



## SunPower E-Series: E20-435-COM

# SunPower® Commercial DC Panel for Helix™

SunPower E-Series panels combine high efficiency with the strongest durability and warranty available in the market today, resulting in more long-term energy and savings.<sup>1,2</sup>



### Helix Roof Compatible Modules

Factory-installed clips enable tool-free panel installation, decreasing installation time and minimizing business disruption.<sup>3</sup>



### More Lifetime Energy and Savings

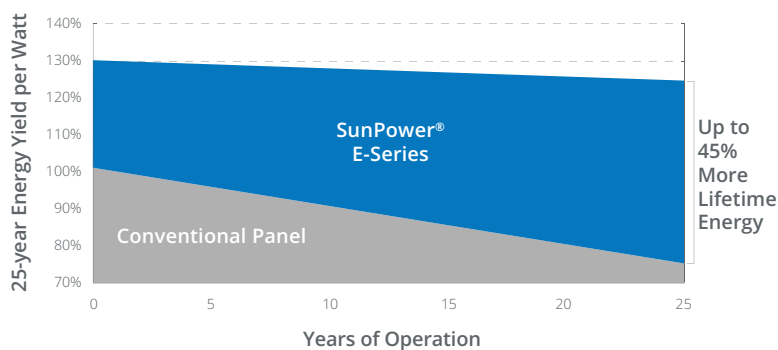
Designed to deliver 45% more energy in the same space over 25 years in real-world conditions like partial shade and high temperatures.<sup>2</sup>

## Fundamentally Different. And Better.



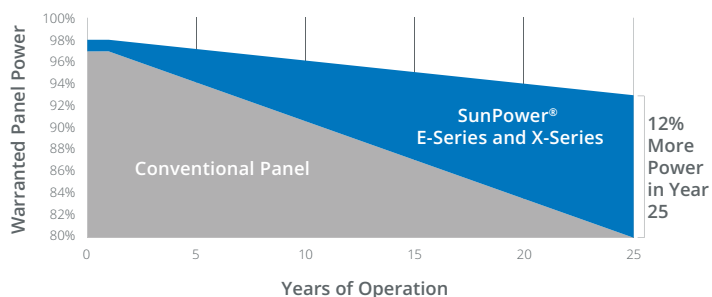
### The SunPower Maxeon® Solar Cell

- Enables high efficiency panels<sup>2</sup>
- Unmatched reliability<sup>4</sup>
- Patented solid metal foundation prevents breakage and corrosion



### Best Reliability, Best Warranty

With more than 25 million panels deployed around the world, SunPower technology is proven to last. That's why we stand behind our panel with the industry's best 25-year Combined Power and Product Warranty, including the highest Power Warranty in solar.

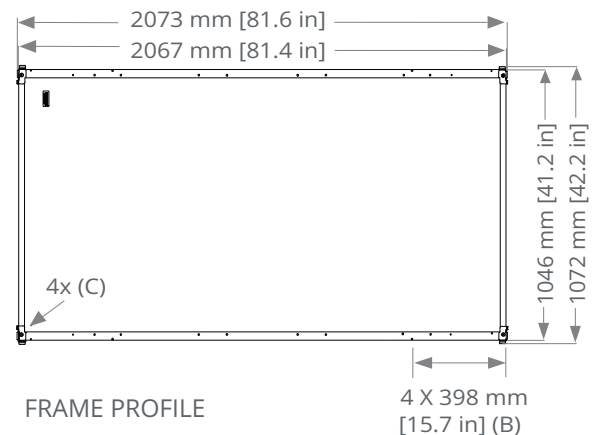


## E-Series: E20-435-COM SunPower® Commercial DC Panel for Helix

Electrical Data	
SPR-E20-435-COM	
Nominal Power (P <sub>nom</sub> ) <sup>5</sup>	435 W
Power Tolerance	+5/-3%
Panel Efficiency	20.1%
Rated Voltage (V <sub>mpp</sub> )	72.9 V
Rated Current (I <sub>mpp</sub> )	5.97 A
Open-Circuit Voltage (V <sub>oc</sub> )	85.6 V
Short-Circuit Current (I <sub>sc</sub> )	6.43 A
Max. System Voltage	1500 V UL & 1500 V IEC
Maximum Series Fuse	15 A
Power Temp Coef.	-0.35% / °C
Voltage Temp Coef.	-235.5 mV / °C
Current Temp Coef.	2.6 mA / °C

Operating Condition And Mechanical Data	
Temperature	-40° F to +185° F (-40° C to +85° C)
Impact Resistance	1 inch (25 mm) diameter hail at 52 mph (23 m/s)
Appearance	Class A
Solar Cells	128 Monocrystalline Maxeon Gen II
Tempered Glass	High-transmission tempered anti-reflective
Junction Box	IP-65, 1230 mm cables / MC4 Compatible
Weight	56 lbs (25.4 kg)
Max. Load	Wind: 50 psf, 2400 Pa, 244 kg/m <sup>2</sup> front & back Snow: 112 psf, 5400 Pa, 550 kg/m <sup>2</sup> front
Frame	Class 2 silver anodized; stacking pins

Tests And Certifications	
Standard Tests <sup>6</sup>	UL1703 (Type 2 Fire Rating), IEC 61215, IEC 61730
Quality Management Certs	ISO 9001:2015, ISO 14001:2015
EHS Compliance	RoHS, OHSAS 18001:2007, lead free, Recycle Scheme, REACH SVHC-163
Ammonia Test	IEC 62716
Desert Test	10.1109/PVSC.2013.6744437
Salt Spray Test	IEC 61701 (maximum severity)
PID Test	1500 V: IEC 62804, PVEL 600 hr duration
Available Listings	UL, TUV, MCS, FSEC, CEC



(A) Cable Length: 1230 mm +/-10 mm

(B) Stacking Pins

(C) Optional Helix-compatible Clips

Please read the safety and installation guide.

Clips installed on Helix Roof compatible modules only.

Clips are not removable and may not be compatible with non-Helix-branded racking.

1 SunPower 327 W compared to a Conventional Panel on same sized arrays (260 W, 16% efficient, approx. 1.6 m<sup>2</sup>), 4% more energy per watt (based on PVsyst pan files), 0.75%/yr slower degradation (Campeau, Z. et al. "SunPower Module Degradation Rate," SunPower white paper, 2013).

2 Based on search of datasheet values from websites of top 10 manufacturers per IHS, as of January 2017.

3 Helix-compatible modules may not be compatible with other racking systems.

4 #1 rank in "Fraunhofer PV Durability Initiative for Solar Modules: Part 3". PVTech Power Magazine, 2015. Campeau, Z. et al. "SunPower Module Degradation Rate," SunPower white paper, 2013.

5 Standard Test Conditions (1000 W/m<sup>2</sup> irradiance, AM 1.5, 25° C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.

6 Type 2 fire rating per UL1703:2013, Class C fire rating per UL1703:2002.

See [www.sunpower.com/company](http://www.sunpower.com/company) for more reference information.

For more details, see extended datasheet: [www.sunpower.com/solar-resources](http://www.sunpower.com/solar-resources).

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

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