



# AS-8M108-HC 520W~545W

## MONOCRYSTALLINE MODULE

### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 21.34% by using innovative Half-cell design and Multi-busbar(MBB) cell technology.
- Low temperature coefficient 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.

### CERTIFICATIONS

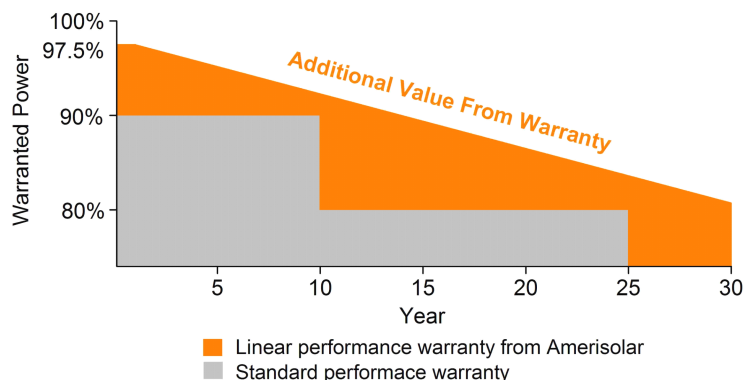
- IEC 61215, IEC 61730, CE
- ISO 9001:2015: Quality management system
- ISO 14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system



### SPECIAL WARRANTY

- 20 years product warranty
- 30 years linear power output warranty

**Passionately  
committed to  
delivering innovative  
energy solution**



## ELECTRICAL CHARACTERISTICS AT STC

Maximum Power ( $P_{max}$ )	520W	525W	530W	535W	540W	545W
Open Circuit Voltage ( $V_{OC}$ )	36.9V	37.1V	37.3V	37.5V	37.7V	37.9V
Short Circuit Current ( $I_{SC}$ )	18.20A	18.25A	18.30A	18.35A	18.40A	18.45A
Voltage at Maximum Power ( $V_{mp}$ )	30.5V	30.7V	30.9V	31.1V	31.3V	31.5V
Current at Maximum Power ( $I_{mp}$ )	17.05A	17.11A	17.16A	17.21A	17.26A	17.31A
Module Efficiency (%)	20.36	20.56	20.75	20.95	21.14	21.34
Operating Temperature	-40°C to +85°C					
Maximum System Voltage	1000V DC/1500V DC					
Fire Resistance Rating	Type 1(in accordance with UL1703)/Class C(IEC61730)					
Maximum Series Fuse Rating	30A					

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM1.5; Tolerance of P<sub>max</sub>: ±3%; Measurement Tolerance: ±3%

## ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power ( $P_{max}$ )	390W	394W	398W	402W	406W	410W
Open Circuit Voltage ( $V_{OC}$ )	34.0V	34.2V	34.4V	34.6V	34.8V	35.0V
Short Circuit Current ( $I_{SC}$ )	14.75A	14.79A	14.83A	14.87A	14.91A	14.95A
Voltage at Maximum Power ( $V_{mp}$ )	27.8V	28.0V	28.2V	28.4V	28.6V	28.8V
Current at Maximum Power ( $I_{mp}$ )	14.03A	14.08A	14.12A	14.16A	14.20A	14.24A

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

## MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline PERC 210*105mm
Number of cells	108 (6*18)
Module dimensions	1960x1303x35mm (77.17x51.30x1.38inches)
Weight	28kg (61.7lbs)
Front cover	3.2mm (0.13inches) tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm <sup>2</sup> (0.006inches <sup>2</sup> ), Portrait: 300mm (11.81inches); Landscape: 1200mm (47.24inches)
Connector	MC4 or MC4 compatible

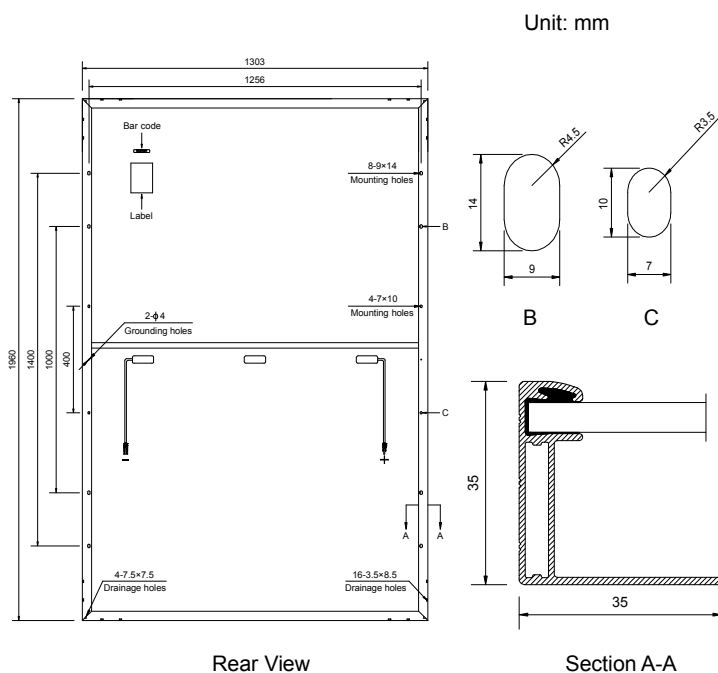
## TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of $P_{max}$	-0.34%/°C
Temperature Coefficients of $V_{OC}$	-0.26%/°C
Temperature Coefficients of $I_{SC}$	0.05%/°C

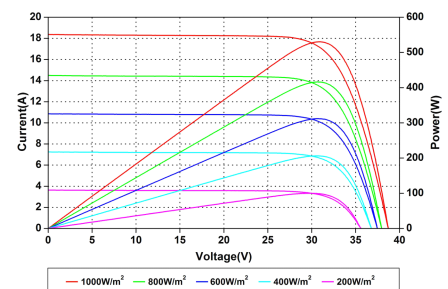
## PACKAGING

Standard packaging	31pcs/pallet
Module quantity per 20' container	248pcs
Module quantity per 40' container	527pcs (HQ)

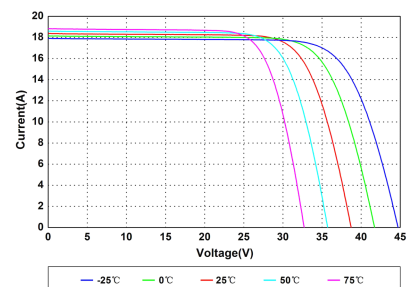
## ENGINEERING DRAWINGS



## 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.