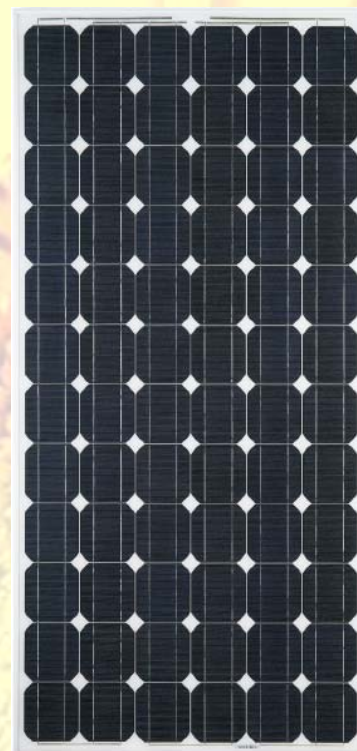




AS-5M Amerisolar 170W-190W

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 25Years.
- 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

Maximum Power (P_{max})	170W	175W	180W	185W	190W
Open Circuit Voltage (V_{oc})	44.19V	44.36V	44.53V	44.70V	44.87V
Short Circuit Current (I_{sc})	5.20A	5.28A	5.37A	5.45A	5.54A
Maximum Power Voltage (V_{mp})	35.68V	35.88V	36.08V	36.28V	36.48V
Maximum Power Current (I_{mp})	4.77A	4.88A	4.99A	5.10A	5.21A
Module Efficiency (%)	13.32	13.71	14.10	14.49	14.88

Temperature Coefficients

Temperature Coefficients of P_m	-0.47 %/°C
Temperature Coefficients of V_{oc}	-0.33 %/°C
Temperature Coefficients of I_{sc}	+0.036 %/°C

Absolute Maximum Limits

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

WARRANTY

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



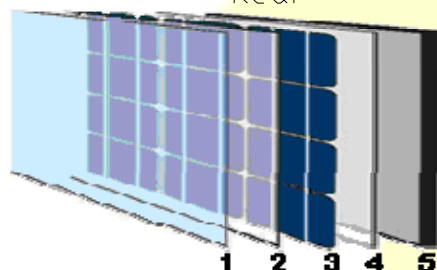
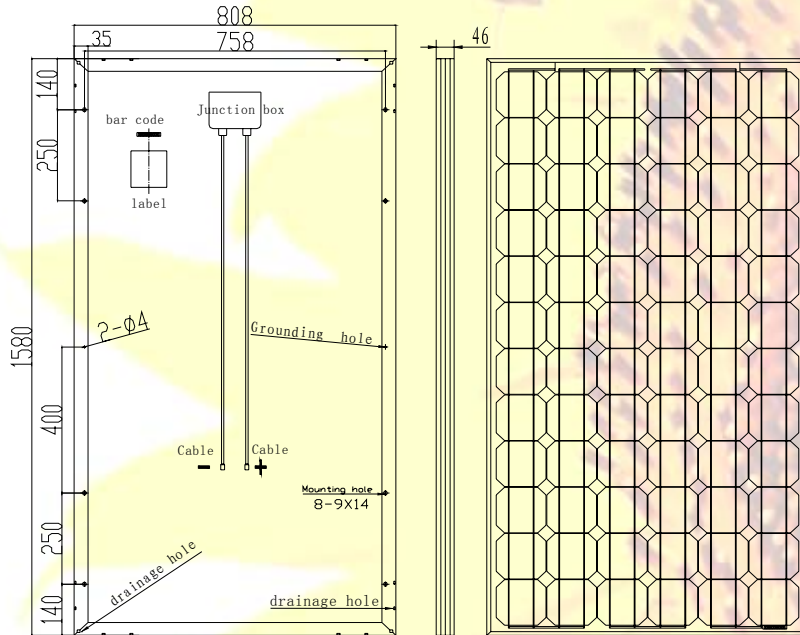
Passionately committed to delivering innovative energy solution

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 ²)	

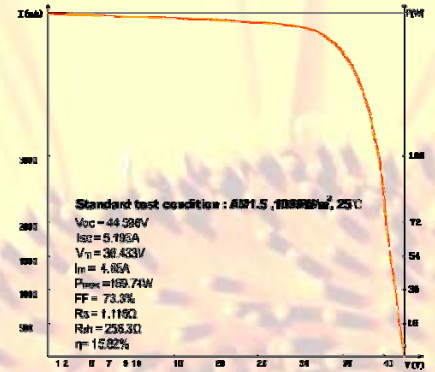
Basic Dimensions

ALL DIMENSIONS IN mm

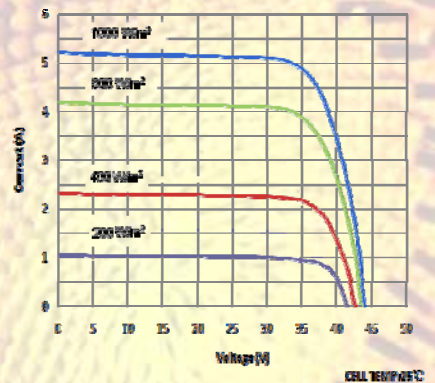


- Side Front
1. Front: tempered solar glass 3.2mm
 2. EVA
 3. 72 high efficiency solar cells
125mm X 125mm
 4. EVA
 5. Rear: laminate (weatherproof and waterproof)

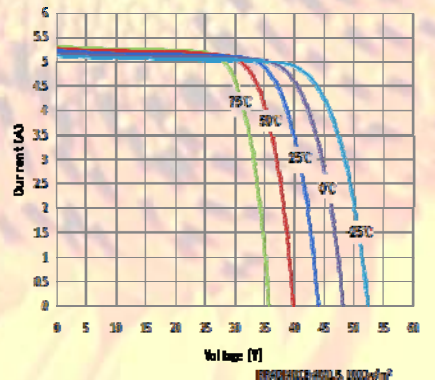
I-V curves



Module at STC



Various Irradiance Levels



Various Temperatures