



SunPower® Performance Series | P19

SunPower® Performance Series panels are designed to deliver consistent performance for many decades in commercial applications.

Increased Energy Production

The Performance Series modules deliver more energy due to higher performance in row-to-row shading, enabling closer row spacing and more energy from the same area. The unique parallel circuitry limits shading loss to the shaded area only instead of much larger sections of energy loss in conventional panels.¹

Design Tip: When modeling P-Series energy performance be sure to use linear shading losses. For more detailed guidance please visit <https://us.sunpower.com/sites/sunpower/files/media-library/manuals/mn-sunpower-p-series-modeling-guide.pdf>

Higher Efficiency

The Performance Series design minimizes white space between solar cells, eliminates reflective metal lines on the cells, and lowers electrical resistance between cells, increasing efficiency compared to Conventional Commercial Panels.²

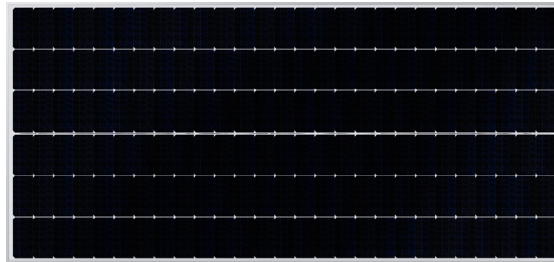
High Reliability

Innovative panel design uses flexible and redundant electrical connections between solar cells to deliver enhanced reliability.

SunPower Quality

Tested to SunPower's rigorous quality standards, and backed by the industry's best Combined Power and Product Warranty.

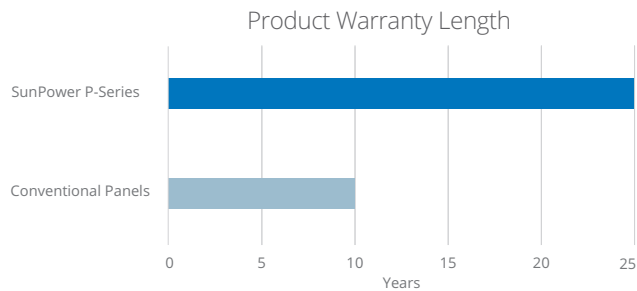
High Performance & Excellent Reliability



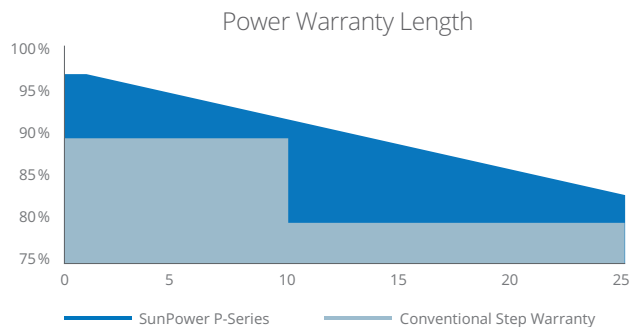
SPR-P19-405-COM



25 Year Combined Warranty Protect your investment



SunPower provides the best 25 year Combined Power and Product warranty in the industry, providing coverage regardless of product defect or power loss.



SunPower's Performance Series is warranted to produce more than 97% power in the first year, then declining by 0.6% per year, ending at 82.6% power after 25 years.

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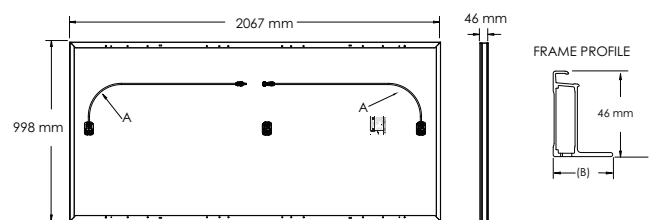
Electrical Data, STC ³						
Model	SPR-P19-405-COM	SPR-P19-400-COM	SPR-P19-395-COM	SPR-P19-390-COM	SPR-P19-385-COM	SPR-P19-380-COM
Nominal Power (P _{nom})	405 W	400 W	395 W	390 W	385 W	380 W
Power Tolerance	+5/-0%	+5/-0%	+5/-0%	+5/-0%	+5/-0%	+5/-0%
Efficiency	19.6%	19.4%	19.1%	18.9%	18.7%	18.4%
Rated Voltage (V _{mpp})	43.6 V	43.4 V	43.2 V	43.1 V	42.8 V	42.6 V
Rated Current (I _{mpp})	9.28 A	9.22 A	9.14 A	9.05 A	8.99 A	8.92 A
Open-Circuit Voltage (V _{oc})	52.9 V	52.7 V	52.5 V	52.3 V	52.0 V	51.8 V
Short-Circuit Current (I _{sc})	9.87 A	9.80 A	9.72 A	9.63 A	9.58 A	9.49 A
Power Temp. Coef.	-0.36% / ° C					
Voltage Temp. Coef.	-0.29% / ° C					
Current Temp. Coef.	0.05% / ° C					
Maximum System Voltage	1000 V IEC					
Maximum Series Fuse	15 A					

Operating Condition And Mechanical Data	
Temperature	-40° F to +185° F (-40° C to +85° C)
Impact Resistance	1 inch (25 mm) diameter hail at 52 mph (23 m/s)
Appearance	Class A
Solar Cells	Monocrystalline PERC
Tempered Glass	High-transmission tempered anti-reflective
Junction Box	IP-67, Multi-Contact (MC4) - 3 Diodes inside / BYPASS
Weight	23,1 kg
Max. Load	Wind: 2400 Pa, 245 kg/m ² front & back Snow: 5400 Pa, 550 kg/m ² front
Frame	Class 2 silver anodized
Blocking Diode	None

Tests And Certifications	
Standard Tests	IEC 61215, IEC 61730
Quality Certs	ISO 9001:2008, ISO 14001:2004
EHS Compliance	OHSAS 18001:2007, Recycle Scheme
Ammonia Test	IEC 62716
Desert Test	10.1109/PVSC.2013.6744437
Salt Spray Test	IEC 61701 (maximum severity)
PID Test	Potential-Induced Degradation free: 1000 V
Available Listings	TUV

REFERENCES:

- 1 Independent Shade Study by CFV Laboratory.
- 2 Compared to a Conventional Commercial Panel (310 W, 16% efficient, approx. 1.93 m²).
- 3 Measured at Standard Test Conditions (STC): irradiance of 1000 W/m², AM 1.5, and cell temperature 25° C.



- (A) Portrait Cable: 1000 mm +/-15 mm
 (B) Long Side: 32 mm
 Short Side: 24 mm

Read safety and installation instructions before using this product.