

AS-7M108N-HC Anti-glare 420W~440W Black

MONOCRYSTALLINE MODULE

ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 22.53% 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})	420W	425W	430W	435W	440W
Open Circuit Voltage (Voc)	38.0V	38.2V	38.4V	38.6V	38.8V
Short Circuit Current (I _{SC})	13.94A	14.00A	14.06A	14.12A	14.18A
Voltage at Maximum Power (V _{mp})	31.8V	32.0V	32.2V	32.4V	32.6V
Current at Maximum Power (I _{mp})	13.21A	13.29A	13.36A	13.43A	13.50A
Module Efficiency (%)	21.51	21.76	22.02	22.28	22.53
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 Pmax: ±3%; Measurement Tolerance: ±3%

ELECTRICAL CHARACTERISTICS AT NOCT					
Maximum Power (P _{max})	316W	320W	324W	328W	331W
Open Circuit Voltage (Voc)	36.1V	36.3V	36.5V	36.7V	36.9V
Short Circuit Current (I _{SC})	11.29A	11.34A	11.39A	11.44A	11.49A
Voltage at Maximum Power (V _{mp})	29.9V	30.1V	30.3V	30.5V	30.7V
Current at Maximum Power (I _{mp})	10.57A	10.64A	10.70A	10.75A	10.81A

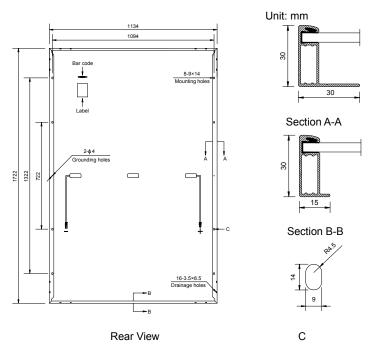
NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind Speed 1 m/s

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 Anti-glare			
Frame	Anodized aluminum alloy			
Junction box	IP68, 3 diodes			
	4mm ² (0.006inches ²), Portrait: 300mm (11.81inches);			
Cable	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)

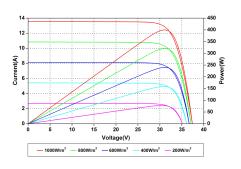
ENGINEERING DRAWINGS



Specifications in this datasheet are subject to change without prior notice. $\label{eq:continuous}$



IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances