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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**Solartech Energy Corporation**

**SEC-6M-60A-295-310**

**SEC-6M-60A-300**

Also available on the web at

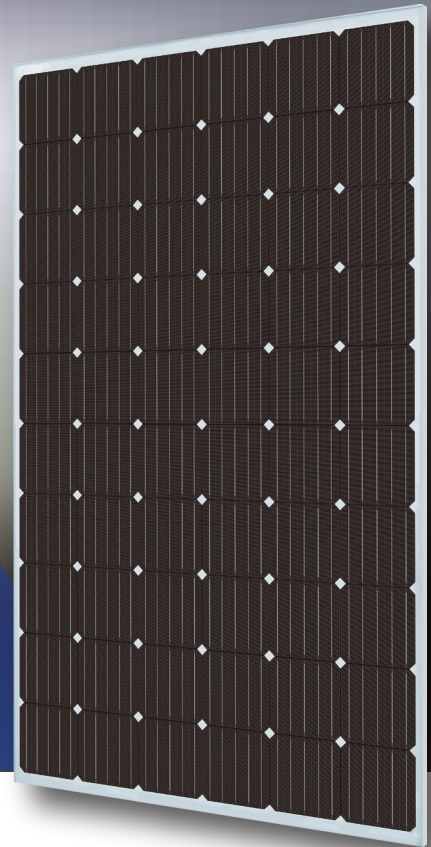
[EnergyPal.com/solartech-energy-corporation-solar-panels/sec-6m-60a-300](http://EnergyPal.com/solartech-energy-corporation-solar-panels/sec-6m-60a-300)

SAPPHIRE CELL INSIDE  
Mono-Crystalline Photovoltaic Modules

# 295W-310W

## SEC-6M-60A-XXX

(XXX=295-310, in steps of 5, 60 cells)



Mono-crystalline modules designed for residential commercial and utility applications, rooftop or ground mount



Potential Induced Degradation (PID) Resistant



Designed for IEC DC 1000V applications



Commit protection in the severest weather conditions with certified EVA, Back sheet foil, and Junction box



Ensure 5400pa snow loads and 2400pa wind loads with hightransparent tempered glass and robust anodized aluminum frame



Ammonia resistance  
According to IEC 62716 Ed. 1

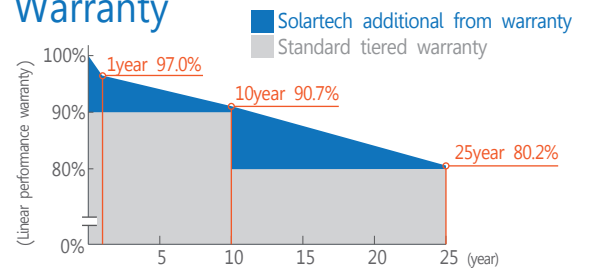


Salt corrosion and humidity resistance  
According to IEC 61701 Ed. 2 (severity level 6)

## Reliable Quality

Positive power tolerance : 0%~+3%  
100% EL double-inspection ensures modules are defects free  
Prolonged aging test : 2000 hours damp heat test ;  
400 thermal cycles

## Warranty



10-year limited product warranty, 25-year limited power output warranty ( 90% for 10 years, 80% for 25 years )

## Comprehensive Certificates

IEC 61215, IEC 61730 and CE  
ISO 9001: 2015: Quality management systems  
ISO 14001: 2015: Environmental management systems  
OHSAS 18001: 2007: Occupational health and safety management systems



# Mono-Crystalline Photovoltaic Modules

## SEC-6M-60A-XXX (XXX=295-310)

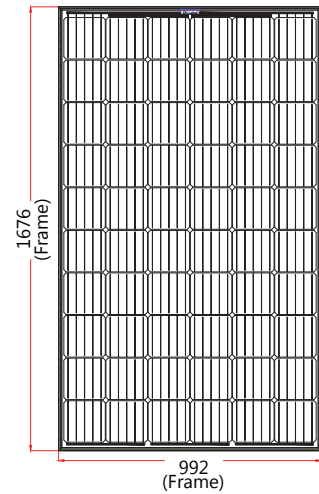


### Electrical Characteristics @ STC

Maximum power [Pmax]	295W	300W	305W	310W
Power tolerance	0%~+3%	0%~+3%	0%~+3%	0%~+3%
Maximum power voltage [Vpm]	31.60	32.00	32.40	32.80
Maximum power current [Ipm]	9.34	9.38	9.42	9.46
Open circuit voltage [Voc]	39.40	39.80	40.10	40.40
Short circuit current [Isc]	9.85	9.92	10.01	10.10
Efficiency [Eff.]	17.74	18.04	18.34	18.65

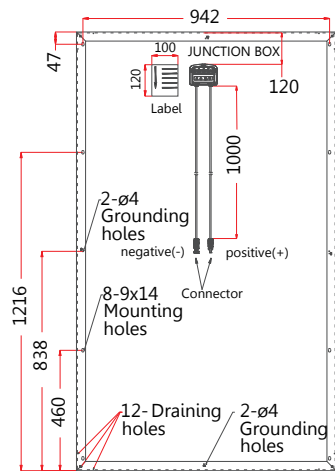
STC : Standard Test Conditions, measurement at radiation strength 1,000 W/m<sup>2</sup>, spectral distribution AM 1.5, temperature 25°C, in accordance with EN 60904-3.

Power tolerance can be adjusted on requests.  
Specifications are subject to change without notice.



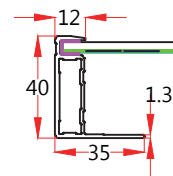
### Mechanical Data

Dimension (L X W X H)	1676mm X 992mm X 40mm
Weight	19.0kg (41.89lbs)
Cells	60 mono-crystalline cells
Glass	Anti-reflective tempered solar glass, 3.2 mm thickness
Backsheet	Composite film
Frame	Anodized aluminum
Connection	Junction box above IP67 with 3 bypass diodes
Cable	4mm <sup>2</sup> x 1.0m with Tyco or MC4 compatible connectors



### Maximum Operation

Operational Temp.	-40°C ~ 85°C
Max. System Voltage	1000V DC
Max. Reverse Current	15A
Max. Load	Snow loads : 5400 Pa / Wind loads : 2400 Pa



### Temperature Coefficient

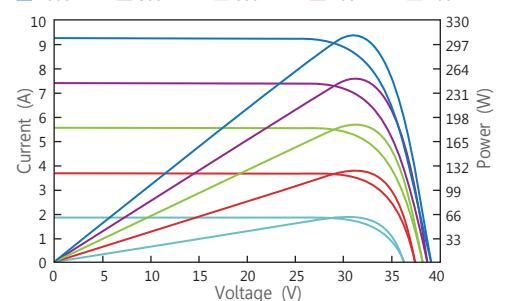
NOCT	45.3°C ± 2°C
Temp. Coeff. of Pmax	-0.42% / °C
Temp. Coeff. of Voc	-0.38% / °C
Temp. Coeff. of Isc	0.06% / °C

NOCT: Nominal Operating Cell Temperature, 45.3 +/- 2°C, measurement at radiation strength 800 W/m<sup>2</sup>, AM 1.5, Air temperature 20°C, wind speed 1m/s.

### IV Curve

IV and Pmax Curves with different radiation levels at 25°C

Legend: 1000Wm<sup>2</sup> (blue), 800Wm<sup>2</sup> (purple), 600Wm<sup>2</sup> (green), 400Wm<sup>2</sup> (red), 200Wm<sup>2</sup> (cyan)



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