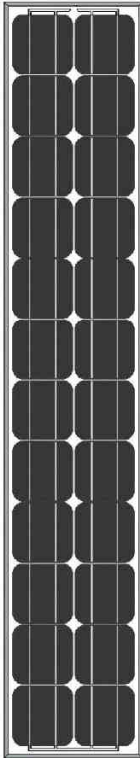




# AS-5M12

## MONOCRYSTALLINE MODULE



### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- Particular design with light weight especially for agriculture and roofing applications.
- High module conversion efficiency up to 15.28% 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.
- Positive power tolerance of 0 ~ +3 %.
- High ammonia and salt mist resistance.
- Potential induced degradation (PID) resistance.

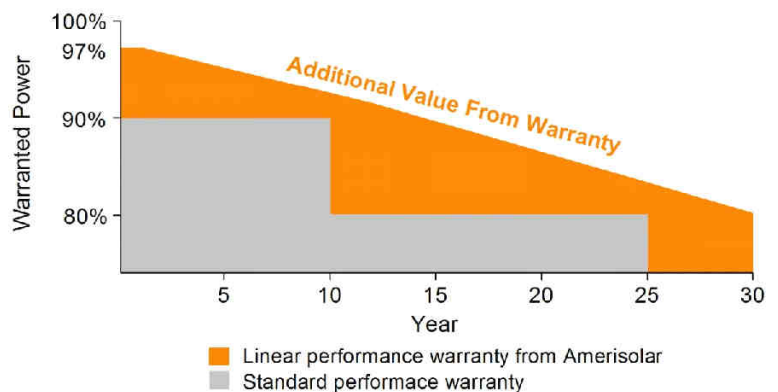
### CERTIFICATIONS

- 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.

**Passionately  
committed to  
delivering innovative  
energy solution**



## ELECTRICAL CHARACTERISTICS AT STC

Nominal Power ( $P_{max}$ )	60W	65W	70W
Open Circuit Voltage ( $V_{OC}$ )	14.8V	15.0V	15.2V
Short Circuit Current ( $I_{SC}$ )	5.36A	5.63A	5.90A
Voltage at Nominal Power ( $V_{mp}$ )	12.0V	12.2V	12.4V
Current at Nominal Power ( $I_{mp}$ )	5.00A	5.33A	5.65A
Module Efficiency (%)	13.09	14.19	15.28
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/m<sup>2</sup>, Cell temperature 25°C, AM1.5

## ELECTRICAL CHARACTERISTICS AT NOCT

Nominal Power ( $P_{max}$ )	44W	48W	52W
Open Circuit Voltage ( $V_{OC}$ )	13.6V	13.8V	14.0V
Short Circuit Current ( $I_{SC}$ )	4.34A	4.56A	4.78A
Voltage at Nominal Power ( $V_{mp}$ )	10.9V	11.1V	11.3V
Current at Nominal Power ( $I_{mp}$ )	4.04A	4.33A	4.60A

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind Speed 1 m/s

## MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline 125x125mm (5x5inches)
Number of cells	24 (2x12)
Module dimensions	1580x290x35mm (62.20x11.42x1.38inches)
Weight	5.4kg (11.9lbs)
Front cover	3.2mm (0.13inches) low-iron tempered glass
Frame	Anodized aluminum alloy
Junction box	IP65, 1 diode
Cable	4mm <sup>2</sup> (0.006inches <sup>2</sup> ), 900mm (35.43inches)
Connector	MC4 or MC4 compatible

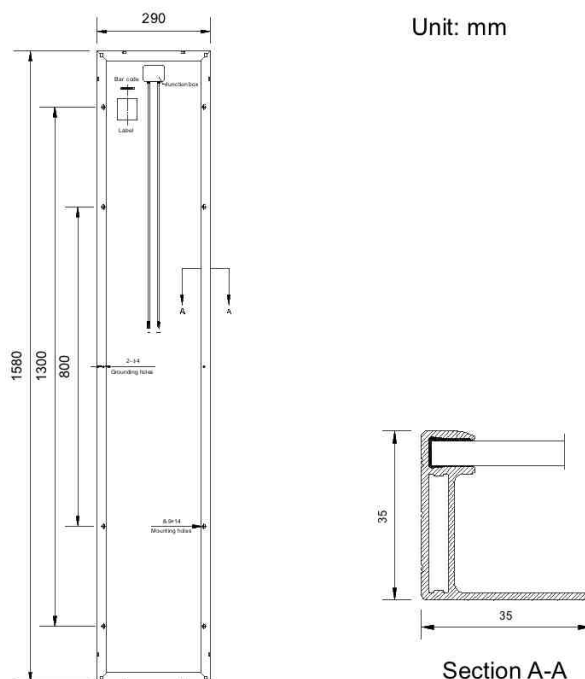
## TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of $P_{max}$	-0.43%/°C
Temperature Coefficients of $V_{OC}$	-0.33%/°C
Temperature Coefficients of $I_{SC}$	0.056%/°C

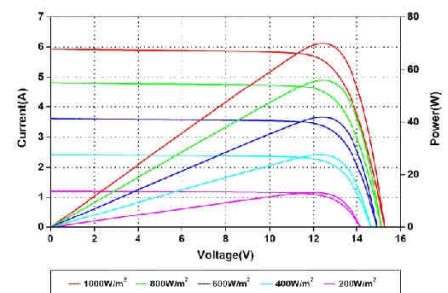
## PACKAGING

Standard packaging	84pcs/pallet
Module quantity per 20' container	1008 pcs
Module quantity per 40' container	2352pcs

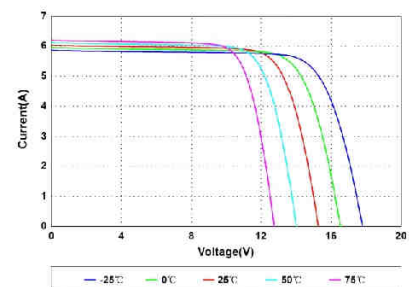
## ENGINEERING DRAWINGS



## 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.