

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

- 10 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})	40.2V	40.4V	40.6V
Short Circuit Current (I_{sc})	13.50A	13.55A	13.60A
Voltage at Maximum Power (V_{mp})	33.4V	33.6V	33.8V
Current at Maximum Power (I_{mp})	12.59A	12.66A	12.73A
Module Efficiency (%)	20.58	20.82	21.07
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	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})	315W	319W	323W
Open Circuit Voltage (V_{oc})	37.8V	38.0V	38.2V
Short Circuit Current (I_{sc})	10.95A	10.98A	11.02A
Voltage at Maximum Power (V_{mp})	31.0V	31.2V	31.4V
Current at Maximum Power (I_{mp})	10.19A	10.25A	10.30A

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

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline PERC 182*91mm
Number of cells	120(12x10)
Module dimensions	1130x2326x2mm
Weight	8.2kg
Front cover	Lightweight high transparent polymer materials
Junction box	IP68, 3 diodes
Cable	4mm ² , Portrait: 450mm, Customized Length
Connector	MC4 compatible

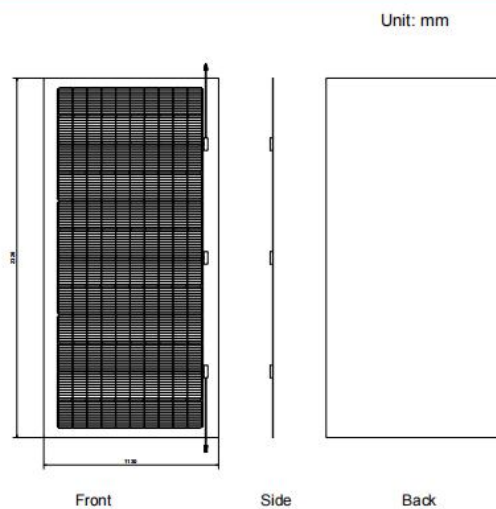
TEMPERATURE CHARACTERISTICS

Normal 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

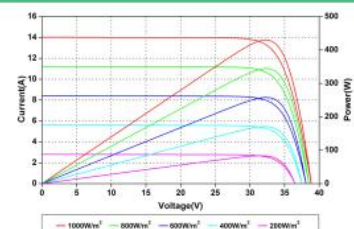
PACKAGING

Standard packaging	66pcs/pallet
Module quantity per 20' container	264pcs
Module quantity per 40' container	1320pcs (HQ)

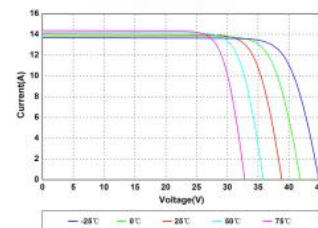
ENGINEERING DRAWINGS



IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

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