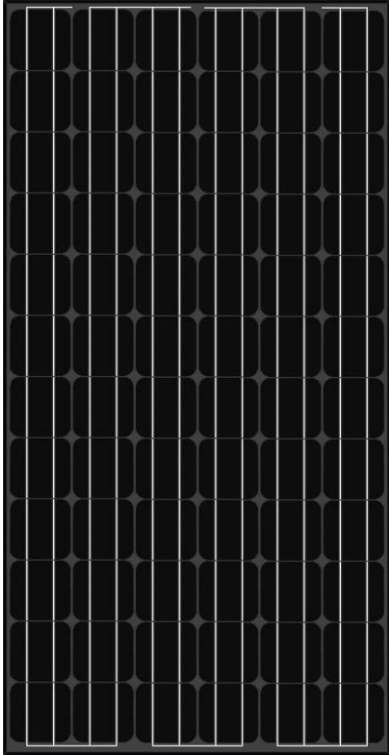




# AS-5M BLACK

## MONOCRYSTALLINE MODULE



### 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.

Passionately  
committed to  
delivering innovative  
energy solution



## 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/m<sup>2</sup>, 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/m<sup>2</sup>, 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 <sup>2</sup> (0.006inches <sup>2</sup> ), 900mm (35.43inches)
Connector	MC4 or MC4 compatible

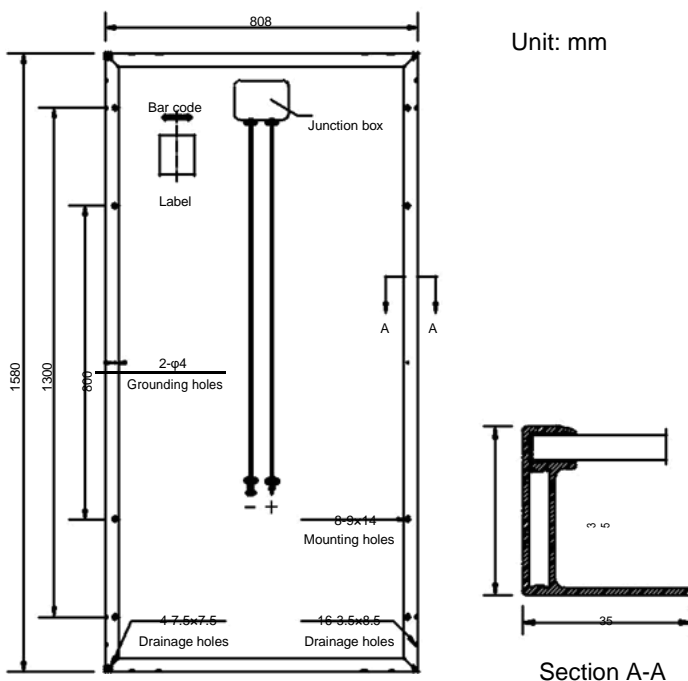
## TEMPERATURE CHARACTERISTICS

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

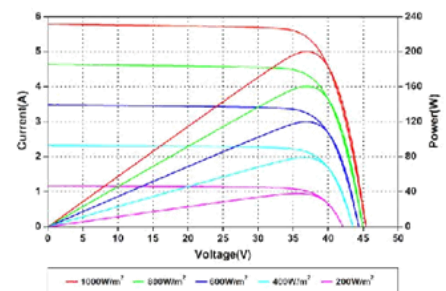
## PACKAGING

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

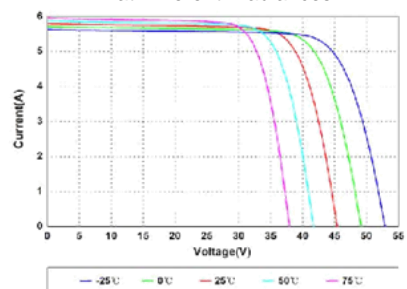
## ENGINEERING DRAWINGS



## 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.