

# SLP250-20

High Efficiency Multicrystalline PV Module



# SOLARLAND®

Electrical Characteristics	SLP250-20
Product code	250012012
Maximum power (Pmax)	250W
Voltage at Pmax (Vmp)	29.98V
Current at Pmax (Imp)	8.34A
Open-circuit voltage (Voc)	37.54V
Short-circuit current (Isc)	8.84A
Temperature coefficient of Voc	-0.33%/°C
Temperature coefficient of Isc	0.055%/°C
Temperature coefficient of power	-0.44%/°C
NOCT (Air 20°C; Sun 0.8kW/m² wind 1m/s)	47±2°C
Operating temperature	-40°C to 85°C
Maximum system voltage	1000V DC
Power tolerance	0-5W
Panel efficiency	15.4%

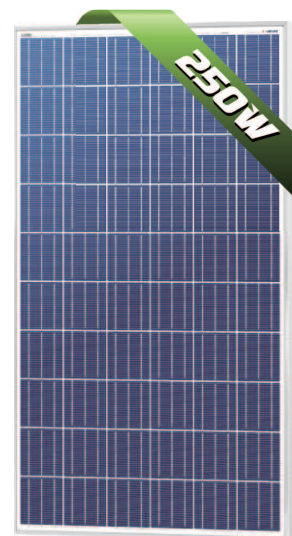
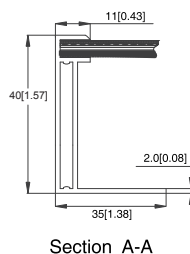
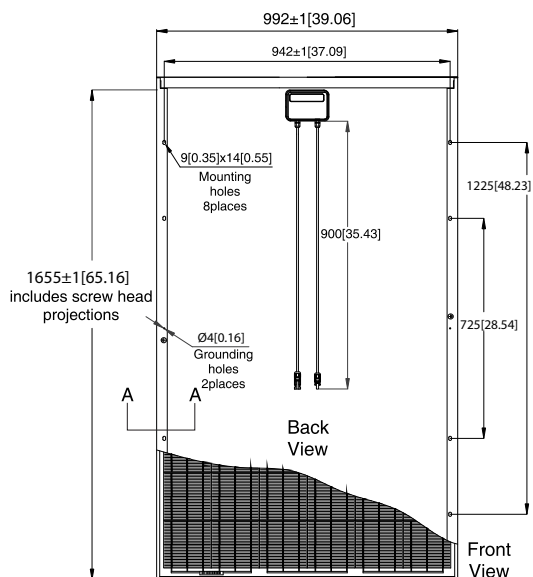
\*STC: Irradiance 1000W/m², AM1.5 spectrum, module temperature 25°C

\*NOCT: Nominal operating cell temperature (the data is only for reference)

High module conversion efficiency 15.4%	Positive Power tolerance +5W 0/+5W	10 years workmanship warranty 25 years output warranty 10/25	Excellent high temperature performance High temp
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## Module Diagram

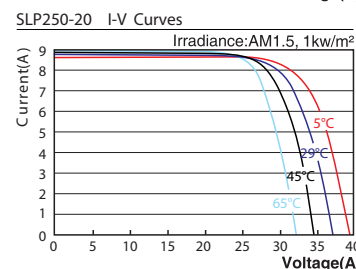
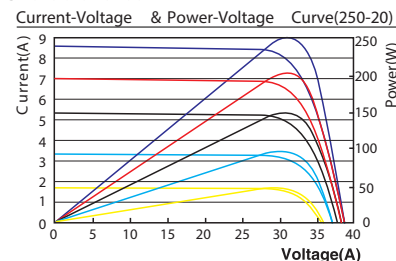
Dimensions in brackets are in inches.  
Un-bracketed dimensions are in millimeters.  
Unit: mm[in.]



## Features

- Nominal 20V DC for standard output.
- Outstanding high temperature performance.
- Heavy-duty anodized frames.
- High transparent low-iron, tempered glass.
- Rugged design to withstand high wind pressure, hail and snow load.
- Aesthetic appearance.
- Clean Energy Council Approved.

## Characteristics



## Specifications

## SLP250-20

Specifications	SLP250-20
Cells	Multicrystalline silicon solar cell
No. of cells and connections	60(6X10)
Module dimension	1655mm[65.16in.]x992mm[39.06in.]x40mm[1.57in.]
Weight	20.00kg[44.09lbs]
Packing information(Carton)	1695mm[66.73in.]x1030mm[40.55in.]x105mm[4.13in.](2pcs/ctn)

\*Limited warranty: 10-year limited warranty of materials and workmanship; 10-year limited warranty of 90% power output; 25-year limited warranty of 80% power output. For detail, please contact us.

\*Specifications are subject to change without notice at any time.

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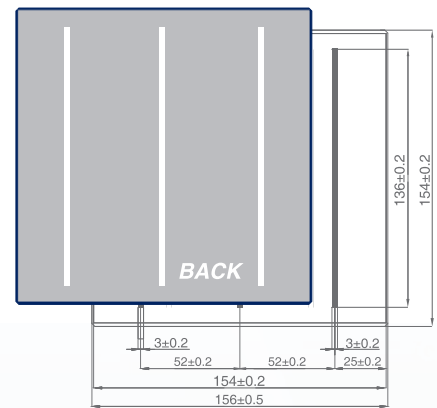
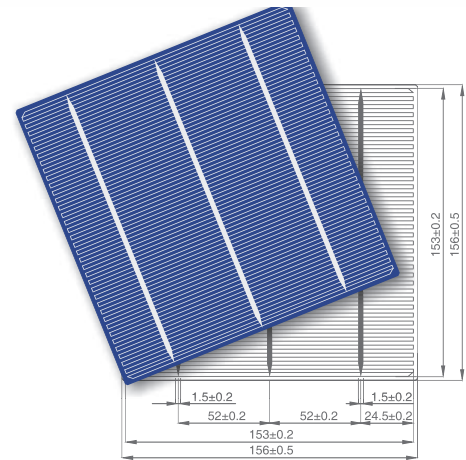


## Mechanical Data And Design

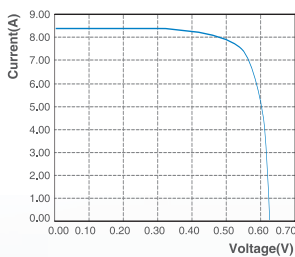
Format	156 mm × 156 mm ± 0.5 mm
Thickness(Wafer)	180 μm ± 20 μm and 200 μm ± 20 μm
Front (-)	1.5 mm bus bars (silver), blue anti-reflection coating (silicon nitride)
Back (+)	3 mm wide soldering pads (silver) back surface field (aluminium)

## Temperature Coefficients

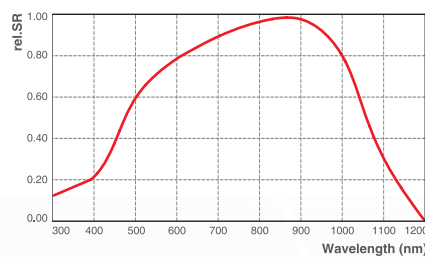
Voc. Temp.coef.%/K	-0.338%/K
Isc. Temp.coef.%/K	+0.051%/K
Pm. Temp.coef.%/K	-0.42%/K



## IV Curve



## Spectral Response



\*Calibrated under AM1.5 global SRC in Fraunhofer ISE.

## Intensity Dependence

Intensity [w/m <sup>2</sup> ]	Isc* [mA]	Voc* [mV]
1000	1.00	1.000
900	0.90	0.989
500	0.50	0.963
300	0.30	0.939
200	0.20	0.920

\*Ratio of Voc (Isc) at reduced intensity to Voc (Isc) at 1000 W/m<sup>2</sup>

## Electrical Characteristics

Efficiency (%)	Pmpp (W)	Umpp (V)	Impp (A)	Uoc (V)	Isc (A)	FF (%)
17.80-18.00	4.33	0.530	8.159	0.633	8.709	78.44
17.60-17.80	4.29	0.527	8.126	0.631	8.677	78.27
17.40-17.60	4.24	0.524	8.081	0.628	8.627	78.17
17.20-17.40	4.19	0.521	8.035	0.625	8.578	78.08
17.00-17.20	4.14	0.518	7.990	0.623	8.531	77.97
16.80-17.00	4.09	0.516	7.938	0.620	8.478	77.85
16.60-16.80	4.04	0.514	7.876	0.618	8.419	77.68
16.40-16.60	3.99	0.511	7.813	0.617	8.356	77.51
16.20-16.40	3.94	0.509	7.754	0.615	8.289	77.40
16.00-16.20	3.90	0.506	7.698	0.613	8.220	77.36