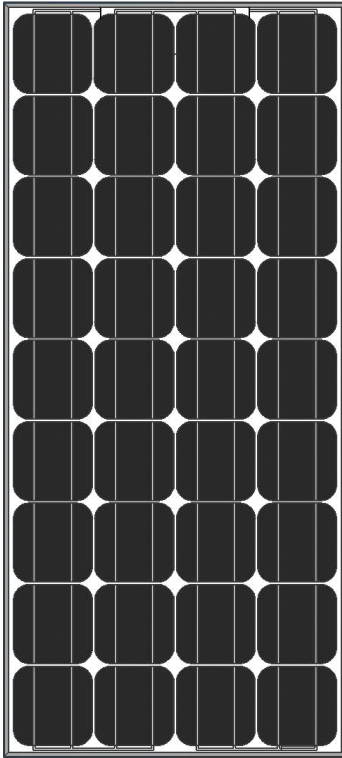




# AS-5M18

## MONOCRYSTALLINE MODULE



### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 16.11% by using high efficient solar cells and 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.
- High reliability against extreme environmental conditions (passing salt mist, ammonia and hail tests).
- Potential induced degradation (PID) resistance.
- Positive power tolerance of 0 ~ +3 %.

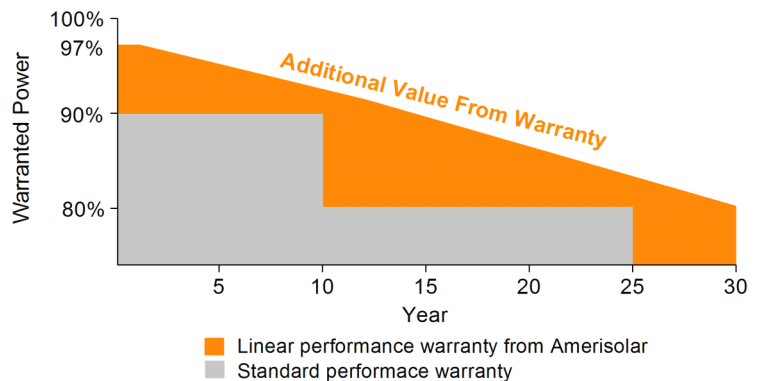
### CERTIFICATIONS

- IEC61215, IEC61730, IEC62716, IEC61701, CE, CQC, CGC, ETL(USA), JET(Japan), J-PEC(Japan), Kemco(South Korea), KS(South Korea), MCS(UK), CEC(Australia), FSEC(FL-USA), CSI Eligible(CA-USA), Israel Electric(Israel), 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 ( $P_{max}$ )	90W	95W	100W	105W
Open Circuit Voltage ( $V_{oc}$ )	22.2V	22.4V	22.6V	22.8V
Short Circuit Current ( $I_{sc}$ )	5.38A	5.56A	5.75A	5.90A
Voltage at Nominal Power ( $V_{mp}$ )	18.0V	18.2V	18.4V	18.6V
Current at Nominal Power ( $I_{mp}$ )	5.00A	5.22A	5.43A	5.65A
Module Efficiency (%)	13.81	14.57	15.34	16.11
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 ( $P_{max}$ )	66W	70W	74W	77W
Open Circuit Voltage ( $V_{oc}$ )	20.4V	20.6V	20.8V	21.0V
Short Circuit Current ( $I_{sc}$ )	4.36A	4.50A	4.66A	4.78A
Voltage at Nominal Power ( $V_{mp}$ )	16.4V	16.6V	16.7V	16.9V
Current at Nominal Power ( $I_{mp}$ )	4.03A	4.22A	4.43A	4.56A

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	36 (4x9)
Module dimensions	1196x545x35mm (47.09x21.46x1.38inches)
Weight	8kg (17.6lbs)
Front cover	3.2mm (0.13inches) tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP65, 2 diodes
Cable	4mm <sup>2</sup> (0.006inches <sup>2</sup> ), 900mm (35.43inches)
Connector	MC4 or MC4 compatible

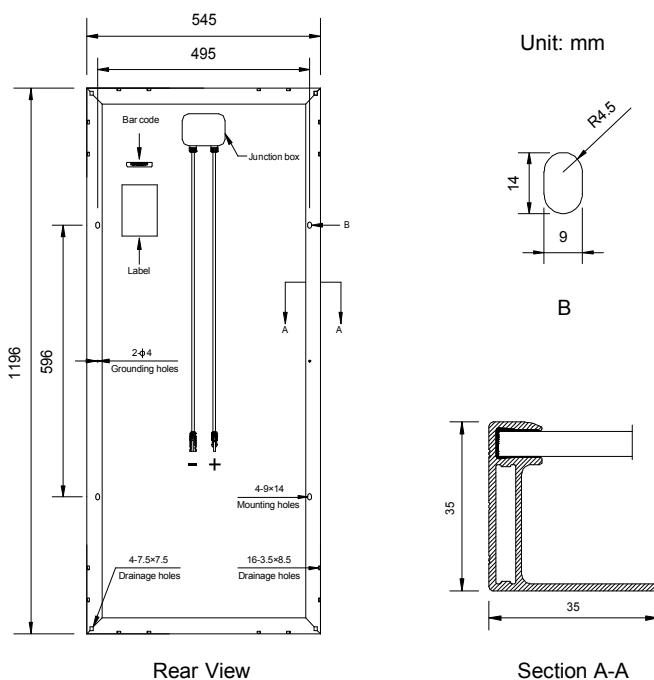
## TEMPERATURE CHARACTERISTICS

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

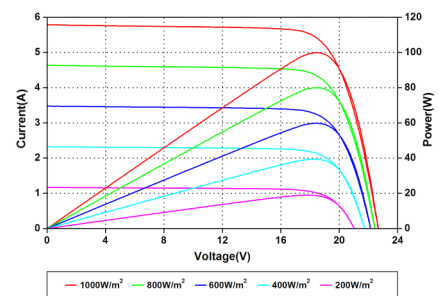
## PACKAGING

Standard packaging	29pcs/pallet
Module quantity per 20' container	696 pcs
Module quantity per 40' container	1566 pcs

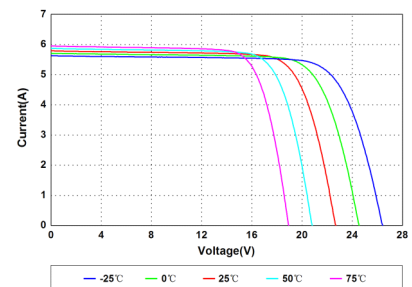
## ENGINEERING DRAWINGS



## 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.