

AS-7M108-HC BLACK

400W~420W

MONOCRYSTALLINE MODULE

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 21.25% 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.
- 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

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

Passionately
committed to
delivering innovative
energy solution



ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (P_{max})	405W	410W	415W	420W
Open Circuit Voltage (V_{oc})	37.4V	37.6V	37.8V	38.0V
Short Circuit Current (I_{sc})	13.76A	13.82A	13.88A	13.94A
Voltage at Maximum Power (V_{mp})	31.2V	31.4V	31.6V	31.8V
Current at Maximum Power (I_{mp})	12.99A	13.06A	13.14A	13.21A
Module Efficiency (%)	20.74	21.00	21.25	21.51
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	25A			

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

ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power (P_{max})	304W	308W	312W	316W
Open Circuit Voltage (V_{oc})	34.4V	34.6V	34.8V	35.0V
Short Circuit Current (I_{sc})	11.15A	11.20A	11.25A	11.30A
Voltage at Maximum Power (V_{mp})	28.4V	28.6V	28.8V	29.0V
Current at Maximum Power (I_{mp})	10.71A	10.77A	10.84A	10.90A

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

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline PERC 182*91mm
Number of cells	108 (6x18)
Module dimensions	1722x1134x30mm (67.80x44.65x1.38inches)
Weight	21.5kg (47.4lbs)
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

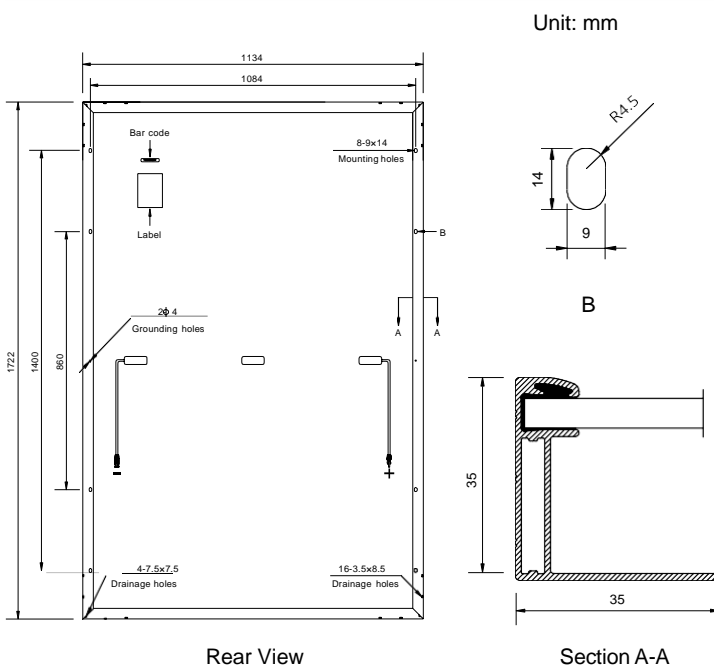
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of P_{max}	-0.36%/°C
Temperature Coefficients of V_{oc}	-0.28%/°C
Temperature Coefficients of I_{sc}	0.05%/°C

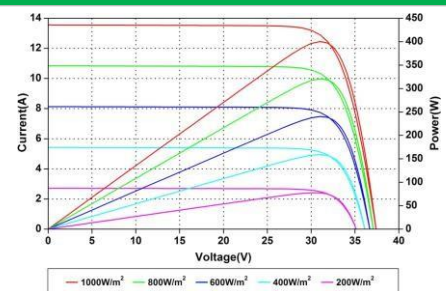
PACKAGING

Standard packaging	31pcs/pallet
Module quantity per 20' container	186pcs
Module quantity per 40' container	936pcs (HQ)

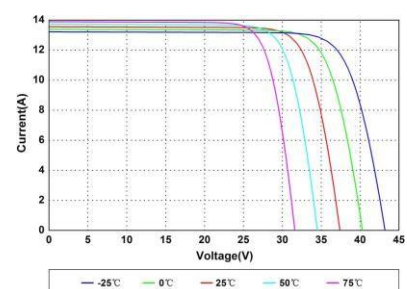
ENGINEERING DRAWINGS



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.