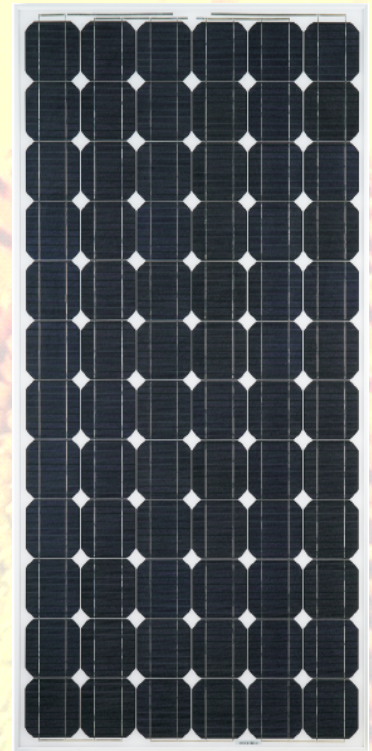




## AS-5M Amerisolar

Amerisolar’s photovoltaic modules are designed for large electrical power requirements. With a 25 year warranty, AS-5M offers high-powered, reliable performance for solar projects, both on- and off-grid.

- Solar Cell: High efficiency solar cells ensure high performance of solar module and create maximum power output.
- Low iron tempered glass: Anti-reflecting coating and high transmission rate glass increase the power output and mechanical strength of solar module.
- Aluminum frame: Without screw, corner connection. 8 holes on the frame can be installed easily.
- Superior Junction box: Multi function junction box with water proof capabilities.
- Long lifespan:  $\geq 25$ Years.
- Tolerance:  $\pm 3\%$ .
- Good performance of preventing from atrocious weather such as wind and hails.
- Resisting moisture and etching effectively, not effect by geology.
- The certificate issued by international authority: CE, TUV, IEC, UL, MCS and Korea Certificate.



### Electrical characteristics

<i>P<sub>max</sub>, V<sub>oc</sub>, I<sub>sc</sub>, V<sub>mp</sub> and I<sub>mp</sub> at STC (1000W/m<sup>2</sup>, 25±2°C, AM 1.5);</i>						
Maximum Power (P <sub>max</sub> )	170W	175W	180W	185W	190W	195W
Open Circuit Voltage (V <sub>oc</sub> )	44.19V	44.36V	44.53V	44.70V	44.87V	45.04V
Short Circuit Current (I <sub>sc</sub> )	5.20A	5.28A	5.37A	5.45A	5.54A	5.63A
Maximum Power Voltage (V <sub>mp</sub> )	35.68V	35.88V	36.08V	36.28V	36.48V	36.67V
Maximum Power Current (I <sub>mp</sub> )	4.77A	4.88A	4.99A	5.10A	5.21A	5.32A
Module Efficiency (%)	13.32	13.71	14.10	14.49	14.88	15.27

### Temperature Coefficients

Temperature Coefficients of P <sub>m</sub>	-0.47 %/°C
Temperature Coefficients of V <sub>oc</sub>	-0.33 %/°C
Temperature Coefficients of I <sub>sc</sub>	+0.036 %/°C

### Absolute Maximum Limits

Maximum System Voltage	DC 1000V
Module Operating Temperature	-40°C to +85°C
Noct (DEGC.)	47°C±2°C

### WARRANTY

- Product: 10 years
- Power Output:  
90%----10 years  
80%----25 years

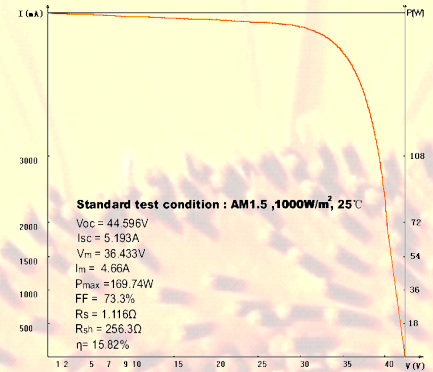


Passionately committed to delivering innovative energy solution

**Mechanical characteristics**

Cell Technology	125mmx125mm [4.92inx4.92in]	Mono-crystal silicon
Number of Cells (Pcs)	72 (6x12)	
Dimensions	1580mmx808mmx46mm	
Weight	15.5kg	
Frame	Aluminium-alloy	
Length of Cables (mm)	900mm	
Allowable Hail Load	Steel ball fall down from 1m height	
Surface Maximum Load Capacity	60m/s(540kg/m <sup>2</sup> )	

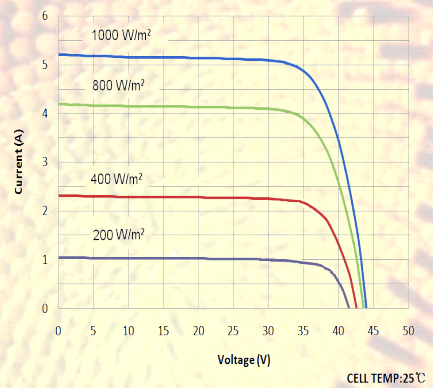
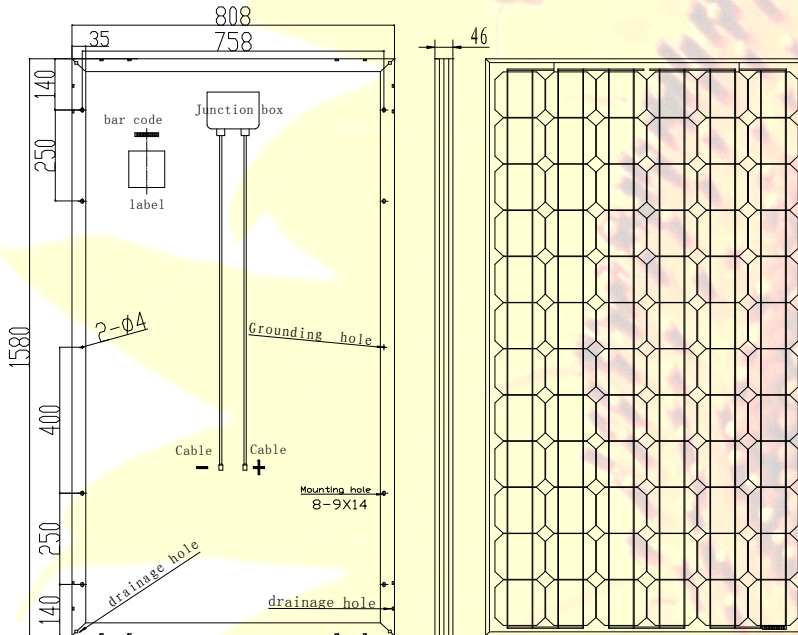
**I-V curves**



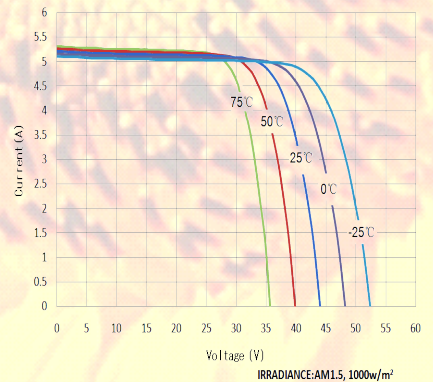
Module at STC

**Basic Dimensions**

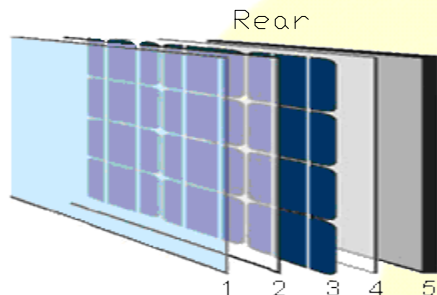
ALL DIMENSIONS IN mm



Various Irradiance Levels



Various Temperatures



- 1. Front: tempered solar glass 3.2mm
- 2. EVA
- 3. 72 high efficiency solar cells  
125mm X 125mm
- 4. EVA
- 5. Rear: laminate (weatherproof and waterproof)

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