

# AS-7M132N-HC 510W~530W

# **MONOCRYSTALLINE MODULE**

#### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 22.32% 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 <sub>max</sub> )	510W	515W	520W	525W	530W
Open Circuit Voltage (Voc)	46.2V	46.4V	46.6V	46.8V	47.0V
Short Circuit Current (I <sub>SC</sub> )	13.95A	14.00A	14.05A	14.10A	14.15A
Voltage at Maximum Power (V <sub>mp</sub> )	38.8V	39.0V	39.2V	39.4V	39.6V
Current at Maximum Power (I <sub>mp</sub> )	13.15A	13.21A	13.27A	13.33A	13.39A
Module Efficiency (%)	21.48	21.69	21.90	22.11	22.32
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/m², Cell temperature 25°C, AM1.5; Tolerance of Pmax: ±3%; Measurement Tolerance: ±3%

ELECTRICAL CHARACTERISTICS AT NOCT					
Maximum Power (P <sub>max</sub> )	384W	388W	392W	396W	400W
Open Circuit Voltage (Voc)	43.9V	44.1V	44.3V	44.5V	44.7V
Short Circuit Current (I <sub>SC</sub> )	11.30A	11.34A	11.38A	11.42A	11.46A
Voltage at Maximum Power (V <sub>mp</sub> )	36.5V	36.7V	36.9V	37.1V	37.3V
Current at Maximum Power (I <sub>mp</sub> )	10.53A	10.58A	10.63A	10.68A	10.73A

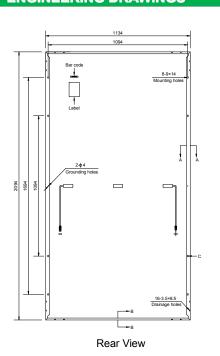
NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind Speed 1 m/s

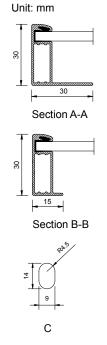
MECHANICAL CHARACTERISTICS			
Cell type	Monocrystalline N-type 182*91mm		
Number of cells	132 (6x22)		
Module dimensions	2094x1134x30mm (82.44x44.65x1.18inches)		
Weight	26kg (57.3lbs)		
Front cover	3.2mm (0.13inches) tempered glass with AR coating		
Frame	Anodized aluminum alloy		
Junction box	IP68, 3 diodes		
Cable	4mm² (0.006inches²), Portrait: 300mm (11.81inches);		
	Landscape: 1300mm (51.18inches)		
Connector	MC4 or MC4 compatible		

TEMPERATURE CHARACTERISTICS				
Nominal Operating Cell Temperature (NOCT)	43°C±2°C			
Temperature Coefficients of P <sub>max</sub>	-0.30%/°C			
Temperature Coefficients of V <sub>OC</sub>	-0.25%/°C			
Temperature Coefficients of I <sub>SC</sub>	0.045%/°C			

PACKAGING	
Standard packaging	36pcs/pallet
Module quantity per 20' container	180pcs
Module quantity per 40' container	792pcs (HQ)

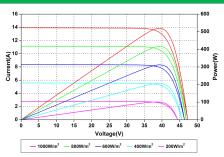
## **ENGINEERING DRAWINGS**



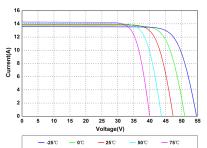


Specifications in this datasheet are subject to change without prior notice.

## **IV CURVES**



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures