

AS-6M144FL-HC 420W~430W MONOCRYSTALLINE MODULE

Product Characteristics

- Optimized composite materials, 70% lighter at the same power
- Used advanced organic polymer encapsulation materials, bending radius reach 0.30m, fit all kinds of curved surface perfectly
- Through quickly bonding installation, requires no penetration, eliminates the use of mounting hardware

CERTIFICATIONS

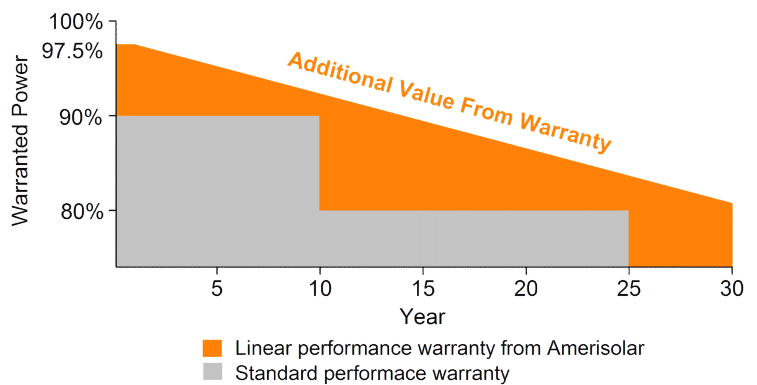
- IEC 61215, IEC 61730
- ISO 9001:2015: Quality management system
- ISO 14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system



SPECIAL WARRANTY

- 12 years product warranty
- 25 years linear power output warranty

Passionately
committed to
delivering innovative
energy solution



ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (P_{max})	420W	425W	430W
Open Circuit Voltage (V_{oc})	49.0V	49.2V	49.4V
Short Circuit Current (I_{sc})	10.92A	10.98A	11.04A
Voltage at Maximum Power (V_{mp})	41.0V	41.2V	41.4V
Current at Maximum Power (I_{mp})	10.35A	10.42A	10.49A
Module Efficiency (%)	18.63	18.85	19.07
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	20A		

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})	311W	315W	319W
Open Circuit Voltage (V_{oc})	45.0V	45.2V	45.4V
Short Circuit Current (I_{sc})	8.84A	8.89A	8.94A
Voltage at Maximum Power (V_{mp})	36.8V	37.0V	37.2V
Current at Maximum Power (I_{mp})	8.46A	8.52A	8.58A

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

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline PERC 166*83mm
Number of cells	144 (12x12)
Module dimensions	2050x1100x2mm
Weight	7.2kg
Front cover	Lightweight high transparent polymer materials
Junction box	IP68, 3 diodes
Cable	4mm ² , Portrait: 300mm; Customized Length
Connector	MC4 compatible

TEMPERATURE CHARACTERISTICS

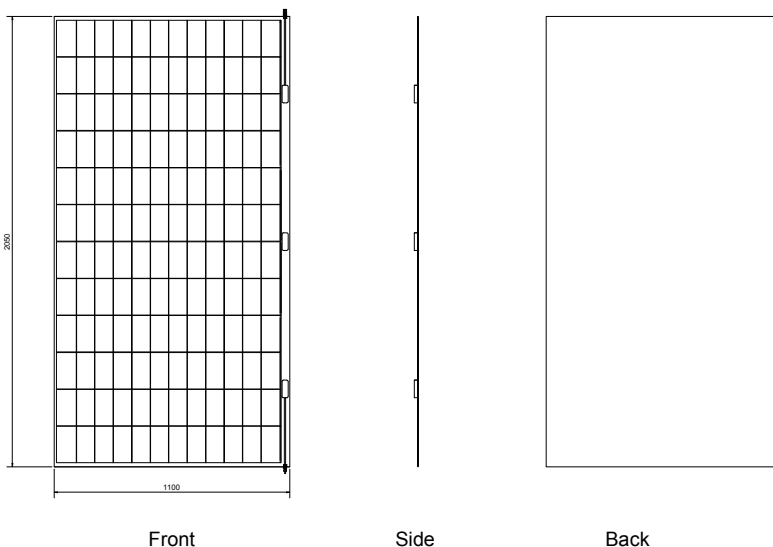
Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of P_{max}	-0.36%/°C
Temperature Coefficients of V_{oc}	-0.28%/°C
Temperature Coefficients of I_{sc}	0.05%/°C

PACKAGING

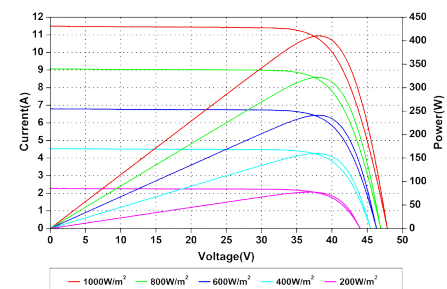
Standard packaging	66pcs/pallet
Module quantity per 20' container	530pcs
Module quantity per 40' container	1400pcs (HQ)

ENGINEERING DRAWINGS

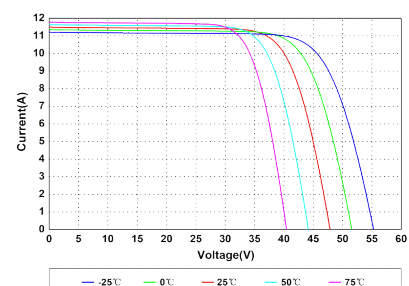
Unit: mm



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.