## SUNPOWER

### 230 SOLAR PANEL

EXCEPTIONAL EFFICIENCY AND PERFORMANCE

#### **BENEFITS**

#### **Highest Efficiency**

SunPower<sup>TM</sup> Solar Panels are the most efficient photovoltaic panels on the market today.

#### **More Power**

Our panels produce more power in the same amount of space—up to 50% more than conventional designs and 100% more than thin film solar panels.

#### **Reduced Installation Cost**

More power per panel means fewer panels per install. This saves both time and money.

#### Reliable and Robust Design

Proven materials, tempered front glass, and a sturdy anodized frame allow panel to operate reliably in multiple mounting configurations.



SPR-230-WHT-U



The SunPower™ 230 Solar Panel provides today's highest efficiency and performance. Utilizing 72 all back-contact solar cells, the SunPower 230 delivers a total panel conversion efficiency of 18.5%. The panel's reduced voltage-temperature coefficient and exceptional low-light performance attributes provide outstanding energy delivery per peak power watt.

SunPower's High Efficiency Advantage - Up to Twice the Power

	Thin Film	Conventional	SunPower
Peak Watts / Panel	65	1 <i>7</i> 0	230
Efficiency	9.0%	13.0%	18.5%
Peak Watts / ft² (m²)	8 (90)	12 (130)	17 (185)

#### **About SunPower**

SunPower designs, manufactures and delivers high-performance solar electric technology worldwide. Our high-efficiency solar cells generate up to 50% more power than conventional solar cells. Our high-performance solar panels, roof tiles and trackers deliver significantly more energy than competing systems.



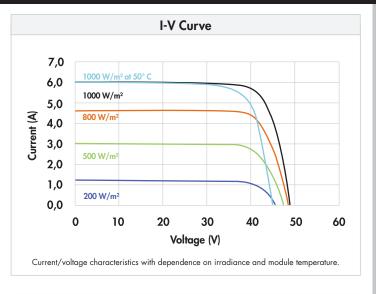
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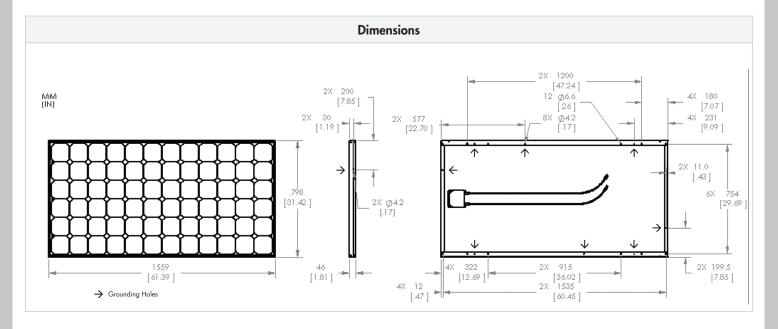
Electrical Data			
Measured at Standard Test Conditions (STC): irradiance of $1000W/m^2$ , AM 1.5, and cell temperature $25^{\circ}$ C			
Peak Power (+/-5%)	$P_{max}$	230 W	
Rated Voltage	$V_{mpp}$	41.0 V	
Rated Current	I <sub>mpp</sub>	5.61 A	
Open Circuit Voltage	V <sub>oc</sub>	48.7 V	
Short Circuit Current	I <sub>sc</sub>	5.99 A	
Maximum System Voltage	UL	600 V	
Temperature Coefficients			
	Power	-0.38% / K	
	Voltage (V <sub>oc</sub> )	-132.5mV / K	
	Current (I <sub>sc</sub> )	3.5mA / K	
NOCT		45° C +/-2° C	
Series Fuse Rating		20 A	

Mechanical Data		
Solar Cells	72 SunPower all-back contact monocrystalline	
Front Glass	High transmission tempered glass	
Junction Box	IP-65 rated with 3 bypass diodes	
	Dimensions: 32 x 155 x 128 (mm)	
Output Cables	1000mm length cables / MultiContact (MC4) connectors	
Frame	Anodized aluminum alloy type 6063 (black)	
Weight	33.1 lbs. (15.0 kg)	



	Tested Operating Conditions
Temperature	-40° F to +185° F (-40° C to + 85° C)
Max load	113 psf 550kg/m² (5400 Pa) front – e.g. snow; 50 psf 245kg/m² (2400 Pa) front and back – e.g. wind
Impact Resistance	Hail 1 in (25 mm) at 52mph (23 m/s)

Warranties and Certifications		
Warranties	25 year limited power warranty	
	10 year limited product warranty	
Certifications	Tested to UL 1703. Class C Fire Rating	



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

Visit sunpowercorp.com for details