

AS-7M120N-BHC

465W~485W

N TYPE MONOCRYSTALLINE MODULE

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 22.4% 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

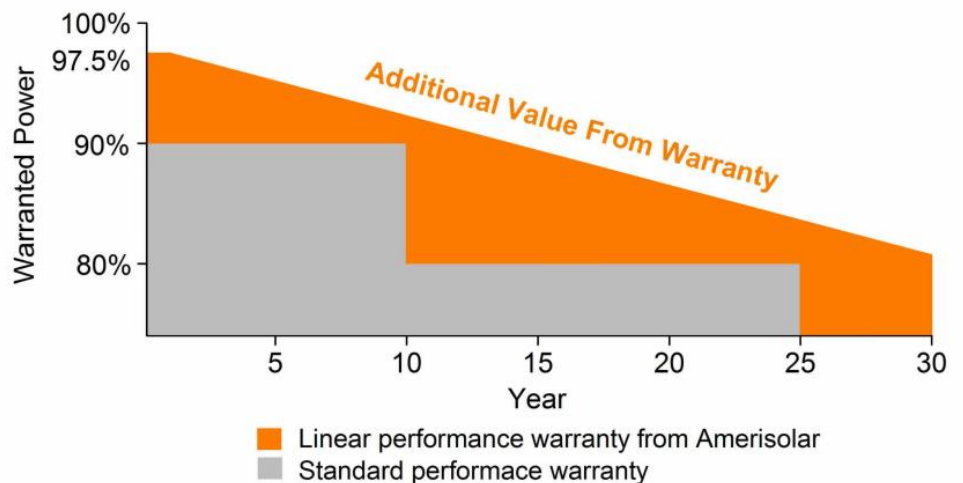
- IEC 61215, IEC 61730, CE
- ISO 9001:2015: Quality management system
- ISO 14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system



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})	465W	470W	475W	480W	485W
Open Circuit Voltage (V_{oc})	42.22V	42.38V	42.54V	42.71V	42.88V
Short Circuit Current (I_{sc})	14.07A	14.15A	14.23A	14.31A	14.39A
Voltage at Maximum Power (V_{mp})	34.89V	35.05V	35.21V	35.38V	35.54V
Current at Maximum Power (I_{mp})	13.33A	13.41A	13.49A	13.57A	13.65A
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	30A				

STC: Irradiance 1000W/m², Cell temperature 25°C, AM1.5; Tolerance of Pmax: ±3%; Measurement Tolerance: ±3%

ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power (P_{max})	350W	353W	357W	361W	365W
Open Circuit Voltage (V_{oc})	40.10V	40.25V	40.41V	40.57V	40.73V
Short Circuit Current (I_{sc})	11.36A	11.42A	11.49A	11.55A	11.61A
Voltage at Maximum Power (V_{mp})	32.77V	32.94V	33.10V	33.27V	33.44V
Current at Maximum Power (I_{mp})	10.67A	10.73A	10.79A	10.85A	10.92A

NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind Speed 1 m/s

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: AS-7M120N-BHC-480W)

Power Gain	Pmax	Voc	Isc	Vmp	Imp
10%	528W	42.71V	15.74A	35.38V	14.93A
15%	552W	42.71V	16.46A	35.38V	15.61A
20%	576W	42.71V	17.17A	35.38V	16.29A
25%	600W	42.71V	17.89A	35.38V	16.96A
30%	624W	42.71V	18.61A	35.38V	17.64A

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline N type 182*91mm
Number of cells	120 (6x20)
Module dimensions	1908x1134x30mm
Weight	26kg
Glass	2.0mm or 1.6mm tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm ² , Portrait: 300mm; Landscape: 1200mm
Connector	MC4 or MC4 compatible

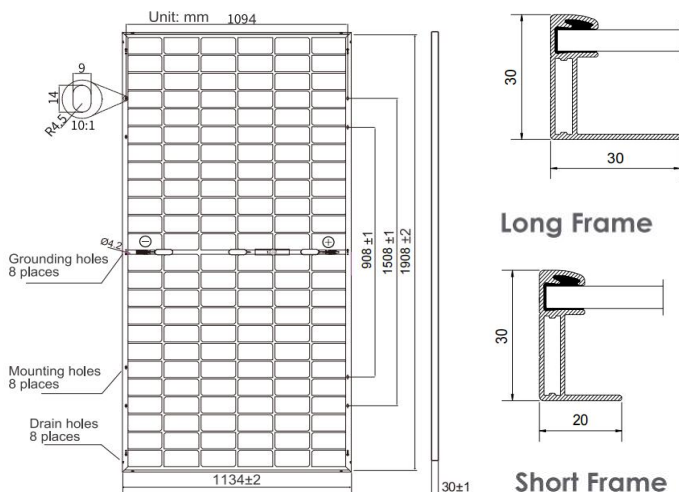
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of P_{max}	-0.31%/°C
Temperature Coefficients of V_{oc}	-0.26%/°C
Temperature Coefficients of I_{sc}	0.046%/°C

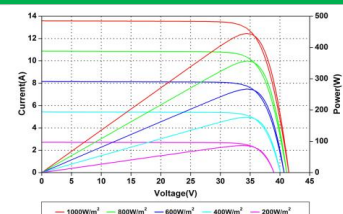
PACKAGING

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

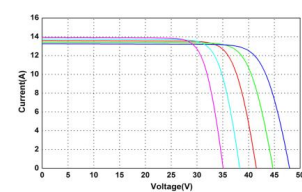
ENGINEERING DRAWINGS



IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures