

# AS-7M132-HC495W~510W Black

# MONOCRYSTALLINE PERC MODULE

### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 21.50% 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.

### **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**

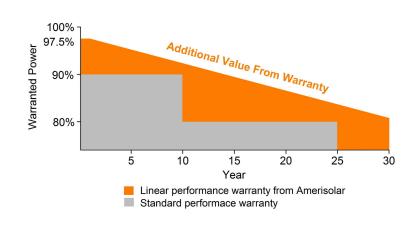
- 20 years product warranty
- 30 years linear power output warranty

**Passionately** 

committed to

delivering innovative

energy solution



ELECTRICAL CHARACTERISTICS AT STC				
Maximum Power (P <sub>max</sub> )	495W	500W	505W	510W
Open Circuit Voltage (Voc)	45.40V	45.55V	45.70V	45.85V
Short Circuit Current (I <sub>SC</sub> )	13.82A	13.90A	13.97A	14.05A
Voltage at Maximum Power (V <sub>mp</sub> )	38.23V	38.38V	38.53V	38.68V
Current at Maximum Power (I <sub>mp</sub> )	12.96A	13.03A	13.11A	13.19A
Module Efficiency (%)	20.80	21.10	21.30	21.50
Operating Temperature	-40°C to +85°C			
Maximum System Voltage	1000/1500VDC(IEC)			
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> )	370W	374W	378W	381W	
Open Circuit Voltage (Voc)	42.69V	42.83V	42.97V	43.11V	
Short Circuit Current (I <sub>SC</sub> )	11.17A	11.24A	11.30A	11.36A	
Voltage at Maximum Power (V <sub>mp</sub> )	35.51V	35.65V	35.79V	35.93V	
Current at Maximum Power (I <sub>mp</sub> )	10.42A	10.48A	10.55A	10.61A	

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind Speed 1 m/s

MECHANICAL CHARACTERISTICS			
Cell type	Monocrystalline 182*91mm		
Number of cells	132(6x22)		
Module dimensions	1094x1134x30mm		
Weight	26kg		
Front cover	3.2mm tempered glass with AR coating		
Frame	Anodized aluminum alloy		
Junction box	IP68, 3 diodes		
Cable	4mm <sup>2</sup> , Length:300mm		
Connector	MC4 or MC4 compatible		

TEMPERATURE CHARACTERISTICS		
Nominal Operating Cell Temperature (NOCT) 43°C±2°C		
Temperature Coefficients of P <sub>max</sub>	-0.36%/°C	
Temperature Coefficients of V <sub>OC</sub>	-0.28%/°C	
Temperature Coefficients of I <sub>SC</sub>	0.05%/°C	

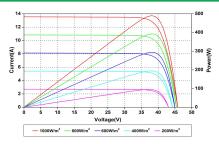
PACKAGING	
Standard packaging	36pcs/pallet
Module quantity per 20' container	180pcs
Module quantity per 40' container	792pcs (HQ

# **ENGINEERING DRAWINGS**

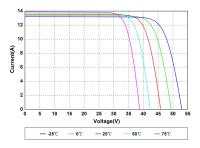
# Title Unit: mm Ser code Label Ser code Service Rear View Section A-A Unit: mm Unit: mm Fig. 35+8.5 Foreigneye holes Section A-A

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