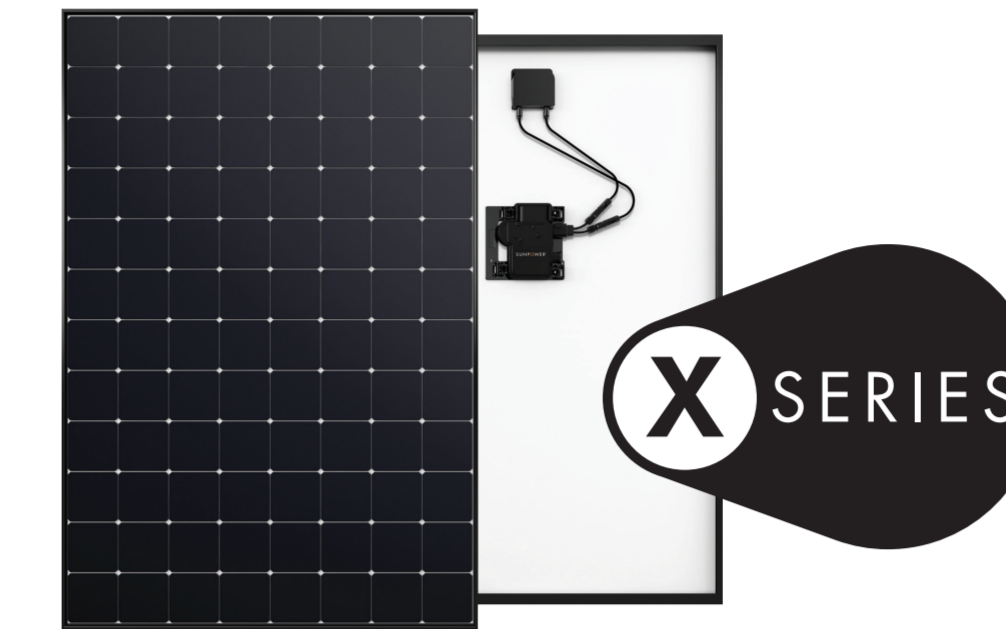
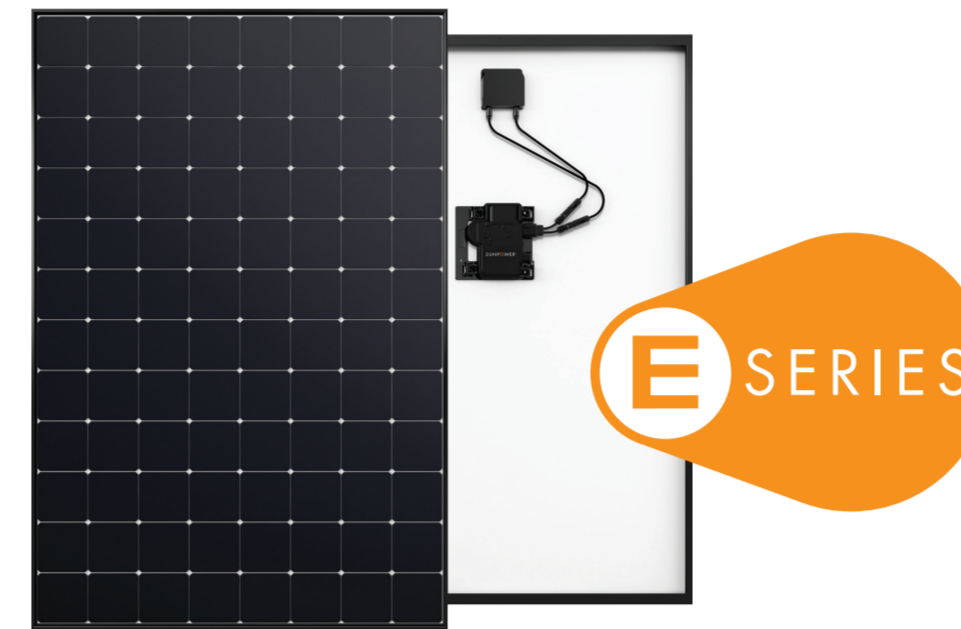


#DemandBetterSolar



SunPower® Panel and Conventional Panel Comparison

Find the right panel for your needs



	Conventional Panel ¹	SunPower® E-Series	SunPower® X-Series	SunPower® M-Series
	<p>LOW TIER</p> <p>The average low tier residential solar panel available today.</p>	<p>E20-327-E-AC</p> <p>Delivers more power and savings than conventional panels, at a great value.</p>	<p>X22-370W-E-AC</p> <p>Industry-leading efficiency² delivers more power and savings, with fewer panels on your roof.</p>	<p>M440-H-AC</p> <p>Game-changing technology delivers the highest efficiency solar panel on the market.²</p>
STYLE	White Backing w/ Grid Lines	White Backing w/ Anti-Reflective Glass	White & Black Backing w/ Anti-Reflective Glass	White & Black Backing w/ Anti-Reflective Glass
ENERGY PRODUCTION OVER TIME				
PANELS FOR 8KW SYSTEM	29 panels	25 panels	22-24 panels	19 panels
EFFICIENCY RATING ³	17%	20.4%	21.5-22.7%	21.7-22.8%
POWER PRODUCED ⁴	280 W	327 W	345-370 W	420-440 W
INVERTER	Wall mounted box	Microinverter built into panel		
WARRANTY ⁵	25 Year Power 12 Year Product 0 Year Labor	<ul style="list-style-type: none"> 25 Year Power 25 Year Product 25 Year Labor 		

1 Conventional Panel as referenced throughout is a solar panel with 280 W multi, 17% efficient, approx. 1.64 m².

2 Based on datasheet review of websites of top 20 manufacturers per Wood Mackenzie US PV Leaderboard Q3 2021.

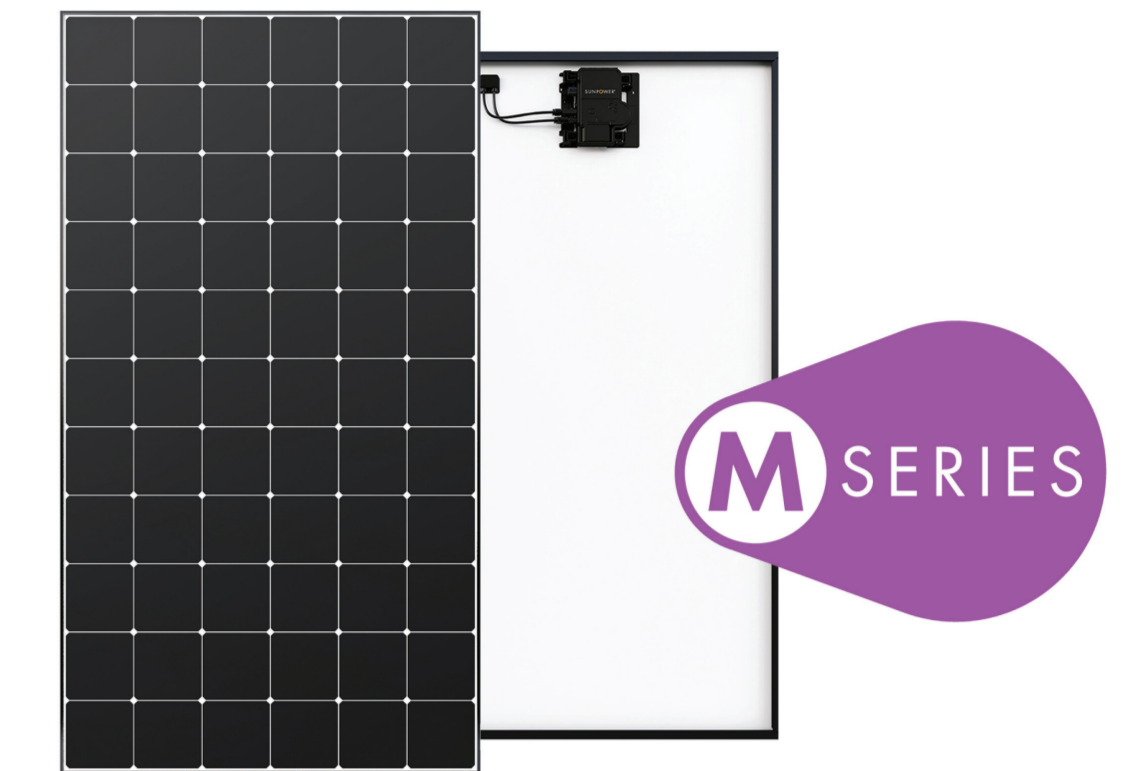
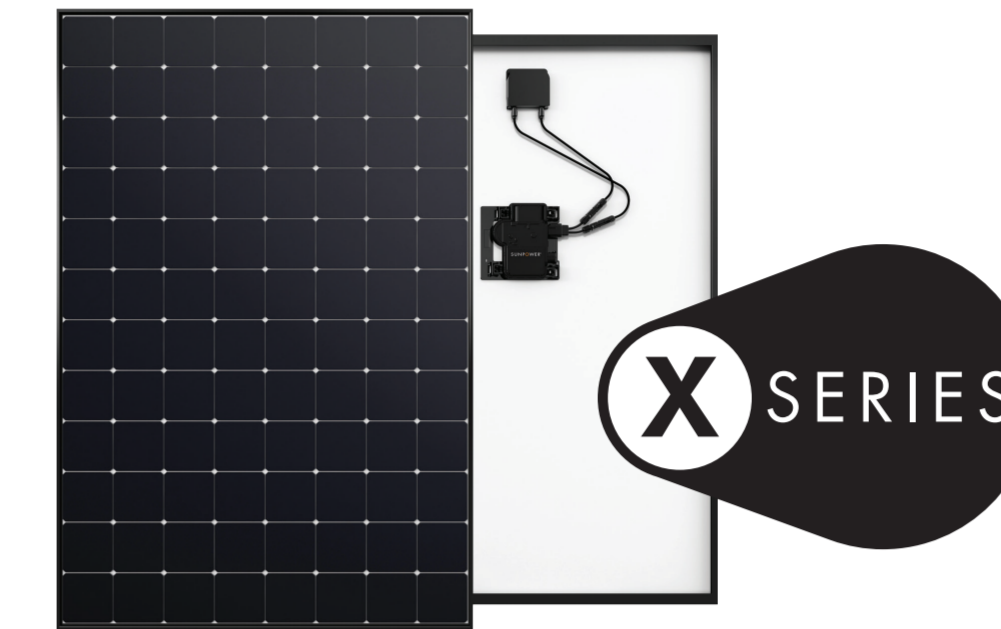
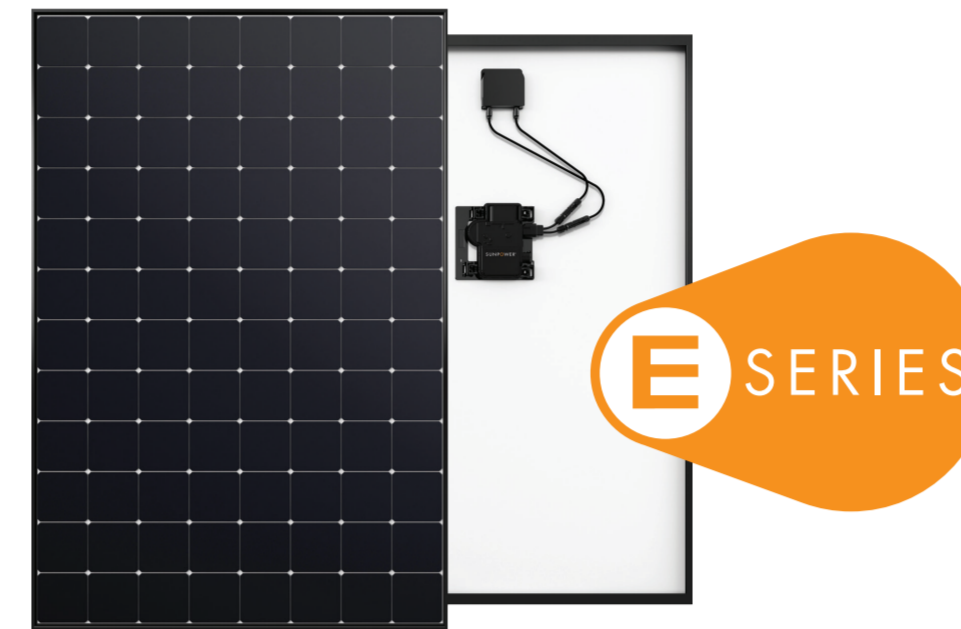
3 SunPower values based on average of measured power values during production.

4 SunPower values based on 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.

5 Representative of standard efficiency solar manufacturers such as Trina, Jinko and Canadian Solar. Competitor warranty information provided from latest warranty documents, as of 2021.

SunPower® Panel and Conventional Panel Comparison

Find the right panel for your needs



	Conventional Panel ¹	SunPower® E-Series	SunPower® X-Series	SunPower® M-Series
	<p>MID TIER</p> <p>The average mid tier residential solar panel available today.</p>	<p>E20-327-E-AC</p> <p>Delivers more power and savings than conventional panels, at a great value.</p>	<p>X22-370W-E-AC</p> <p>Industry-leading efficiency² delivers more power and savings, with fewer panels on your roof.</p>	<p>M440-H-AC</p> <p>Game-changing technology delivers the highest efficiency solar panel on the market.²</p>
STYLE	White Backing w/ Grid Lines	White Backing w/ Anti-Reflective Glass	White & Black Backing w/ Anti-Reflective Glass	White & Black Backing w/ Anti-Reflective Glass
ENERGY PRODUCTION OVER TIME				
PANELS FOR 8KW SYSTEM	26 panels	25 panels	22-24 panels	19 panels
EFFICIENCY RATING ³	19%	20.4%	21.5-22.7%	21.7-22.8%
POWER PRODUCED ⁴	310 W	327 W	345-370 W	420-440 W
INVERTER	Wall mounted box	Microinverter built into panel		
WARRANTY ⁵	25 Year Power 12 Year Product 0 Year Labor	<ul style="list-style-type: none"> 25 Year Power 25 Year Product 25 Year Labor 		

1 Conventional Panel as referenced throughout is a solar panel with 310 W mono PERC, 19% efficient, approx. 1.64 m².

2 Based on datasheet review of websites of top 20 manufacturers per Wood Mackenzie US PV Leaderboard Q3 2021.

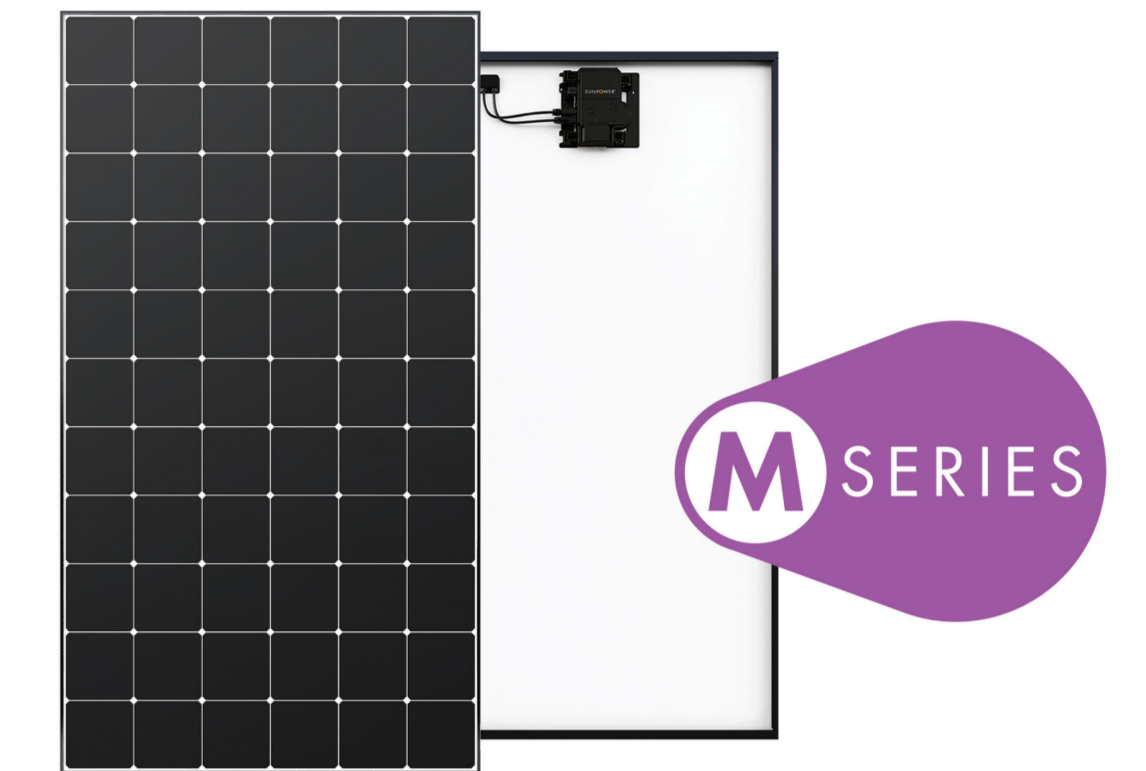
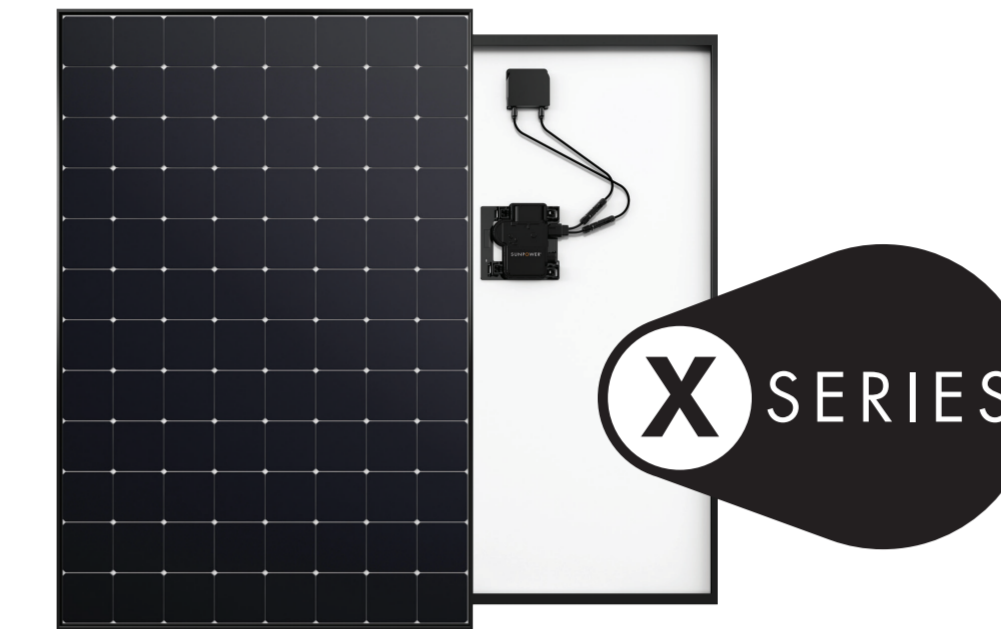
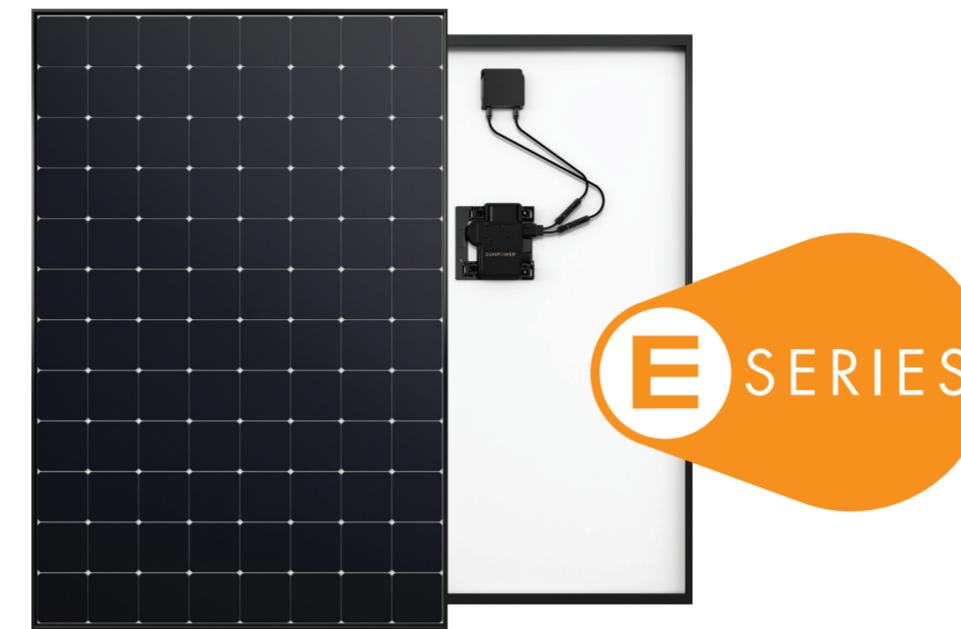
3 SunPower values based on average of measured power values during production.

4 SunPower values based on 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.

5 Representative of standard efficiency solar manufacturers such as Trina, Jinko and Canadian Solar. Competitor warranty information provided from latest warranty documents, as of 2021.

SunPower® Panel and Conventional Panel Comparison

Find the right panel for your needs



	Conventional Panel ¹	SunPower® E-Series	SunPower® X-Series	SunPower® M-Series
	<p>MID TIER +</p> <p>The average mid tier + residential solar panel available today.</p>	<p>E20-327-E-AC</p> <p>Delivers efficient performance and long-lasting durability at a great value.</p>	<p>X22-370W-E-AC</p> <p>Industry-leading efficiency² delivers more power and savings, with fewer panels on your roof.</p>	<p>M440-H-AC</p> <p>Game-changing technology delivers the highest efficiency solar panel on the market.²</p>
STYLE	White Backing w/ Grid Lines	White Backing w/ Anti-Reflective Glass	White & Black Backing w/ Anti-Reflective Glass	White & Black Backing w/ Anti-Reflective Glass
ENERGY PRODUCTION OVER TIME				
PANELS FOR 8KW SYSTEM	<p>22 panels</p>	<p>25 panels</p>	<p>22-24 panels</p>	<p>19 panels</p>
EFFICIENCY RATING ³	<p>21.2%</p>	<p>20.4%</p>	<p>21.5-22.7%</p>	<p>21.7-22.8%</p>
POWER PRODUCED ⁴	<p>365 W</p>	<p>327 W</p>	<p>345-370 W</p>	<p>420-440 W</p>
INVERTER	Wall mounted box	Microinverter built into panel		
WARRANTY ⁵	<p>25 Year Power</p> <p>12 Year Product</p> <p>0 Year Labor</p>	<p>✓ 25 Year Power</p> <p>✓ 25 Year Product</p> <p>✓ 25 Year Labor</p>		

1 Conventional Panel as referenced throughout is a solar panel with 365 W n-type, 21.2% efficient, approx. 1.64 m².

2 Based on datasheet review of websites of top 20 manufacturers per Wood Mackenzie US PV Leaderboard Q3 2021.

3 SunPower values based on average of measured power values during production.

4 SunPower values based on 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.

5 Representative of standard efficiency solar manufacturers such as Trina, Jinko and Canadian Solar. Competitor warranty information provided from latest warranty documents, as of 2021.

SUNPOWER®

Tesla Solar Panels¹

Years in Solar

35 years

15 years as a publicly traded company

15 years

Tesla acquired Solar City in 2017.
Solar City began installing in 2006.

Solar Cell
Manufactured

2.8 billion

0

Tesla does not manufacture the solar products it sells.

System Integration

100% SunPower

Solar panel, microinverter, racking, monitoring hardware and accessories

Varies

6+ panel manufacturers and 4+ inverter manufacturers²

Panel Efficiency

#1

Up to 22.7%³

Varies by manufacturer⁵

Panel Durability

#1

0.25% / year warranted power drop⁴

Varies by manufacturer⁵

Panel Sustainability

A Leader in Solar Sustainability

- 2019 pv magazine Sustainability Award Winner
- 10/10 Score: Module Toxicity & Recycled⁶

Varies by manufacturer⁵

Power Warranty

#1

92% power in year 25

Varies by manufacturer⁵

Warranty Provider

100% SunPower

25-Year Complete Confidence Warranty for panel, racking and microinverter;
10-year for monitoring hardware

4+ pass-through warranties

¹ Excludes Tesla Solar Roof.

² Publicly available data from the State of California <https://www.californiadgstats.ca.gov/downloads>

³ Based on datasheet review of websites of top 20 manufacturers per IHS, as of January 2020.

⁴ Jordan, et. al. Robust PV Degradation Methodology and Application. PVSC 2018.

⁵ Due to various suppliers, product specifications and warranties will vary.

⁶ SVTC. "Solar Scorecard 2018-2019"

Why Choose SunPower?

Products you can trust,
performance you can count on



SUNPOWER®

SunVault™ Storage System

TESLA

Powerwall

40% more power

- Runs more appliances at the same time during an outage
- Handles power surges from large appliances beautifully*
- Can back up entire home for a limited time period

6.8 kW Nominal
8.5 kW Peak

5.0 kW Nominal
7.0 kW Peak

Runs more appliances

- Has nearly 2X the power to run small appliances during an outage*
- Powers appliances of all sizes without causing a brownout

Up to 4.8 kW for each phase, totaling 6.8 kW

Only 2.5 kW for each phase

Hub+™ smart panel

- Intelligently connected to provide real-time visibility into home energy use, solar, and storage
- Oversees battery operation and sends real-time insights to phone
- Makes it easy to electrically connect in any home

Rated for main service panel
Fully integrated main panel to have fewer boxes
Supports utility metering and AC disconnects

Needs many electrical boxes and parts to meet typical electrical code requirements

One app does it all

- Enjoy total control of your solar and storage systems with mySunPower™ app
- Check system performance, make real-time adjustments and manage your settings with ease

One smart, intuitive app for everything

Multiple apps to manage

Elegantly simple design

- Minimalist style, no ugly clutter of additional boxes
- All components designed, engineered and specified by SunPower to work exclusively with SunPower Equinox® Solar products

Just 2-3 attractive components
Fast installation

Up to 5 components

SunPower warranties cover everything

- Solar and storage both covered by SunPower
- Runs cooler than typical storage for longer life
- Unique LFP battery chemistry means greater reliability and stability in challenging conditions

Storage, solar, inverter, racking all covered by SunPower
70% of rated energy over 10 years
38MWh of energy through-put

Multiple companies and warranties

70% of rated energy over 10 years
37.8 MWh of energy through-put

*The ability to power appliances and electronics during outages depends upon the implementation at installation. "Essential Appliances" are determined by the homeowner before installation and typically include lights, select appliances and outlets for devices. The battery storage system should not be relied upon as a power source for critical medical devices. The life of the battery storage system will vary depending on a number of factors including: the amount of energy stored in the battery, the amount of wattage used by the appliances and electronics connected to the battery storage system, the age of the battery, the battery's ability to recharge during daylight hours due to weather, the frequency and duration of battery usage, and other factors. Battery life will decrease with time and use.

SUNPOWER®

SunVault™ 13 Storage System

GENERAC

PWRcell 12*

50% more continuous power¹

- Runs more appliances at the same time during an outage
- Handles power surges from large appliances beautifully²
- 28.5A Max continuous output
- 6.8 kW Continuous power
- 8.5 kW Peak power

- 18A Max continuous output
- 4.5 kW Continuous power
- 6.7 kW Peak power

More comprehensive warranty

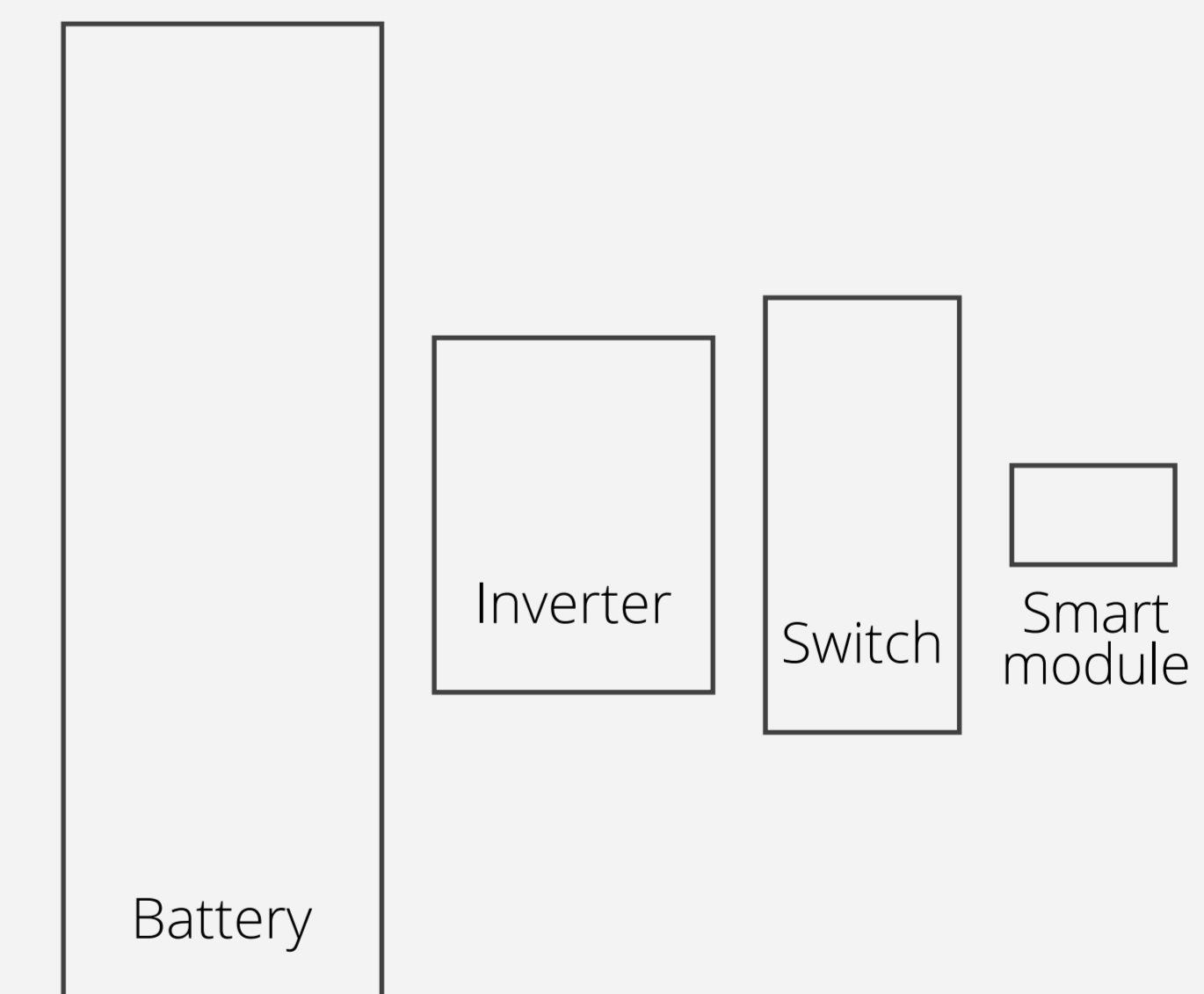
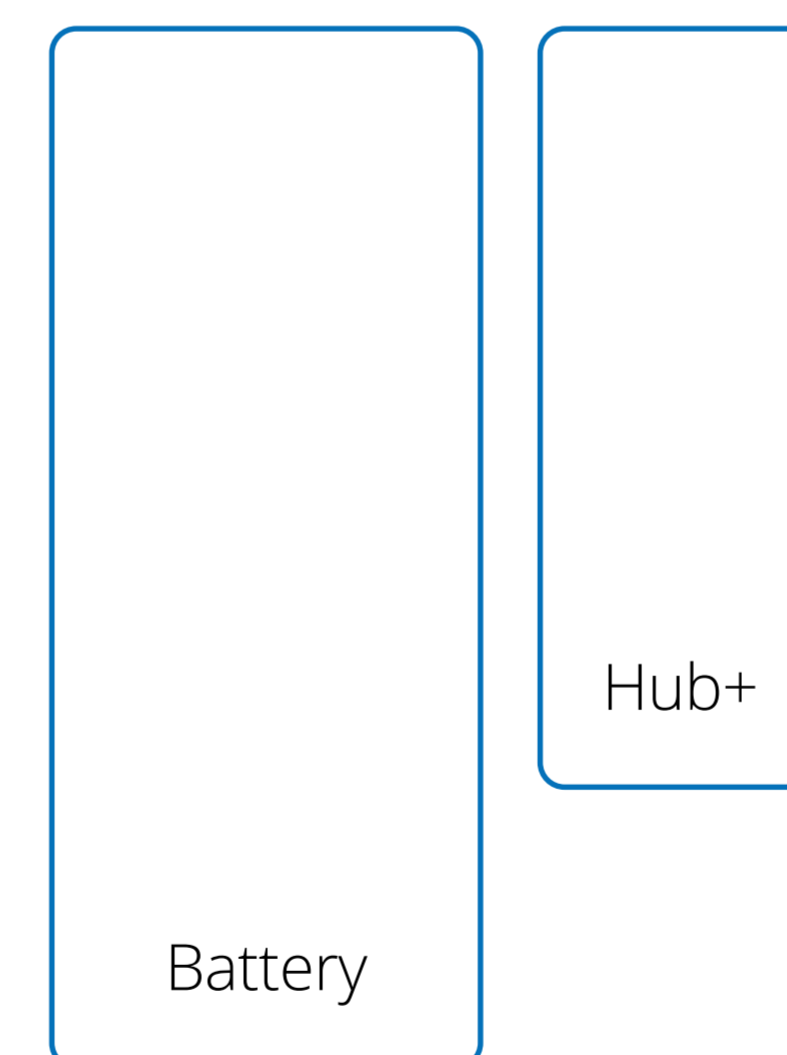
- Solar, storage, inverter, racking & monitoring covered by SunPower
- Runs cooler for longer life
- Warranted for more total hours of energy storage³
- Entire system covered by one company
- 70% of rated energy over 10 years
- 38 MWh of energy through-put

- Multiple companies cover full system
- 10 years, not rated
- 30.2 MWh of energy through-put

Elegantly simple design

- Minimalist style without the clutter of additional boxes
- Wall and floor mounting available for flexible installation
- Indoor or outdoor installation for extra space management
- All components designed, engineered and specified by SunPower to work exclusively with SunPower Equinox® solar products
- Just 2-3 attractive components
- Optional floor mounting: YES
- Outdoor installation: YES
- Entire solar + storage system designed and optimized by SunPower

- Minimum of 3+ components
- Floor mounting required
- Outdoor installation: Alt. module required
- Solar + storage system contains components designed by multiple companies



*Comparison made using Generac data sheets and warranty documents on generac.com in April 2021.

¹ Based on continuous power output of 6.8 kW (SunVault 13) vs. 4.85 kW (PWRcell 12).

² The ability to power appliances and electronics during outages depends upon the implementation at installation. "Essential appliances and devices" are determined by the homeowner before installation and typically include lights, select appliances and outlets for devices. The battery storage system should not be relied upon as a power source for critical medical devices. The life of the battery storage system will vary depending on a number of factors including: the amount of energy stored in the battery, the amount of wattage used by the appliances and electronics connected to the battery storage system, the age of the battery, the battery's ability to recharge during daylight hours due to weather, the frequency and duration of battery usage, and other factors. Battery life will decrease with time and use.

³ SunPower's warranty specifies more MWh per rated kWh of stored energy at 3.167 MWh vs. the Generac warranty at 2.65 MWh.

SUNPOWER®

SunVault™ 13 Storage System

ENPHASE

Encharge

10 with Smart Switch*

79% more continuous power¹

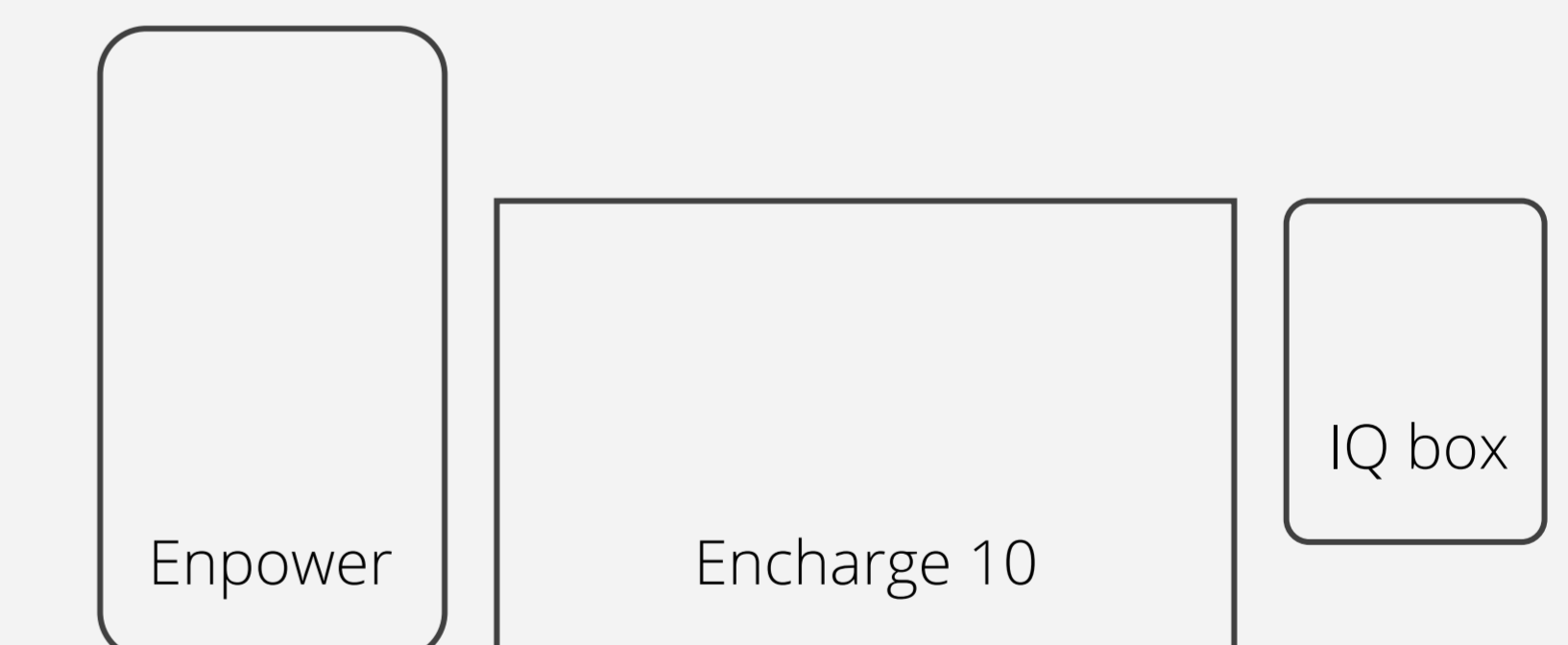
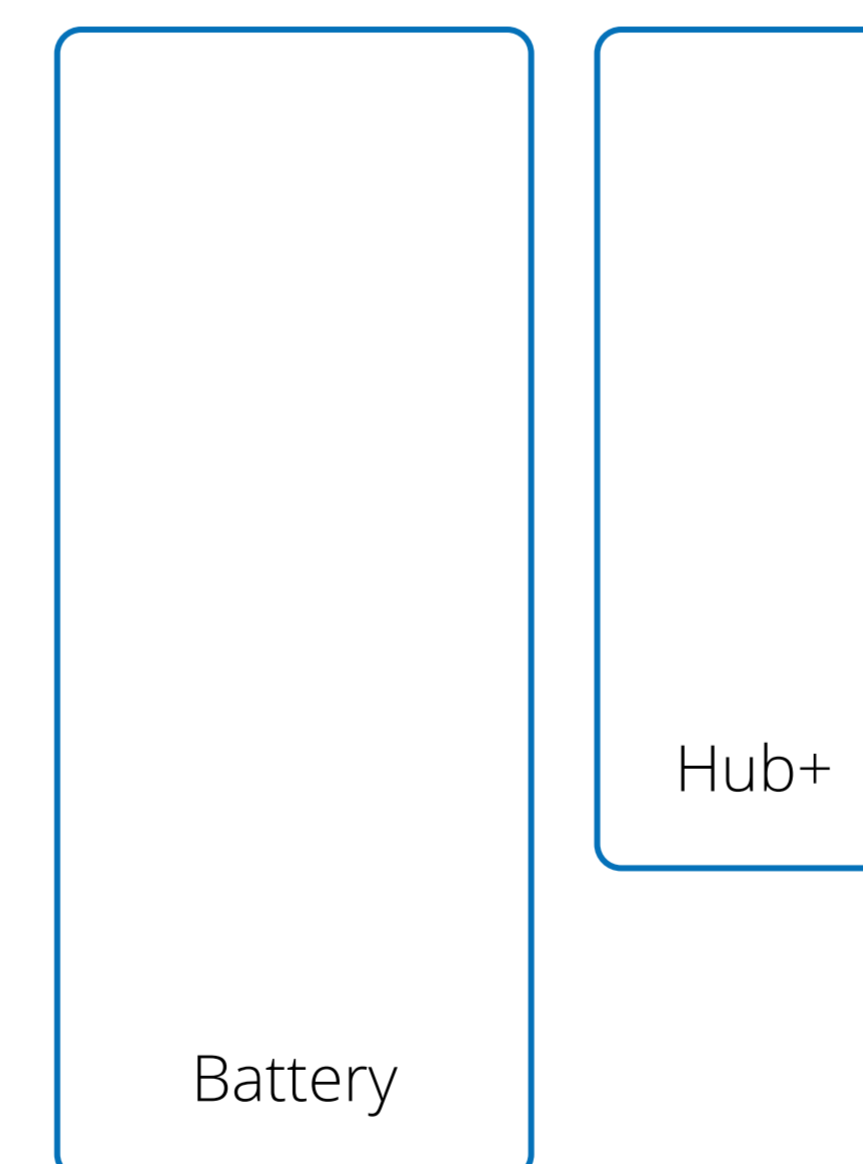
- Runs more appliances at the same time during an outage
- Handles power surges from large appliances beautifully²
- 28.5A Max continuous output
- 6.8 kW Continuous power
- 8.5 kW Peak power

More comprehensive warranty

- Solar, storage, inverter, racking & monitoring covered by SunPower
- More inclusive cost coverage
- Entire system covered by one company
- Covers labor & installation

Elegantly simple design

- Minimalist style without the clutter of additional boxes
- Can be floor-mounted for an even more compact installation
- All components designed, engineered and specified by SunPower to work exclusively with SunPower Equinox® solar products
- Just 2-3 attractive components
- Optional floor mounting: YES
- Entire solar + storage system designed and optimized by SunPower



*Comparison made using Enphase data sheets and warranty documents on Enphase.com in April 2021.

¹ Based on continuous power output of 6.8 kW (SunVault 13) vs. 3.8 kW (Enphase 10).

² The ability to power appliances and electronics during outages depends upon the implementation at installation. "Essential appliances and devices" are determined by the homeowner before installation and typically include lights, select appliances and outlets for devices. The battery storage system should not be relied upon as a power source for critical medical devices. The life of the battery storage system will vary depending on a number of factors including: the amount of energy stored in the battery, the amount of wattage used by the appliances and electronics connected to the battery storage system, the age of the battery, the battery's ability to recharge during daylight hours due to weather, the frequency and duration of battery usage, and other factors. Battery life will decrease with time and use.