

# SunPower® X20-250-BLK-B-AC | Residential AC Module Series

## Design-Driven Advantages

- #1 module aesthetics and efficiency<sup>1</sup>
- Unmatched module reliability<sup>2</sup>
- No electrolytic capacitors
- 25-year Combined Power and Product Warranty

## Maximize Value for Roof

- Size system for roof, not for string inverter
- Optimize performance of each module

## Expand Deployment Options

- Complex roofs and partial shading
- Small systems
- System expandability

## Simplify & Speed Installation

- Factory-integrated microinverter
- Robust, double-locking AC connectors
- Design flexibility offsite and onsite
- No DC string sizing process
- Fewer installation steps than competing systems
- Intuitive commissioning

## Component of Complete System

- Built for use with SunPower® InvisiMount™ and SunPower Monitoring System
- Superior system reliability and aesthetics



<sup>1</sup>Highest of over 3,200 silicon solar panels, Photon Module Survey, Feb. 2014

<sup>2</sup>#1 rank in "PV Module Durability Initiative Public Report," Fraunhofer CSE, Feb 2013. Five out of the top eight largest manufacturers were tested. Campeau, Z. et al. "SunPower Module Degradation Rate." SunPower white paper, Feb 2013. See [www.sunpowercorp.com/facts](http://www.sunpowercorp.com/facts) for details.



**x20**  
SERIES

## Optimize System and Installation Efficiency

SunPower® AC Modules, which include a factory-integrated SunPower microinverter, provide a revolutionary combination of high efficiency, high reliability, and module-level DC-to-AC power conversion. Designed specifically for use with SunPower InvisiMount™ and SunPower Monitoring System, SunPower AC Modules enable rapid installation, best-in-class system aesthetics, and intuitive visibility into system performance. All this comes with the best Combined Power and Product Warranty.

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



# SunPower® X20-250-BLK-B-AC | Residential AC Module Series

Model: X20-250-BLK-B-AC

DC Electrical Data		
Measured at Standard Test Conditions (STC): irradiance of 1000 W/m <sup>2</sup> , AM 1.5, and cell temperature 25° C		
Nominal Power <sup>3</sup>	P <sub>nom</sub>	250 W
Power Tolerance	P <sub>tol</sub>	+5/-0%
Avg. Panel Efficiency <sup>4</sup>	η	20.5%
Temperature Coefficient (Power)	P	-0.30 % / °C
Shade Tolerance	<ul style="list-style-type: none"> <li>• Three bypass diodes</li> <li>• Integrated panel-level maximum power point tracking</li> </ul>	

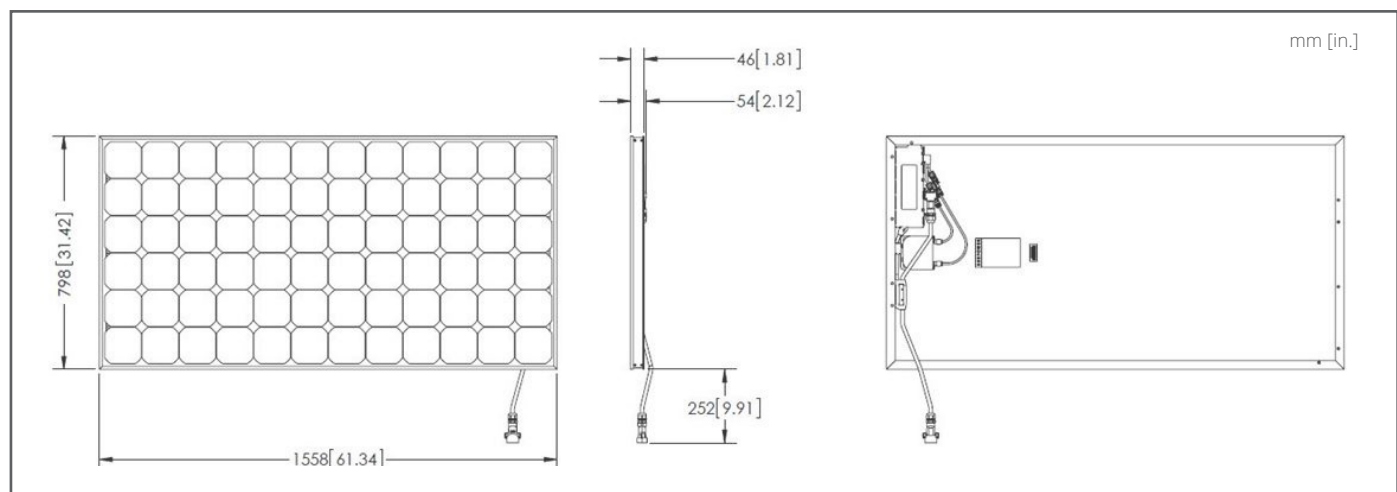
AC Electrical Data	
Output @ 240 V (min./nom./max.)	211/240/264 V
Output @ 208 V (min./nom./max.)	183/208/229 V
Operating Frequency (min./nom./max.)	59.3/60.0/60.5 Hz
Output Power Factor (min.)	0.99
AC Max. Continuous Output Current @ 240 V	0.99 A
AC Max. Continuous Output Current @ 208 V	1.14 A
AC Max. Continuous Output Power	238 W
DC/AC CEC Conversion Efficiency	95.0%
Max. Units Per Branch Circuit @ 240 V	16 (single phase)
Max. Units Per Branch Circuit @ 208 V	24 (three pole) or 14 (two pole)

Mechanical Data	
Solar Cells	72 Monocrystalline Maxeon® Gen III
Front Glass	High-transmission tempered glass with anti-reflective (AR) coating
Environmental Rating	Outdoor Rated
Frame	Class 1 black anodized (highest AAMA rating)
Weight	38.7 lbs (17.6 kg)
Max. Recommended Module Spacing	1.3 in (33 mm)

Tested Operating Conditions	
Operating Temp.	-40° F to +185° F (-40° C to +85° C)
Max. Ambient Temp.	133° F (56° C)
Max. Load	Wind: 2400 Pa (50 psf, 245 kg/m <sup>2</sup> ) front & back Snow: 5400 Pa (112 psf, 550 kg/m <sup>2</sup> ) front
Impact Resistance	1 inch (25 mm) diameter hail at 52 mph (23 m/s)

Warranties and Certifications	
Warranties	<ul style="list-style-type: none"> <li>• 25-year limited power warranty</li> <li>• 25-year limited product warranty</li> </ul>
Certifications	<ul style="list-style-type: none"> <li>• UL 1741, including compliance with applicable requirements of IEEE 1547 and IEEE 1547.1</li> <li>• Type 2 Fire Rated</li> <li>• Alternating Current (AC) Module designation enables installation in accordance with NEC 690.6</li> </ul>

## Dimensions



<sup>3</sup>Standard Test Conditions (1000 W/m<sup>2</sup> irradiance, AM 1.5, 25° C). NREL calibration standard: SOMS current, LACCS FF and voltage.

<sup>4</sup>Based on average of measured power values during production.

See [www.sunpower.com/facts](http://www.sunpower.com/facts) for more reference information. For more details, see extended datasheet: [www.sunpower.com/datasheets](http://www.sunpower.com/datasheets). Read safety and installation instructions before using this product.

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