# SUNPOWER | PERFORMANCE

## Making the conventional, exceptional

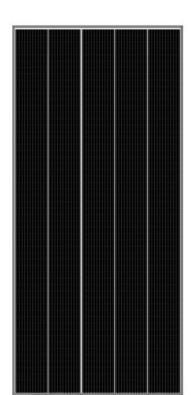












## Engineered for Performance

- · Smaller cells stay cooler when shaded, extending panel life<sup>3</sup>
- An advance encapsulant minimizes degradation from environmental exposure
- · Conductive adhesive defends against daily temperature swings
- · Redundant cell connections create flexible paths for continuous electricity flow



# PERFORMANCE 6 COM | 535-550

## POWER RANGE: 535-550W

The SunPower Performance P6-COM-M-BF panel is engineered to meet the unique needs of solar power plants. Bifacial power generation and G12 (210mm) cell technology combine to maximise power density, while its framed glass/glass construction offers greater durability for extended panel life.

Backed by an comprehensive warranty and an estimated 35-year useful life, 1 SunPower Performance panels wrap conventional front contact cells with 35 years of materials, engineering and manufacturing expertise to mitigate the reliability challenges of Conventional Panel design.

## **Durability that Translates to More Energy**

Engineered to stand up to environmental stresses such as shading, daily temperature swings and high humidity, the SunPower Performance P6 COM is a high power panel uniquely suited for power plant EPCs and developers looking to maximize energy production.

### A Track Record of Innovation Leadership

SunPower Performance panels represent the most deployed shingled cell panel in the industry—innovation protected by a growing portfolio of patents worldwide.2





Countries



90+ **Patents** 

### A Better Product. A Better Warranty.

SunPower Performance P6-COM-M-BF panel is backed by the SunPower Performance COM panel warranty providing 25-year product and power coverage.

 Year 1 Minimum Warranted Power Output 98.0%

 Maximum Annual Degradation 0.45%

87.2% Year 25 Warranted Power Output

#### PERFORMANCE 6 COM POWER: 535-550 W

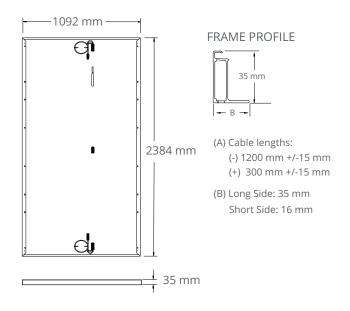
Electrical Data, Front STC Characteristics <sup>4</sup>				
	SPR-P6-550-COM-M-BF	SPR-P6-545-COM-M-BF	SPR-P6-540-COM-M-BF	SPR-P6-535-COM-M-BF
Nominal Power (Pnom)	550 W	545 W	540 W	535 W
Power Tolerance	+3/0%	+3/0%	+3/0%	+3/0%
Efficiency	21.1%	20.9%	20.7%	20.6%
Rated Voltage (Vmpp)	39.5 V	39.3 V	39.1 V	38.8 V
Rated Current (Impp)	13.92 A	13.87 A	13.81 A	13.79 A
Open-Circuit Voltage (Voc) (+/-3%)	47.6 V	47.4 V	47.2 V	47.0 V
Short-Circuit Current (Isc) (+/-3%)	14.82 A	14.81 A	14.80 A	14.79 A

Bifacial Gain <sup>5</sup>				
Pmax with 5% Bifacial Gain	578 W	572 W	567 W	562 W
Isc with 5% Bifacial Gain	15.56 A	15.55 A	15.54 A	15.52 A
Pmax with 10% Bifacial Gain	605 W	600 W	594 W	589 W
Isc with 10% Bifacial Gain	16.30 A	16.29 A	16.28 A	16.26 A
Pmax with 20% Bifacial Gain	660 W	654 W	648 W	642 W
Isc with 20% Bifacial Gain	17.78 A	17.77 A	17.76 A	17.74 A

Mechanical Data		
Impact Resistance	25 mm diameter hail at 23 m/s	
Solar Cells	Monocrystalline PERC	
Glass	2.0mm, Heat Strengthened Glass	
Junction Box	IP-68, 3 bypass diodes	
Connector	Renhe RHC2 or Zerun Z4S or Stäubli Evo2	
Weight	32.4 kg	
Max. Load	Wind: 2400 Pa, 245 kg/m² front & back	
	Snow: 5400 Pa, 550 kg/m² front	
Frame	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 (Pending)		
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 Performance panels expected useful life of 35 years. Source: "SunPower P-Series Technology Technical Review," Leidos Independent Engineer Report. 2016.
- 2 Osborne. "SunPower supplying P-Series modules to a 125MW NextEra project." PV-Tech.org. March 2017.
- 3 SunPower Performance Series Thermal Performance, Z.Campeau 2016.
- 4 Measured at Standard Test Conditions (STC): irradiance of 1000 W/m², AM 1.5, and cell temperature 25° C.
- 5 The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

Designed in the U.S.A. Assembled in China

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

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