FROM MAXEON SOLAR TECHNOLOGIES

SPR-P6-XXX-COM-S-BF

SUNPOWER

PERFORMANCE 6 SOLAR PANEL

485-510 W | Up to 21.4% Efficient



ldeal for commercial applications





Bifacial energy generation

Enhanced Power Density

With high efficiency, LeTID/LID-resistant solar cells (G12, 210mm), bifacial energy capture, 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, and an advanced electrical architecture that is more resilient to the effects of shade and mitigates hot-spot formation.

Complete Confidence

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 Year 1 minimum warranted output Maximum annual degradation

25 / 25 Years 98.0% 0.45%



Performance 6 POWER: 485-510 W | EFFICIENCY: Up to 21.4%

Electrical Data, Front STC Characteristics ¹						
	SPR-P6-510-COM- S-BF	SPR-P6-505-COM- S-BF	SPR-P6-500-COM- S-BF	SPR-P6-495-COM- S-BF	SPR-P6-490-COM- S-BF	SPR-P6-485-COM- S-BF
Nominal Power (Pnom)	510 W	505 W	500 W	495 W	490 W	485 W
Power Tolerance	+3/0%	+3/0%	+3/0%	+3/0%	+3/0%	+3/0%
Panel Efficiency	21.4%	21.2%	21.0%	20.7%	20.5%	20.3%
Rated Voltage (Vmpp)	36.7 V	36.4 V	36.2 V	36.0 V	35.7 V	35.4 V
Rated Current (Impp)	13.92 A	13.88 A	13.82 A	13.77 A	13.73 A	13.71 A
Open-Circuit Voltage (Voc) (+/–3%)	43.4 V	43.3 V	43.2 V	43.1 V	43.0 V	42.9 V
Short-Circuit Current (lsc) (+/–3%)	14.82 A	14.76 A	14.71 A	14.65 A	14.59 A	14.56 A

Bifacial Gain ²						
Pmax with 5% Bifacial Gain	536 W	530 W	525 W	520 W	515 W	509 W
lsc with 5% Bifacial Gain	15.56 A	15.50 A	15.44 A	15.38 A	15.32 A	15.29 A
Pmax with 10% Bifacial Gain	561 W	556 W	550 W	545 W	539 W	534 W
lsc with 10% Bifacial Gain	16.30 A	16.24 A	16.18 A	16.12 A	16.05 A	16.02 A
Pmax with 20% Bifacial Gain	612 W	606 W	600 W	594 W	588 W	582 W
lsc with 20% Bifacial Gain	17.78 A	17.72 A	17.65 A	17.58 A	17.51 A	17.47 A

Mechanical Data		
Impact Resistance	25 mm diameter hail at 23 m/s	
Solar Cells	Monocrystalline PERC	
Glass	2.0 mm, Heat Strengthened Glass	
Junction Box	IP-68, 3 bypass diodes	
Connector	Zerun Z4S or Stäubli Evo2	
Weight	29.6 kg	
Max. Load ³	Wind: 2400 Pa, 245 kg/m ² front & back	
	Snow: 5400 Pa, 550 kg/m² front	
Frame	Silver anodized aluminum alloy	

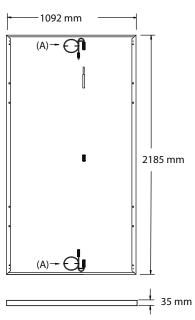
Electrical Data		
Bifaciality (φPmax)	70% +/-10%	
Maximum System Voltage	1500 V IEC	
Temperature	-40°C to +85°C	
Maximum Series Fuse	25 A	
Power Temp. Coef.	–0.34% / ° C	
Voltage Temp. Coef.	–0.26% / ° C	
Current Temp. Coef.	0.05% / ° C	

	Tests And Certifications
Standard Tests	IEC 61215, IEC 61730 Rated to 1500 V
Fire Rating	Class C (IEC 61730)
Quality Certs	ISO 9001:2015, ISO 14001:2015
EHS Compliance	ISO 45001-2018, Recycling Scheme
Ammonia Test	IEC 62716
Dust and Sand	IEC 60068-2-68
Salt Spray Test	IEC 61701 (maximum severity)
LeTID Test	TUV 2fg 2689/04.19 (LeTID Detection)
PID Test	IEC 62804

1 Standard Test Conditions (1000 W/m² irradiance, AM 1.5, 25° C). NREL calibration Standard: SOMS current, LACCS FF and Voltage.

2 The additional gain from the back side of the panel compared to the power of the front side of the panel at the standard test conditions. It depends on mounting (structure, height, tilt angle etc.) and albedo of the underlying surface. 3 Safety factor 1.5 included.

Designed in U.S.A. Assembled in China Specifications included in this datasheet are subject to change without notice. ©2022 Maxeon Solar Technologies. All Rights Reserved. View warranty, patent and trademark information at maxeon.com/legal.



FRAME PROFILE



(A) Cable lengths:
(-) 1200 mm +/-15 mm
(+) 300 mm +/-15 mm
(B) Long Side: 30 mm
Short Side: 16 mm



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

