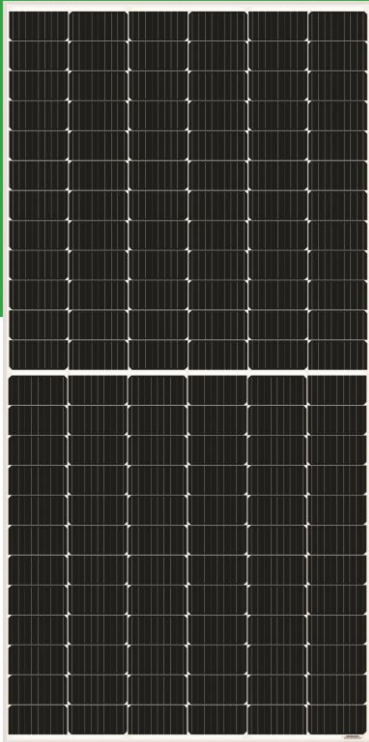




AS-7M144N-BHC

555W~585W

N TYPE MONOCRYSTALLINE MODULE

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 22.65% 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

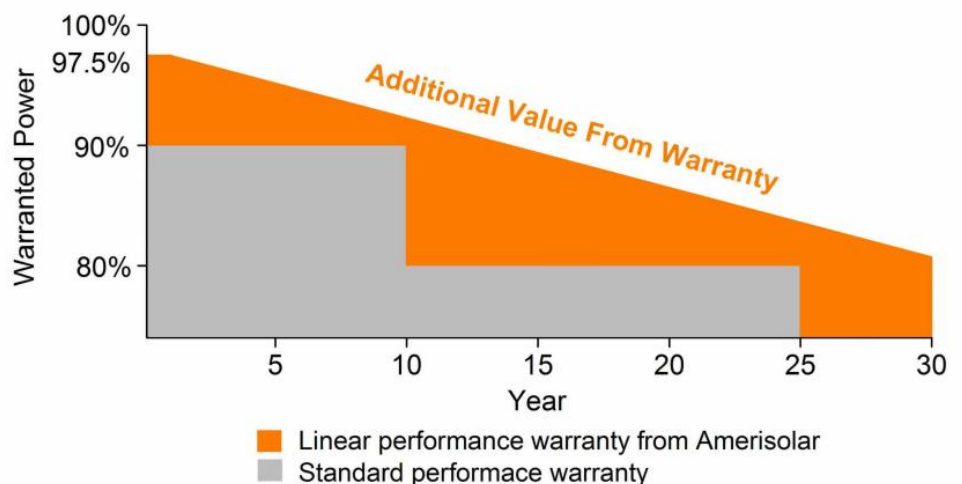
- IEC 61215, IEC 61730, CE
- ISO 9001:2015: Quality management system
- ISO 14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system

SPECIAL WARRANTY

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



Passionately
committed to
delivering innovative
energy solution



ELECTRICAL CHARACTERISTICSAT STC							
Maximum Power (P _{max})	555W	560W	565W	570W	575W	580W	585W
Open Circuit Voltage (V _{OC})	50.2V	50.4V	50.6V	50.8V	51.0V	51.2V	51.4V
Short Circuit Current (I _{SC})	13.99A	14.04A	14.09A	14.14A	14.19A	14.24A	14.29A
Voltage at Maximum Power (V _{mp})	42.0V	42.2V	42.4V	42.6V	42.8V	43.0V	43.2V
Current at Maximum Power (I _{mp})	13.22A	13.28A	13.33A	13.39A	13.44A	13.49A	13.55A
Module Efficiency (%)	21.48	21.67	21.86	22.06	22.25	22.45	22.65
Operating Temperature	-40°C to +85°C						
Maximum System Voltage	1000V DC/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 CHARACTERISTICSAT NOCT							
Maximum Power (P _{max})	417W	421W	425W	429W	433W	437W	441W
Open Circuit Voltage (V _{OC})	47.7V	47.9V	48.1V	48.3V	48.5V	48.7V	48.9V
Short Circuit Current (I _{SC})	11.33A	11.37A	11.41A	11.45A	11.49A	11.54A	11.59A
Voltage at Maximum Power (V _{mp})	39.5V	39.7V	39.9V	40.1V	40.3V	40.5V	40.7V
Current at Maximum Power (I _{mp})	10.56A	10.61A	10.66A	10.70A	10.75A	10.80A	10.85A

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

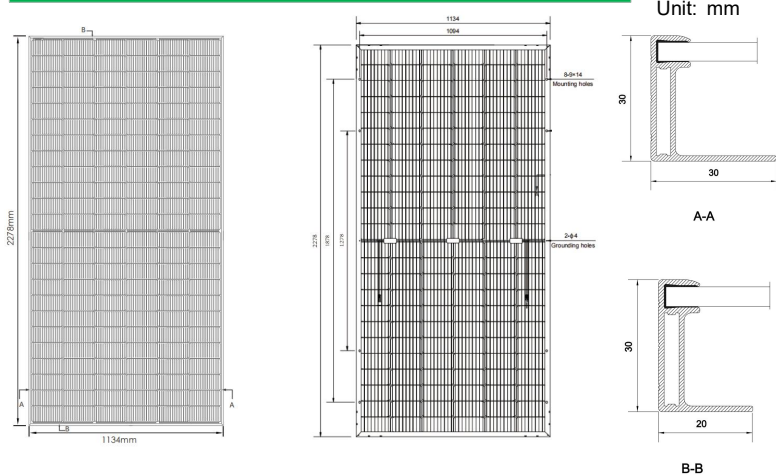
ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (EXAMPLE: AS-7M144N-BHC-560W)						
Power Gain	Pmax	Voc	Isc	Vmp	Imp	
10%	616W	50.4V	15.44A	42.2V	14.60A	
15%	644W	50.4V	16.15A	42.2V	15.27A	
20%	672W	50.4V	16.85A	42.2V	15.93A	
25%	700W	50.4V	17.55A	42.2V	16.59A	
30%	728W	50.4V	18.25A	42.2V	17.26A	

MECHANICAL CHARACTERISTICS	
Cell type	Monocrystalline Bifacial N type 182*91mm
Number of cells	144 (6x24)
Module dimensions	2278x1134x30mm
Weight	32kg
Glass	2.0mm AR coated tempered glass/2.0mm tempered glass
Frame	Black/Silver Alternative Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm² , Portrait: 300mm ; Landscape: 1300mm
Connector	MC4 or MC4 compatible

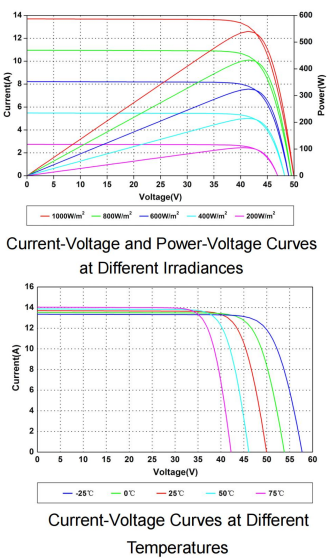
TEMPERATURE CHARACTERISTICS	
Nominal Operating Cell Temperature (NOCT)	42°C±2°C
Temperature Coefficients of P _{max}	-0.30%/°C
Temperature Coefficients of V _{OC}	-0.25%/°C
Temperature Coefficients of I _{SC}	0.05%/°C

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

ENGINEERING DRAWINGS



IV CURVES



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