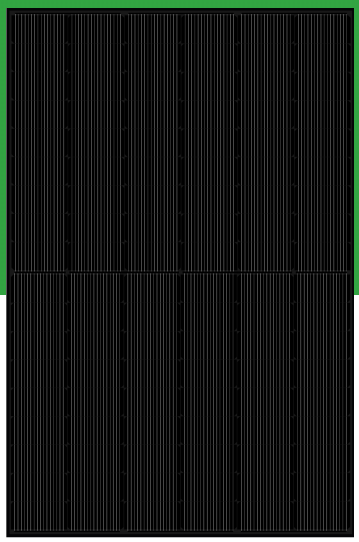
Amerisolar USA | New Energy New World®



AS-7M108-BHC Black
415W~435W
MONOCRYSTALLINE MODULE

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 22.28% 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.
- Aesthetically appealing design with black backsheet and frame.

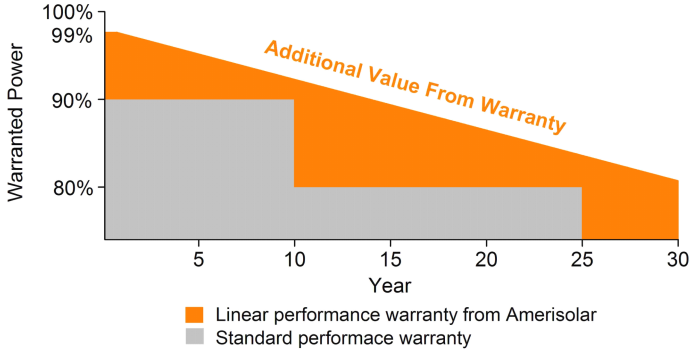
CERTIFICATIONS

- 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})	415W	420W	425W	430W	435W
Open Circuit Voltage (V_{OC})	37.8V	38.0V	38.2V	38.4V	38.6V
Short Circuit Current (I_{SC})	13.88A	13.94A	14.00A	14.06A	14.12A
Voltage at Maximum Power (V_{mp})	31.6V	31.8V	32.0V	32.2V	32.4V
Current at Maximum Power (I_{mp})	13.14A	13.21A	13.29A	13.36A	13.43A
Module Efficiency (%)	21.25	21.51	21.76	22.02	22.28
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})	312W	316W	320W	324W	328W
Open Circuit Voltage (V_{OC})	35.9V	36.1V	36.3V	36.5V	36.7V
Short Circuit Current (I_{SC})	11.24A	11.29A	11.34A	11.39A	11.44A
Voltage at Maximum Power (V_{mp})	29.7V	29.9V	30.1V	30.3V	30.5V
Current at Maximum Power (I_{mp})	10.51A	10.57A	10.64A	10.70A	10.75A

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	108 (6x18)
Module dimensions	1722x1134x30mm (67.80x44.65x1.18inches)
Weight	20.5kg (45.2lbs)
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

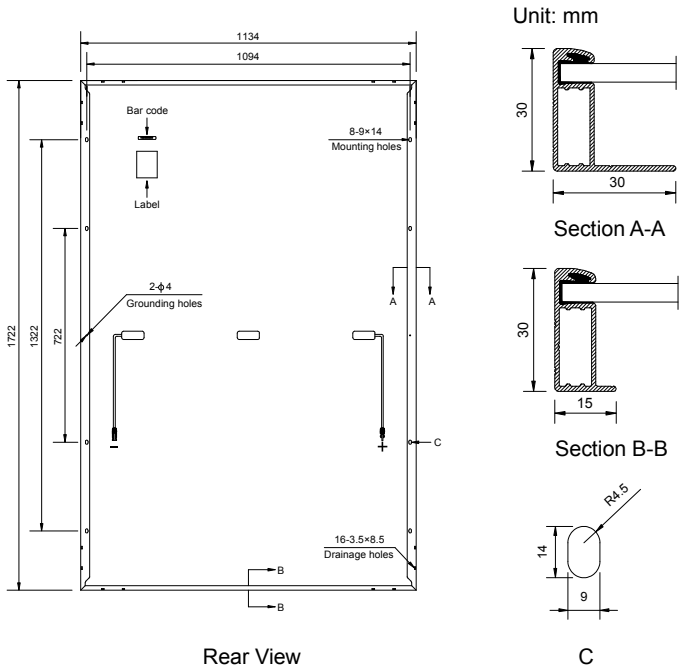
TEMPERATURE CHARACTERISTICS

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

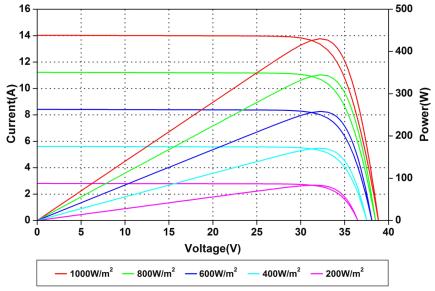
Standard packaging	36pcs/pallet
Module quantity per 20' container	216pcs
Module quantity per 40' container	936pcs (HQ)

ENGINEERING DRAWINGS

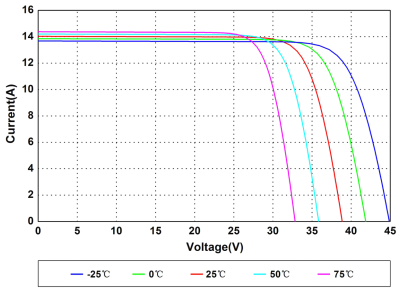


Rear View

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.