

# AS-8M120N-BHC

## 615W~635W

### N TYPE MONOCRYSTALLINE MODULE

#### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 22.4% by using innovative N-type TOPCon cell technology.
- Extremely low LID (light induced degradation) and low annual power degradation ensure higher energy yield during the module's lifetime.
- 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

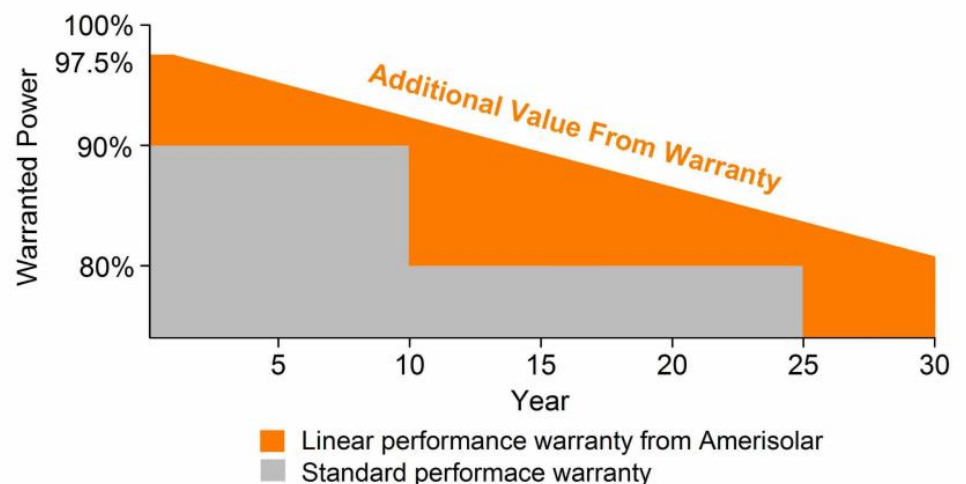
- IEC 61215, IEC 61730, CE
- ISO 9001:2015: Quality management system
- ISO 14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system



#### 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 <sub>max</sub> )	615W	620W	625W	630W	635W
Open Circuit Voltage (V <sub>oc</sub> )	42.7V	42.9V	43.1V	43.3V	43.5V
Short Circuit Current (I <sub>sc</sub> )	18.26A	18.31A	18.36A	18.41A	18.46A
Voltage at Maximum Power (V <sub>mp</sub> )	35.5V	35.7V	35.9V	36.1V	36.3V
Current at Maximum Power (I <sub>mp</sub> )	17.33A	17.37A	17.41A	17.46A	17.50A
Module Efficiency (%)	21.7	21.9	22.1	22.3	22.4
Operating Temperature	-40°C to +85°C				
Maximum System Voltage	1500V DC				
Fire Resistance Rating	Type 1 (in accordance with UL1703)/Class C (IEC61730)				
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 <sub>max</sub> )	465W	469W	473W	476W	480W
Open Circuit Voltage (V <sub>oc</sub> )	40.4V	40.6V	40.8V	41.0V	41.2V
Short Circuit Current (I <sub>sc</sub> )	14.72A	14.77A	14.81A	14.85A	14.89A
Voltage at Maximum Power (V <sub>mp</sub> )	33.6V	33.8V	33.9V	34.1V	34.3V
Current at Maximum Power (I <sub>mp</sub> )	13.86A	13.89A	13.93A	13.96A	13.99A

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-8M120N-BHC-635W)

Power Gain	P <sub>max</sub>	V <sub>oc</sub>	I <sub>sc</sub>	V <sub>mp</sub>	I <sub>mp</sub>
10%	699W	43.5V	20.31A	36.3V	19.26A
15%	730W	43.5V	21.23A	36.3V	20.11A
20%	763W	43.5V	22.15A	36.3V	21.02A
25%	794W	43.5V	23.08A	36.3V	21.88A
30%	826W	43.5V	24.00A	36.3V	22.76A

## MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline Bifacial N type 210*105mm
Number of cells	120 (6x20)
Module dimensions	2172x1303x35mm
Weight	35.3kg
Glass	2.0mm tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm <sup>2</sup> , Portrait: 300mm ; Landscape: 1300mm
Connector	MC4 or MC4 compatible

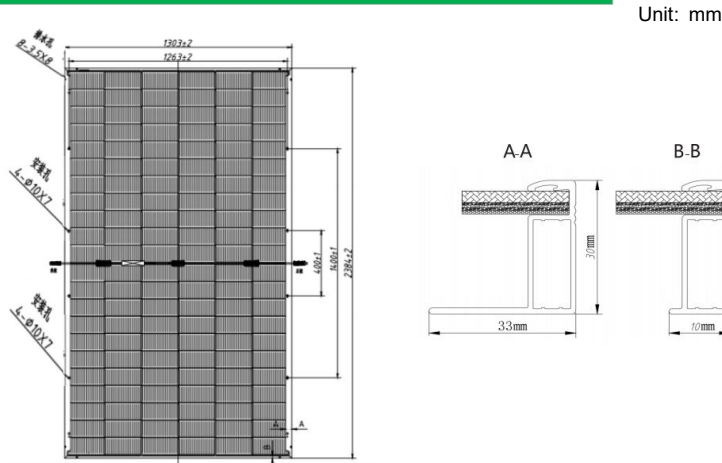
## TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	44°C±2°C
Temperature Coefficients of P <sub>max</sub>	-0.3%/°C
Temperature Coefficients of V <sub>oc</sub>	-0.25%/°C
Temperature Coefficients of I <sub>sc</sub>	0.046%/°C

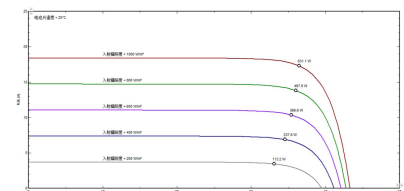
## PACKAGING

Standard packaging	31pcs/pallet
Module quantity per 40' container	558pcs (HQ)

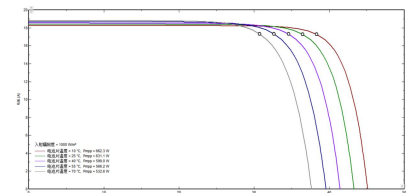
## ENGINEERING DRAWINGS



## IV CURVES



Current-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

Specifications in this datasheet are subject to change without prior notice.