

SPR-P6-XXX-BLK-E9-AC

PERFORMANCE 6 AC SOLAR PANEL

405-410 W | Up to 20.9% Efficient



Factory-integrated
microinverter



Black backsheet,
black frame

Enhanced Power Density

With high efficiency, LID-resistant solar cells (G12, 210mm), a lower temperature coefficient, and front-side conductive wires that support increased current collection, SunPower Performance panels are uniquely engineered to deliver more lifetime energy over standard solar panels.

Proven Reliability

A proprietary shingled-cell design maximises durability in all types of weather conditions—including reinforced cell connections that withstand the stresses of daily temperature swings, redundant electrical paths that alleviate the impact of cell cracks. Each panel's microinverter enables independent panel operation to mitigate the impact of shade while improving system performance.



SunPower Complete Confidence Warranty

Each SunPower Performance panel is manufactured with the absolute confidence to deliver more energy and greater reliability over time—and backed by one of the industry's most comprehensive warranties.

Product and power coverage	25 / 25 Years
Year 1 minimum warranted output	98.0%
Maximum annual degradation	0.45%
Microinverter limited product warranty covered by Enphase	25 Years



Learn more about the SPR-P6-XXX-BLK-E9-AC
sunpower.maxeon.com

PERFORMANCE 6 AC POWER: 405-410 W | EFFICIENCY: Up to 20.9%

AC Electrical Data	
Inverter Model: IQ8MC	@230 VAC
Peak Output Power	330 VA
Max. Continuous Output Power	325 VA
Nom. (L-N) Voltage/Range	184 – 276 V
Max. Continuous Output Current	1.43 A
Max. Units per 20 A (L-N) Branch Circuit	11
Weighted Efficiency ¹	96.5%
Nom. Frequency	50 Hz
Extended Frequency Range	45-55 Hz
Total Harmonic Distortion	<5%
Overvoltage Class AC Port	III
Night-time Power Loss	50 mW
Power Factor Setting	1.0
Power Factor (adjustable)	0.8 lead. / 0.8 lag.

DC Power Data		
	SPR-P6-410-BLK-E9-AC	SPR-P6-405-BLK-E9-AC
Nom. Power ² (P _{nom})	410 W	405 W
Power Tol.	+3/0%	+3/0%
Module Efficiency	20.9%	20.6%
Temp. Coef. (Power)	-0.34%/°C	
Shade Tol.	Integrated module-level max. power point tracking	

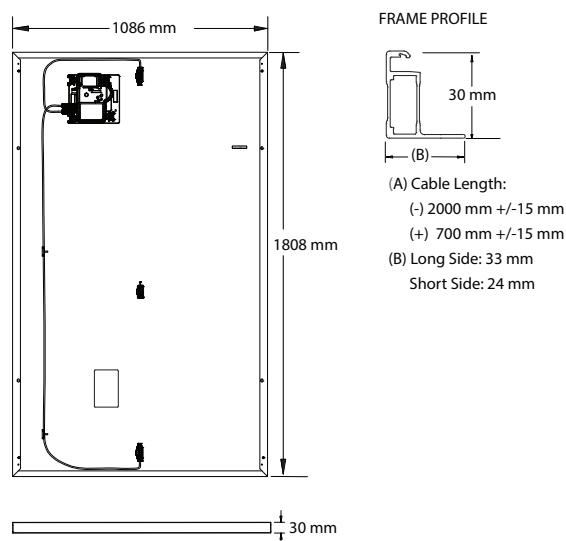
Mechanical Data	
Solar Cells	Monocrystalline PERC
Tempered Glass	High-transmission tempered anti-reflective
Environmental Rating	Microinverter Outdoor rated - IP67
Frame	Black anodized aluminum alloy
Weight	22.1 kg

Packaging Configuration	
Number of modules per pallet	35
Number of pallets per 40ft HQ container	24
Number of modules per container	840



Tested Operating Conditions	
Operating Temp.	-40°C to +65°C
Max. Ambient Temp.	50°C
Relative Humidity	4% to 100% (Condensing)
Max. Altitude	2000 m
Max. Load ³	Wind: 2400 Pa, 244 kg/m ² back Snow: 5400 Pa, 550 kg/m ² front
Impact Resistance	25 mm diameter hail at 23 m/s
Microinverter enclosure	Class II double-insulated, corrosion resistant polymeric enclosure

Warranties, Certifications and Compliance	
Panel Warranties	<ul style="list-style-type: none"> 25-year limited power warranty 25-year limited product warranty
Microinverter Warranty	<ul style="list-style-type: none"> 25-year limited product warranty covered by Enphase warranty⁴
Certifications and Compliance	<ul style="list-style-type: none"> IEC 61215, 61730⁵ IEC 62109-1, 62109-2 IEC 61000-3-2, 61000-3-3, 61000-6-2, 61000-6-3, IEC 50065-1, 50065-2-2, EN55011⁶ IEC/ EN 50549-1:2019
Quality Management Certs	ISO 9001:2015, ISO 14001:2015
PID Test	1000 V: IEC 62804
LeTID Test	TÜV 2 PfG 2689 ⁷ (LeTID Detection)
Available listing	TUV ⁵ , EnTest
Green Building Certification contribution	Panels can contribute additional points towards LEED and BREEAM certifications
EHS Compliance	ISO 45001-2018, Recycling Scheme



Please read the safety and installation instructions.
Visit www.sunpower.maxeon.com/int/InstallGuideACModules
Paper version can be requested through
techsupport.ROW@maxeon.com

1 Tested per EN 50530 (EU).

2 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.

3 As per IEC 61215-2016 tested and certified.

4 AC modules shall be connected to Enphase Monitoring hardware (IQ Gateway) to enable Enphase product warranty.

5 Refer to the DC module, Class C fire rating per IEC 61730.

6 At STC with MPP range.

7 Panels degraded 0% in extended LeTID testing conducted by PVEL. Test report R10124977G-1, 2020.

Designed in U.S.A.

Assembled in China

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

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