

AS-8M120N-BHC 600W~630W

MONOCRYSTALLINE BIFACIAL N-TYPE TOPCON MODULE



ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 23.32% 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

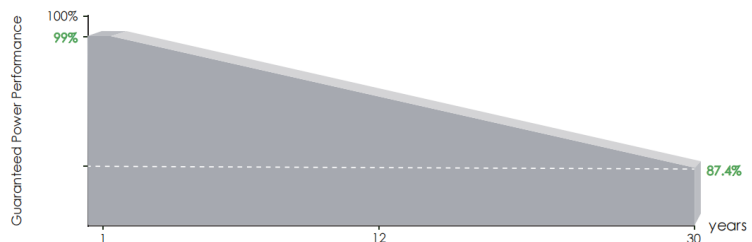
SPECIAL WARRANTY

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



Passionately
committed to
delivering innovative
energy solution

LINEAR PERFORMANCE WARRANTY



ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (Pmax)	600W	605W	610W	615W	620W	625W	630W
Open Circuit Voltage (VOC)	48.42V	48.71V	48.99V	49.31V	49.60V	49.82V	50.04V
Short Circuit Current (ISC)	15.69A	15.72A	15.76A	15.79A	15.82A	15.85A	15.88A
Voltage at Maximum Power (Vmp)	40.31V	40.51V	40.79V	40.99V	41.21V	41.40V	41.59V
Current at Maximum Power (Imp)	14.89A	14.94A	14.96A	15.01A	15.05A	15.10A	15.15A
Module Efficiency (%)	22.21	22.40	22.58	22.77	22.95	23.14	23.32
Operating Temperature	-40°C to +85°C						
Maximum System Voltage	1500V DC						
Fire Resistance Rating	Class C						
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 (Pmax)	459W	462W	466W	471W	475W	479W	483W
Open Circuit Voltage (VOC)	46.02V	46.21V	46.49V	46.79V	47.10V	47.33V	47.56V
Short Circuit Current (ISC)	12.63A	12.66A	12.69A	12.74A	12.77A	12.81A	12.85A
Voltage at Maximum Power (Vmp)	37.91V	38.11V	38.29V	38.51V	38.71V	38.87V	39.03V
Current at Maximum Power (Imp)	12.11A	12.12A	12.17A	12.23A	12.27A	12.32A	12.37A

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

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: AS-8M120N-BHC-610W)

Power Gain	P _{max}	V _{OC}	I _{SC}	V _{mp}	I _{mp}
5%	641W	48.99V	16.55A	40.79V	15.70A
15%	702W	48.99V	18.12A	40.79V	17.19A
25%	763W	48.99V	19.70A	40.79V	18.69A

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline Bifacial TOPCON 210*91mm
Number of cells	132(6x22)
Module dimensions	2382x1134x30mm
Weight	33.5kg
Front/Back Glass	2.0mm tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm ² , Length:300mm
Connector	MC4 or MC4 compatible

TEMPERATURE CHARACTERISTICS

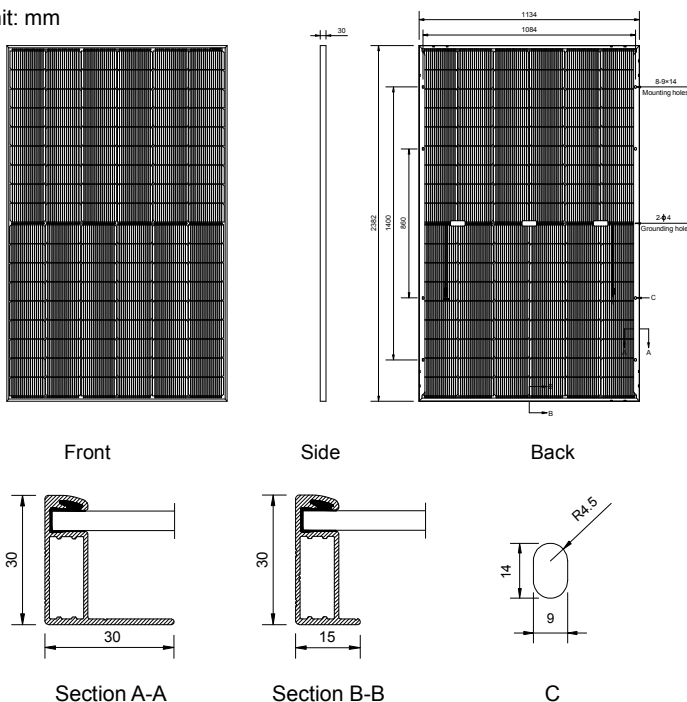
Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of P _{max}	-0.29%/°C
Temperature Coefficients of V _{OC}	-0.25%/°C
Temperature Coefficients of I _{SC}	0.045%/°C

PACKAGING

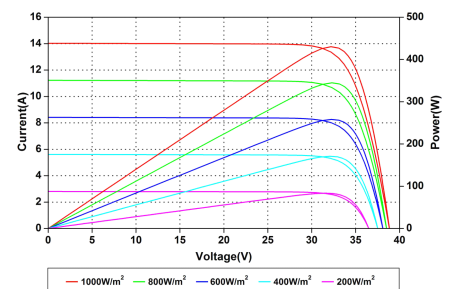
Standard packaging	36pcs/pallet
Module quantity per 20' container	180pcs
Module quantity per 40' container	720pcs(HQ)

ENGINEERING DRAWINGS

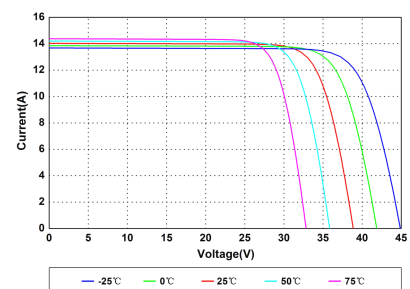
Unit: mm



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.