

# AS-8M120-BHJ

## 615W~635W

### MONOCRYSTALLINE MODULE

#### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 22.44% by using the most advanced HJT technology.
- More power gain up to 30% by utilizing the ambient light reflected from surrounding surfaces.
- Lower annual power degradation and higher energy yield during the module's lifetime.
- Superior performance under high temperature and low light conditions.
- High load-bearing capacity which can withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- Excellent reliability and durability against extreme environmental conditions (high resistance to salt mist, ammonia, sand, acid and alkali, etc.).
- Potential induced degradation (PID) free.

#### CERTIFICATIONS

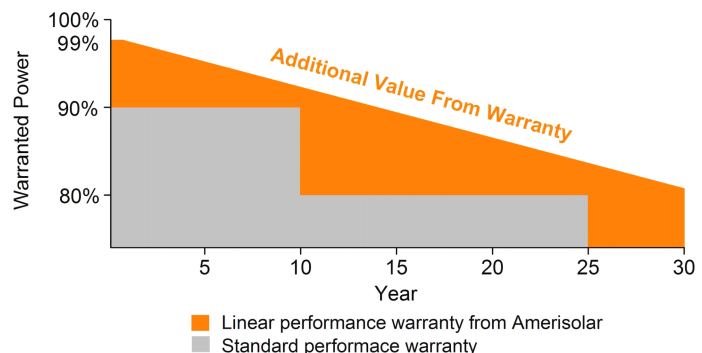


- IEC 61215, IEC 61730, CE
- ISO9001:2015: Quality management system
- ISO14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system

#### SPECIAL WARRANTY

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

**Passionately**  
**committed to**  
**delivering innovative**  
**energy solution**



### ELECTRICAL CHARACTERISTICS AT STC\*

Module Type	AS-8M120-BHJ-615W	AS-8M120-BHJ-620W	AS-8M120-BHJ-625W	AS-8M120-BHJ-630W	AS-8M120-BHJ-635W
Maximum Power ( $P_{max}$ )	615W	620W	625W	630W	635W
Open Circuit Voltage ( $V_{oc}$ )	44.7V	44.9V	45.1V	45.3V	45.5V
Short Circuit Current ( $I_{sc}$ )	17.23A	17.28A	17.33A	17.38A	17.43A
Voltage at Maximum Power ( $V_{mp}$ )	37.4V	37.6V	37.8V	38.0V	38.2V
Current at Maximum Power ( $I_{mp}$ )	16.45A	16.49A	16.54A	16.58A	16.63A
Module Efficiency (%)	21.73	21.91	22.08	22.26	22.44
Operating Temperature	-40°C to +85°C				
Maximum System Voltage	1500V DC				
Fire Resistance Rating	Class C				
Maximum Series Fuse Rating	35A				

\*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 ( $P_{max}$ )	462W	466W	470W	474W	478W
Open Circuit Voltage ( $V_{oc}$ )	42.5V	42.7V	42.9V	43.1V	43.3V
Short Circuit Current ( $I_{sc}$ )	13.96A	14.00A	14.04A	14.08A	14.12A
Voltage at Maximum Power ( $V_{mp}$ )	35.2V	35.4V	35.6V	35.8V	36.0V
Current at Maximum Power ( $I_{mp}$ )	13.13A	13.17A	13.21A	13.25A	13.28A

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

### ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: AS-8M120-BHJ-620W)

Power Gain	$P_{max}$	$V_{oc}$	$I_{sc}$	$V_{mp}$	$I_{mp}$
10%	682W	44.9V	19.01A	37.6V	18.14A
15%	713W	44.9V	19.87A	37.6V	18.97A
20%	744W	44.9V	20.74A	37.6V	19.79A
25%	775W	44.9V	21.60A	37.6V	20.62A
30%	806W	44.9V	22.46A	37.6V	21.44A

### MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline HJT
Number of cells	120(6x20)
Module dimensions	2172x1303x35mm
Weight	35kg
Front cover	2mm tempered glass with AR coating
Back cover	2mm tempered glass
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm <sup>2</sup> , Length: Portrait: 300mm; Landscape: 1300mm
Connector	MC4 compatible

### TEMPERATURE CHARACTERISTICS

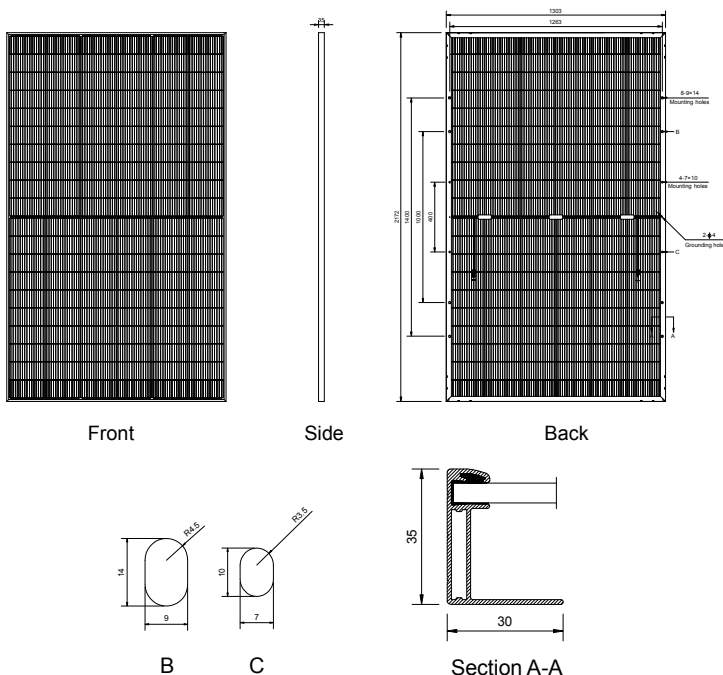
Nominal Operating Cell Temperature (NOCT)	42°C±2°C
Temperature Coefficients of $P_{max}$	-0.26%/°C
Temperature Coefficients of $V_{oc}$	-0.24%/°C
Temperature Coefficients of $I_{sc}$	0.04%/°C

### PACKAGING

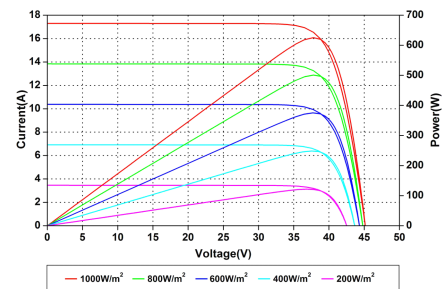
Standard packaging	31pcs/pallet
Module quantity per 20' container	155pcs
Module quantity per 40' container	527pcs(HQ)

### ENGINEERING DRAWINGS

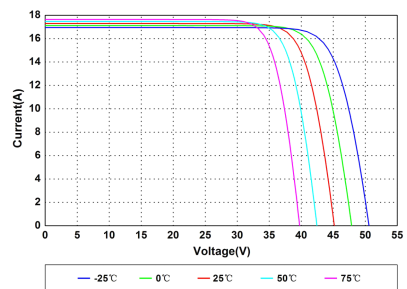
Unit: mm



### 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.