

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

Design-Driven Advantages

- #1 module aesthetics and efficiency¹
- Reliability-focused design, which enables 25-year warranty

Maximum Value for Roof

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

Expand Access to Solar

- Complex roofs
- Partial shading
- Small systems
- System expandability

Simple & Fast Installation

- Factory-integrated microinverter
- Robust, double-locking AC connectors
- AC architecture allows onsite design flexibility
- No DC string sizing process
- Fewer steps than competing DC-optimizer and non-factory-integrated AC systems
- Simple commissioning

Core of Superior System

- Built for use with SunPower InvisiMount™
- Best-in-class system reliability and aesthetics
- AC system means fewer parts, simpler design
- Pair with SunPower monitoring app for system data



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



Optimize System and Installation Efficiency

Factory-integrated SunPower® AC Modules provide a revolutionary combination of high efficiency, high reliability, and module-level DC-to-AC power conversion. Designed specifically for use with SunPower InvisiMount™ residential mounting system, SunPower AC Modules also achieve rapid installation and best-in-class system aesthetics. All this comes with an industry-leading 25-year AC module warranty.

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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 ² , AM 1.5, and cell temperature 25° C	
Nominal Power (P _{nom})	250 W
Power Tolerance (η)	+5/-0%
Avg. Panel Efficiency	20.3%
Rated Voltage (V _{mpp})	42.8 V
Rated Current (I _{mpp})	5.84 A
Open-circuit Voltage (V _{oc})	50.9 V
Short-circuit Current (I _{sc})	6.20 A
Power Temperature Coefficients (P)	-0.30 %/K
Voltage Temperature Coefficients (V _{oc})	-25.6 mV/K
Current Temperature Coefficients (I _{sc})	3.5 mA/K
Shade Tolerance	<ul style="list-style-type: none"> • Three bypass diodes • Integrated panel-level MPPT

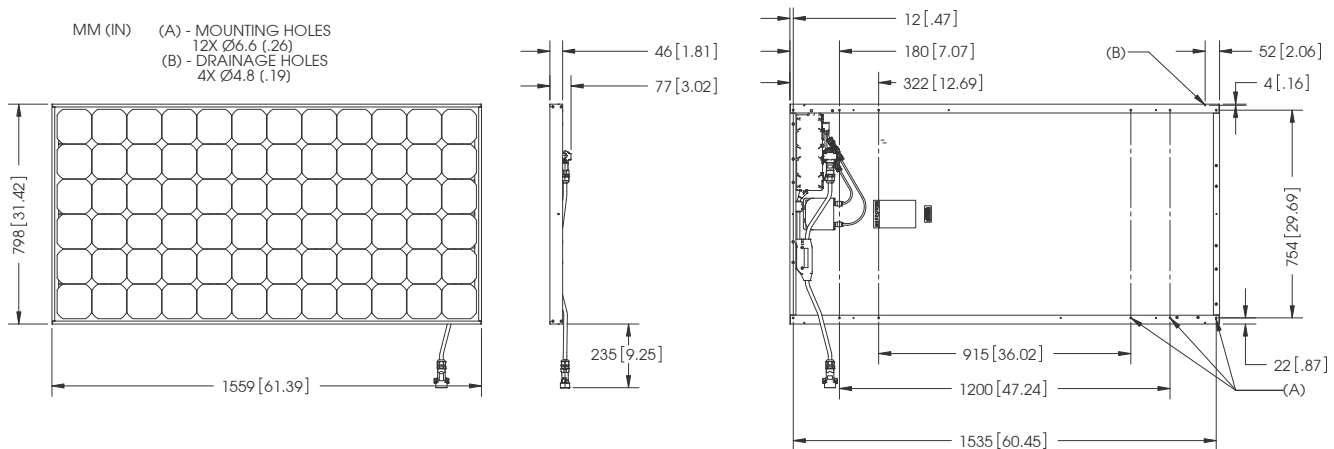
AC Electrical Data	
Output @ 240 V (min./nom./max.)	211/240/264 V
Output @ 208 V (min./nom./max.)	183/208/229 V
Operating Frequency (min./nom./max.)	59.3/60.0/60.5 Hz
Output Power Factor (min.)	0.99
AC Max. Cont. Output Current @ 240 V	0.99 A
AC Max. Cont. Output Current @ 208 V	1.14 A
AC Max. Cont. 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	IP65
Frame	Class 1 black anodized (highest AAMA rating)
Weight	38.7 lbs (17.6 kg)
Max. Recommended Module Spacing	33 mm (1.3 in)

Tested Operating Conditions	
Temperature	-40° C to +85° C (-40° F to +185° F)
Max. Load	Wind: 2400 Pa (50 psf, 245 kg/m ²) front & back Snow: 5400 Pa (112 psf, 550 kg/m ²) 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"> • 25-year limited power warranty • 25-year limited product warranty
Certifications	UL 1741, including compliance with applicable requirements of IEEE 1547 and IEEE 1547.1 Type 2 Fire Rated Alternating Current (AC) Module designation enables installation in accordance with NEC 690.6

Dimensions



See <http://www.sunpower.com/facts> for more reference information.

For more details, see extended datasheet: www.sunpower.com/datasheets. Read safety and installation instructions before using this product.

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