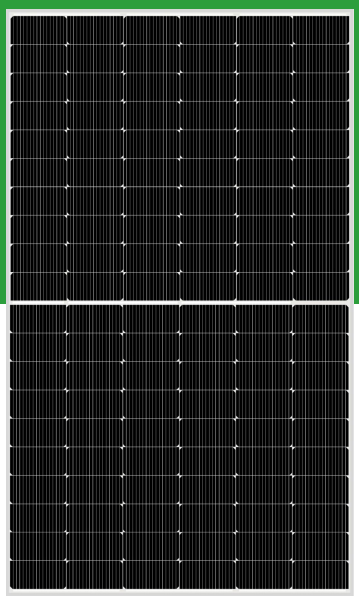
Amerisolar USA | New Energy New World®



AS-7M120N-HC

465W~480W

MONOCRYSTALLINE MODULE

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 22.18% 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.

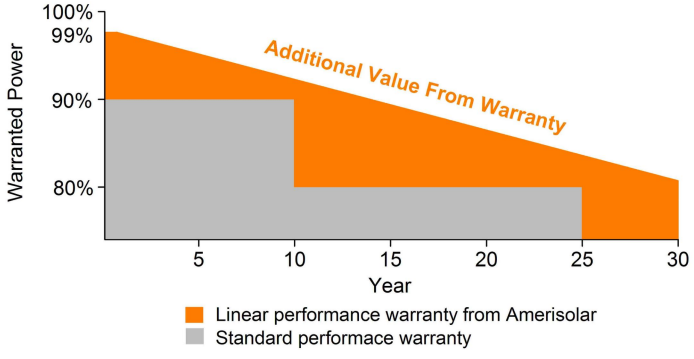
CERTIFICATIONS

- 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_{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^2, Cell temperature 25°C, AM1.5; Tolerance of Pmax: ±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^2, 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	23kg (50.7lbs)
Front cover	3.2mm (0.13inches) tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm^2 (0.006inches^2), Portrait: 300mm (11.81inches); Landscape: 1200mm (47.24inches)
Connector	MC4 or MC4 compatible

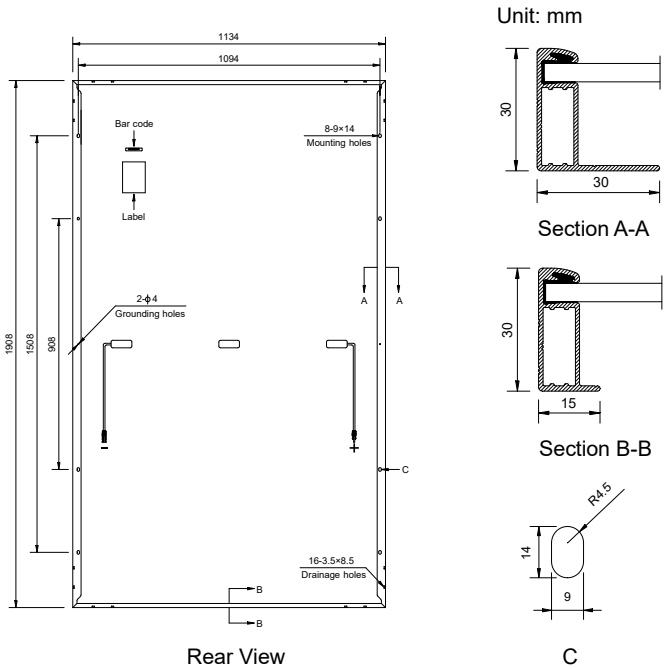
TEMPERATURE CHARACTERISTICS

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

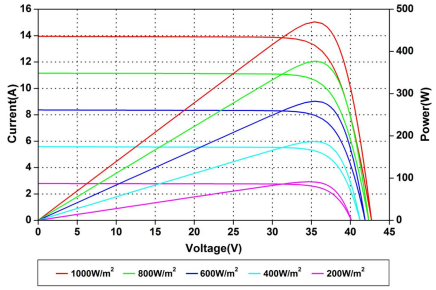
Standard packaging	36pcs/pallet
Module quantity per 20' container	216pcs
Module quantity per 40' container	864pcs (HQ)

ENGINEERING DRAWINGS

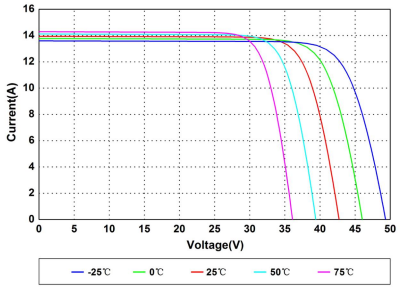


Rear View

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.