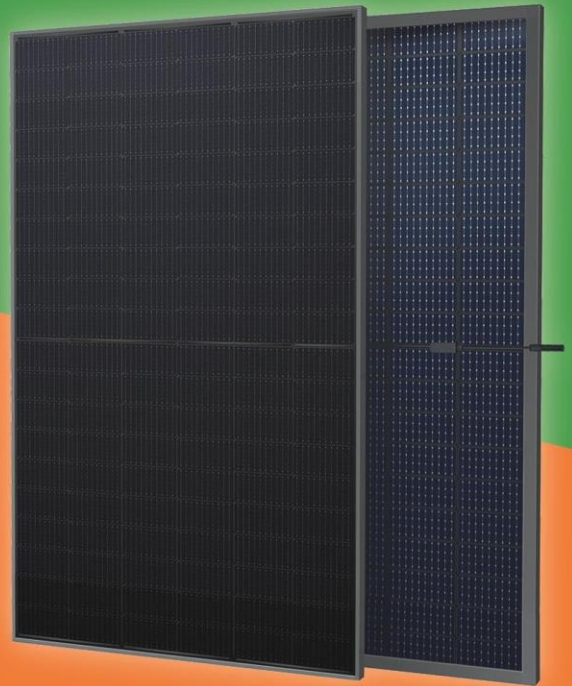


# AS-7M120-BHC BIFACIAL BLACK MODULE 465W~480W



## ● ADVANCED PERFORMANCE & PROVEN ADVANTAGES

High module conversion efficiency up to 21.26% 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

35 years product warranty

35 years linear power output warranty

Passionately  
committed to  
delivering innovative  
energy solution



## ELECTRICAL CHARACTERISTICS AT STC

Maximum Power ( $P_{max}$ )	465W	470W	475W	480W
Open Circuit Voltage ( $V_{oc}$ )	42.0V	42.2V	42.4V	42.6V
Short Circuit Current ( $I_{sc}$ )	13.96A	14.02A	14.08A	14.14A
Voltage at Maximum Power ( $V_{mp}$ )	35.2V	35.4V	35.6V	35.8V
Current at Maximum Power ( $I_{mp}$ )	13.22A	13.28A	13.35A	13.41A
Module Efficiency (%)	21.49	21.72	21.95	22.18
Operating Temperature	-40°C to +85°C			
Maximum System Voltage	1000V DC/1500V DC			
Fire Resistance Rating	Class C			
Maximum Series Fuse Rating	25A			

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 ( $P_{max}$ )	348W	352W	356W	360W
Open Circuit Voltage ( $V_{oc}$ )	39.9V	40.1V	40.3V	40.5V
Short Circuit Current ( $I_{sc}$ )	11.31A	11.36A	11.41A	11.46A
Voltage at Maximum Power ( $V_{mp}$ )	33.1V	33.3V	33.5V	33.7V
Current at Maximum Power ( $I_{mp}$ )	10.52A	10.58A	10.63A	10.69A

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

## MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline N-type 182*91mm
Number of cells	120 (6x20)
Module dimensions	1908x1134x30mm (75.12x44.65x1.18inches)
Weight	23.5kg (51.8lbs)
Front cover	2.0mm AR coating semi-tempered glass, low iron
Back cover	2.0mm AR coating semi-tempered glass, low iron
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

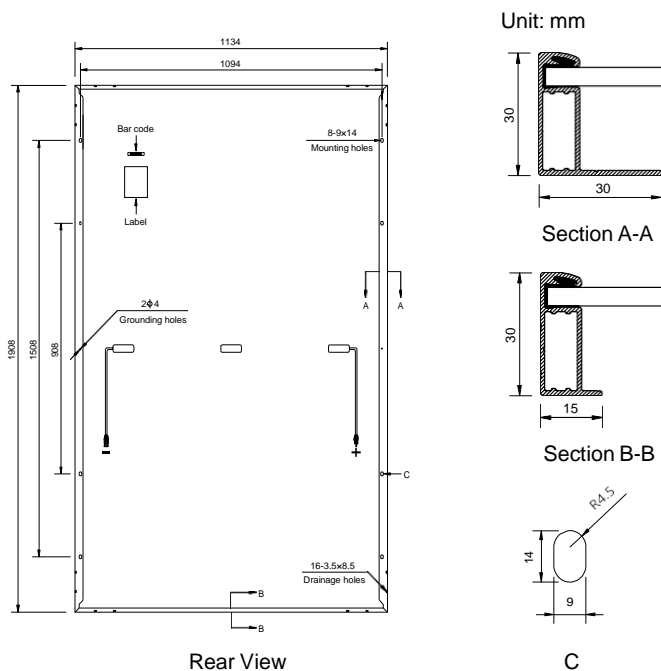
## TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of $P_{max}$	-0.30%/°C
Temperature Coefficients of $V_{oc}$	-0.25%/°C
Temperature Coefficients of $I_{sc}$	0.045%/°C

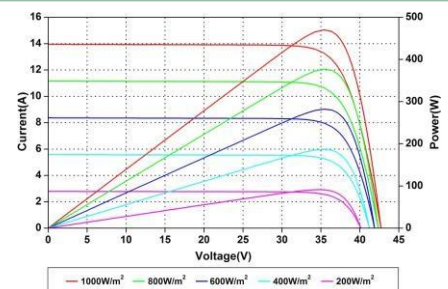
## PACKAGING

Standard packaging	36pcs/pallet
Module quantity per 20' container	216pcs
Module quantity per 40' container	864pcs (HQ)

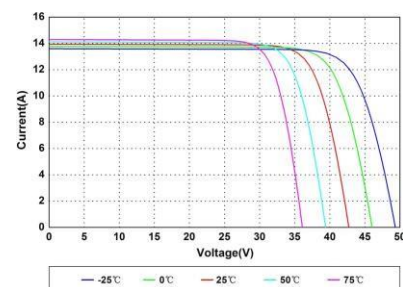
## ENGINEERING DRAWINGS



## 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.