

For a Free Quote:

Web: [EnergyPal.com](https://energypal.com)

Call: **1-800-990-3725**

Email: **contact@energypal.com**



Solar Panel Guide

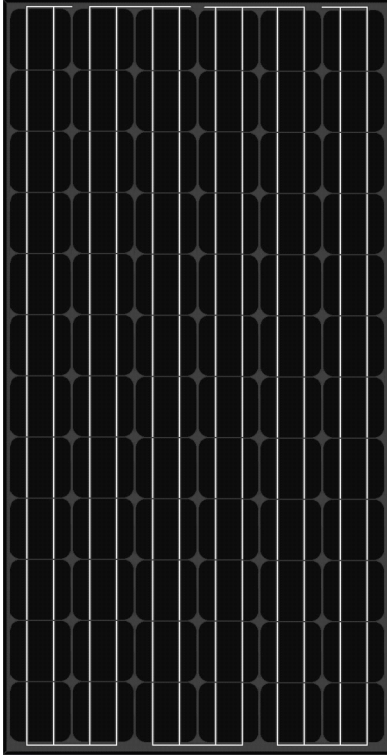
Specification Data Sheet

Learn more at energypal.com/best-solar-panels-for-homes



AS-5M BLACK

MONOCRYSTALLINE MODULE



**Passionately
committed to
delivering innovative
energy solution**

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

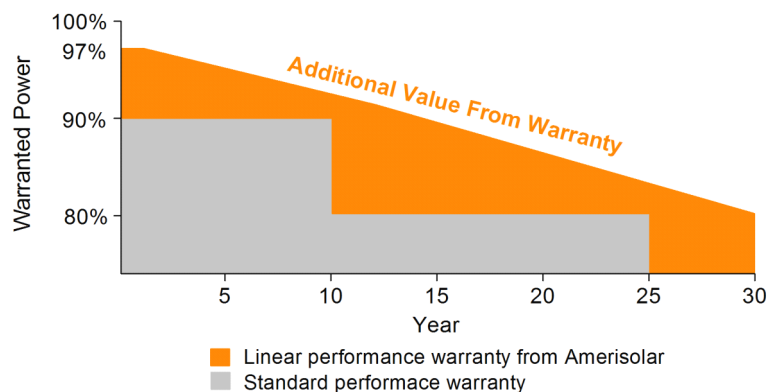
- Aesthetically appealing design with black backsheet and frame.
- High module conversion efficiency up to 16.45% through advanced manufacturing technology.
- Low degradation and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- Positive power tolerance of 0 ~ +3 %.
- High ammonia and salt mist resistance.
- Potential induced degradation (PID) resistance.

CERTIFICATIONS

- IEC61215, IEC61730, IEC62716, IEC61701, UL1703, CE, ETL(USA), JET(Japan), J-PEC(Japan), MCS(UK), CEC(Australia), FSEC(FL-USA), CSI Eligible(CA-USA), Israel Electric(Israel), Kemco(South Korea), InMetro(Brazil), TSE(Turkey)
- ISO9001:2008: Quality management system
- ISO14001:2004: Environmental management system
- OHSAS18001:2007: Occupational health and safety management system

SPECIAL WARRANTY

- 12 years limited product warranty.
- Limited linear power warranty: 12 years 91.2% of the nominal power output, 30 years 80.6% of the nominal power output.



ELECTRICAL CHARACTERISTICS AT STC

Nominal Power (P_{max})	185W	190W	195W	200W	205W	210W
Open Circuit Voltage (V_{oc})	44.8V	45.0V	45.1V	45.2V	45.4V	45.6V
Short Circuit Current (I_{sc})	5.45A	5.54A	5.63A	5.72A	5.81A	5.90A
Voltage at Nominal Power (V_{mp})	36.3V	36.5V	36.7V	36.9V	37.1V	37.3V
Current at Nominal Power (I_{mp})	5.10A	5.21A	5.32A	5.43A	5.53A	5.64A
Module Efficiency (%)	14.49	14.88	15.27	15.67	16.06	16.45
Operating Temperature	-40°C to +85°C					
Maximum System Voltage	1000V DC					
Fire Resistance Rating	Type 1(UL1703)/Class C(IEC61730)					
Maximum Series Fuse Rating	10A					

STC: Irradiance 1000W/m², Cell temperature 25°C, AM1.5

ELECTRICAL CHARACTERISTICS AT NOCT

Nominal Power (P_{max})	136W	140W	144W	147W	151W	155W
Open Circuit Voltage (V_{oc})	41.2V	41.4V	41.5V	41.6V	41.8V	42.0V
Short Circuit Current (I_{sc})	4.41A	4.49A	4.56A	4.63A	4.71A	4.78A
Voltage at Nominal Power (V_{mp})	33.0V	33.2V	33.4V	33.6V	33.8V	33.9V
Current at Nominal Power (I_{mp})	4.13A	4.22A	4.32A	4.38A	4.47A	4.58A

NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind Speed 1 m/s

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline 125x125mm (5x5inches)
Number of cells	72 (6x12)
Module dimensions	1580x808x35mm (62.20x31.81x1.38inches)
Weight	15.5kg(34.2lbs)
Front cover	3.2mm (0.13inches) low-iron tempered glass
Frame	Anodized aluminum alloy
Junction box	IP67, 3 diodes
Cable	4mm ² (0.006inches ²), 900mm (35.43inches)
Connector	MC4 or MC4 compatible

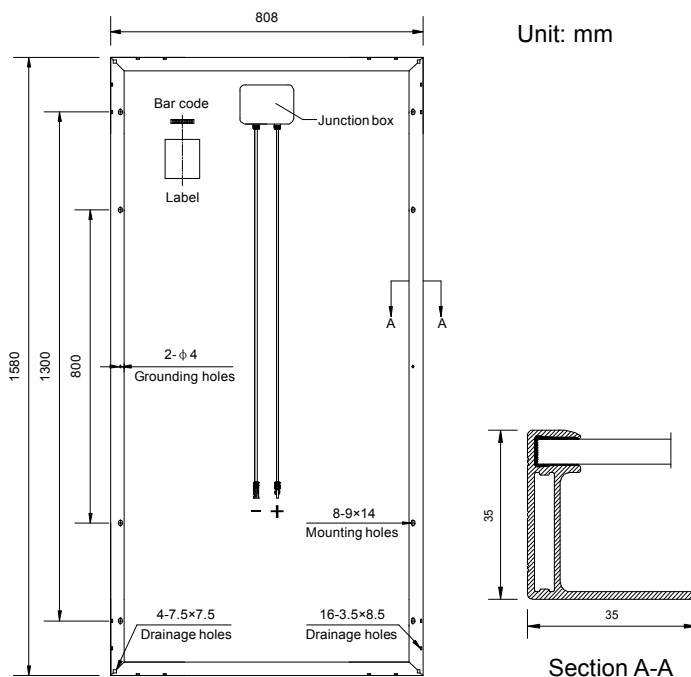
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of P_{max}	-0.41%/°C
Temperature Coefficients of V_{oc}	-0.31%/°C
Temperature Coefficients of I_{sc}	0.05%/°C

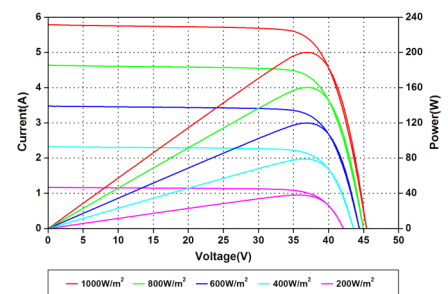
PACKAGING

Standard packaging	29pcs/pallet
Module quantity per 20' container	348 pcs
Module quantity per 40' container	812 pcs

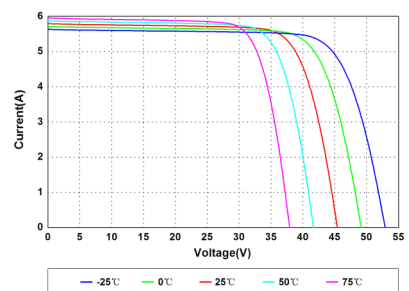
ENGINEERING DRAWINGS



IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

Specifications in this datasheet are subject to change without prior notice.