



BENEFITS

Reliable

Proven polycrystalline technology and rigorous quality control offer long-term, reliable energy delivery, backed by the dependable SunPower 25-year power warranty

Solid Performance

Each panel provides 228 rated watts with a conversion efficiency of 13.9%

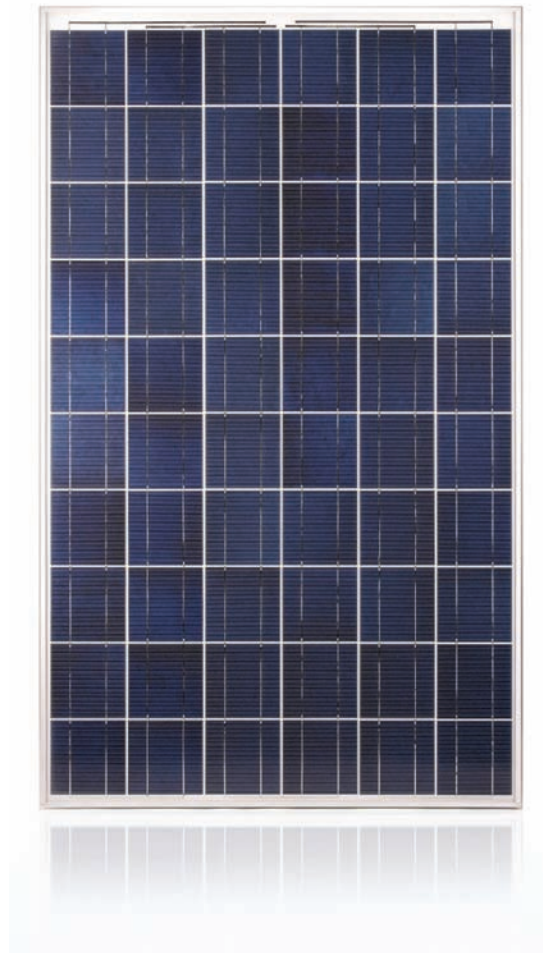
Easy to Install

Junction box with integrated connectors and a versatile module format enable easy installation

Suitable for all Applications

Designed and tested for use with SunPower™ mounting systems

E13 / 228 SOLAR PANEL



Serengeti™ Solar Panels deliver consistent long-term performance. Rigorous quality assurance from SunPower Corporation ensures predictable output and proven reliability.



by SUNPOWER

Electrical Data

Measured at Standard Test Conditions (STC):
Irradiance 1000W/ m², AM 1.5, and cell temperature 25°C

Model Name			SER-228P
Peak Power (+5/-3%)		P _{nom}	228 W
Efficiency		η	13.9 %
Rated Voltage		V _{mpp}	29.6 V
Rated Current		I _{mpp}	7.70 A
Open Circuit Voltage		V _{OC}	37.8 V
Short Circuit Current		I _{SC}	8.30 A
Maximum System Voltage		UL	600 V
Temperature Coefficients	Power	P	-0.45 %/K
	Voltage	V _{OC}	-0.35 %/K
	Current	I _{SC}	0.05 %/K
NOCT (+/-2° C)			45° C
Series Fuse Rating			15 A
Limiting Reverse Current (2-strings)		I _R	10.4 A

Electrical Data

Measured at Nominal Operating Cell Temperature (NOCT):
Irradiance 800 W/m², 20°C, wind 1 m/s

Nominal Power	P _{max}	164 W
Rated Voltage	V _{mpp}	26.6 V
Rated Current	I _{mpp}	6.15 A
Open Circuit Voltage	V _{oc}	32.7 V
Short Circuit Current	I _{sc}	6.63 A

Mechanical Data

Solar Cells	60 polycrystalline solar cells
Front Glass	High transmission tempered glass
Junction Box	IP-65 rated with 3 bypass diodes 1.26 X 6.10 X 5.04 in (32 X 155 X 128 mm)
Output Cables	3.28 ft (1000mm) length cables/ MultiContact (MC4) compatible connectors
Frame	Anodised aluminium alloy type 6063 (silver)
Dimensions	65.35 X 38.98 in (1660 X 990 mm)
Thickness	1.65 in (42 mm)
Weight	42.1 lbs (19.1 kg)

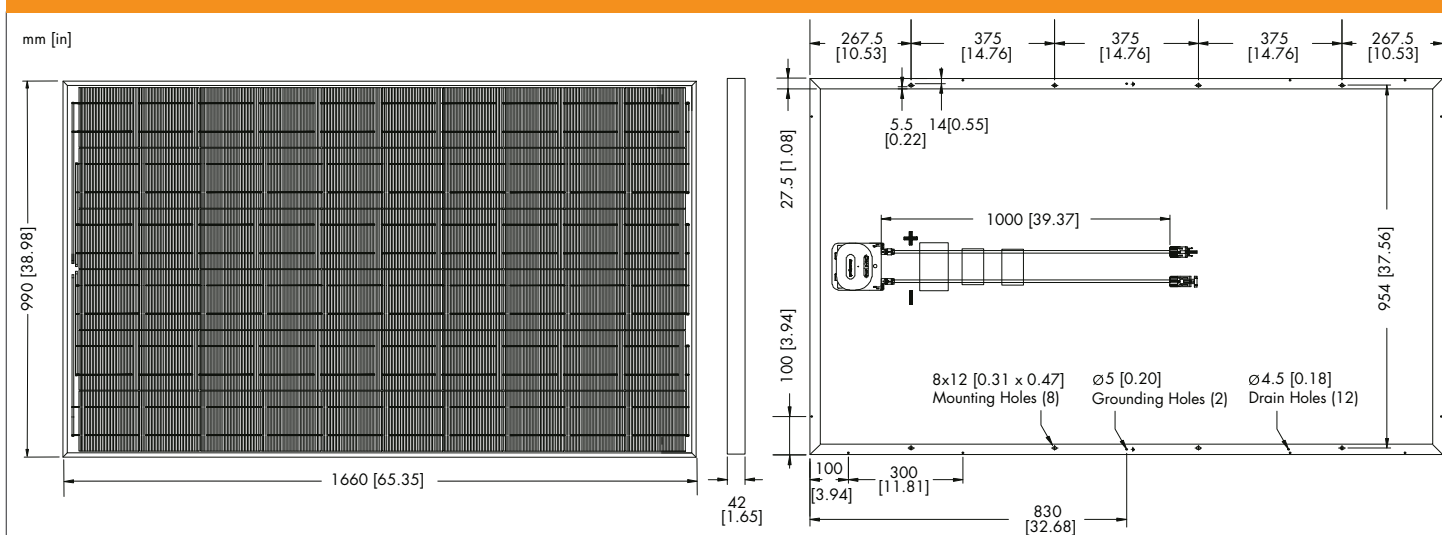
Tested Operating Conditions

Temperature	-40°F to +194°F (-40°C to +90°C)
Max Load	50psf, 245 kg/m ² (2400 Pa), front and back (e.g. wind) 113psf, 550 kg/m ² (5400 Pa), front (e.g. snow) w/specified mounting configurations
Impact Resistance	Hail - 1 in (25mm) at 52mph (23 m/s)

Warranty and Certifications

Warranty	25 year limited power warranty 10 year limited product warranty
Certifications	UL1703, IEC 61215 Ed. 2, IEC 61730 (SCII)

Dimensions



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

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