



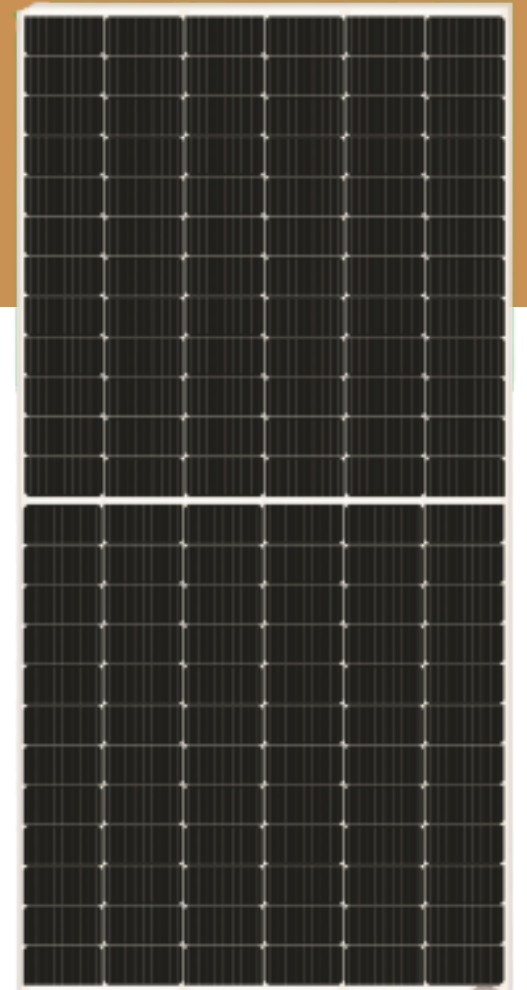
Supplied by



AS-7M144-HC

525W~550W

MONOCRYSTALLINE MODULE



ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 21.28% by using innovative Half-cell design and Multi-busbar(MBB) cell technology
- Lower annual power degradation and higher energy yield during the module's lifetime.
- Superior performance under high temperature and low light conditions.
- High load-bearing capacity which can withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- Excellent reliability and durability against extreme environmental conditions (high resistance to salt mist, ammonia, sand, acid and alkali, etc.).
- Potential induced degradation (PID) resistance.

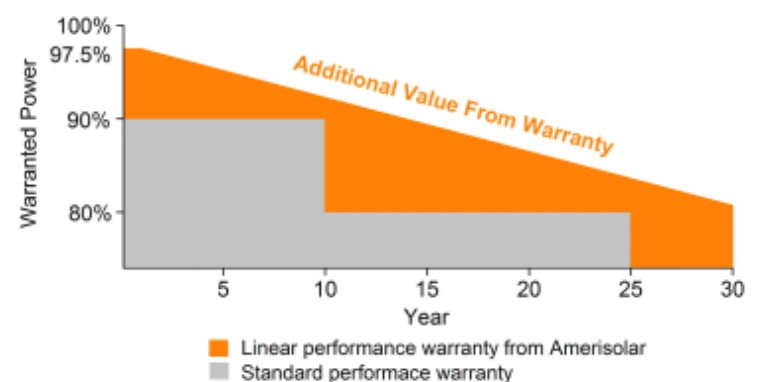
CERTIFICATIONS

- IEC 61215, IEC 61730, CE
- ISO9001:2015: Quality management system
- ISO14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system



SPECIAL WARRANTY

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



ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (Pmax)	525	530	535	540	545	550
Open Circuit Voltage (VOC)	49.0	49.2	49.4	49.6	49.8	50.0
Short Circuit Current (ISC)	13.74	13.78	13.82	13.86	13.90	13.94
Voltage at Maximum Power (Vmp)	40.8	41.0	41.2	41.4	41.6	41.8
Current at Maximum Power (Imp)	12.88	12.93	12.99	13.05	13.11	13.16
Module Efficiency (%)	20.31	20.51	20.70	20.89	21.09	21.28
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 (Pmax)	391	395	399	403	407	411
Open Circuit Voltage (VOC)	45.1	45.3	45.5	45.7	45.9	46.1
Short Circuit Current (ISC)	11.13	11.16	11.19	11.22	11.25	11.28
Voltage at Maximum Power (Vmp)	37.1	37.3	37.5	37.7	37.9	38.1
Current at Maximum Power (Imp)	10.54	10.59	10.64	10.69	10.74	10.79

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

MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline PERC 182*91mm
Number of cells	144 (6x24)
Module dimensions	2279x1134x35mm (89.72x44.65x1.38inches)
Weight	29kg (63.9lbs)
Front cover	3.2mm (0.13inches) tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm ² (0.006inches ²), Portrait: 300mm (11.81inches); Landscape: 1300mm (51.18inches)
Connector	MC4 or MC4 compatible

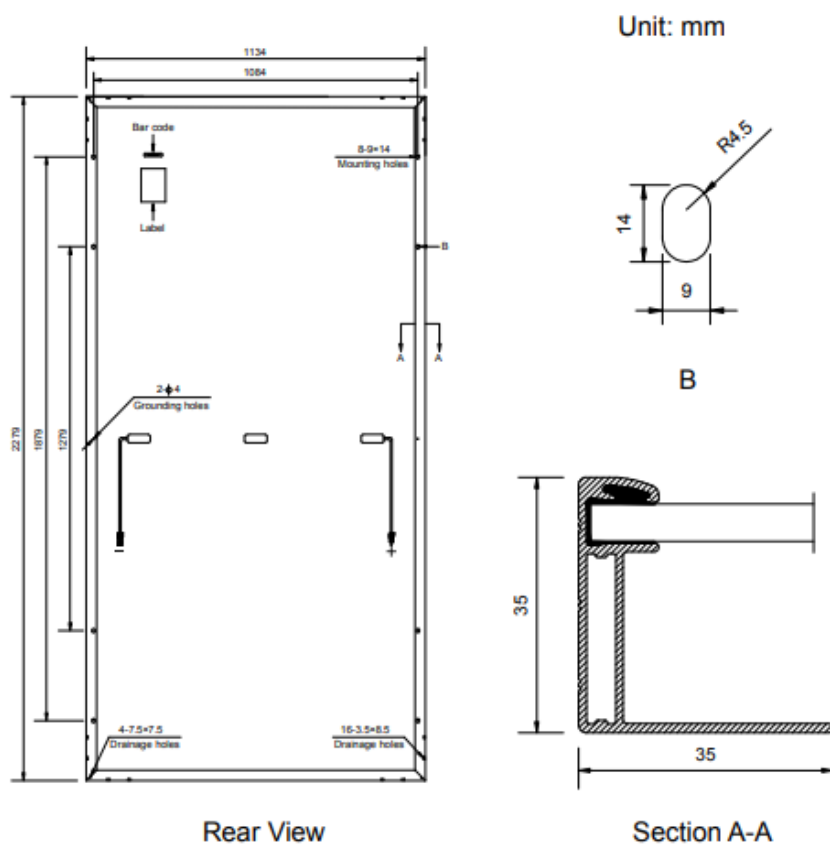
TEMPERATURE COEFFICIENT

Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of Pmax	-0.36%/°C
Temperature Coefficients of VOC	-0.28%/°C
Temperature Coefficients of ISC	0.05%/°C

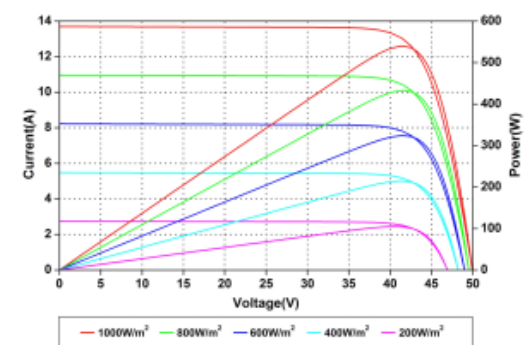
PACKAGING

Standard packaging	31pcs/pallet
Module quantity per 20' container	155pcs
Module quantity per 40' container	620pcs (HQ)

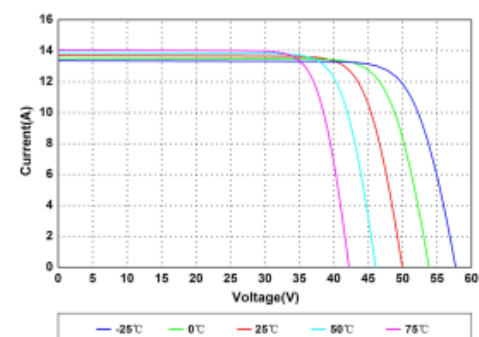
ENGINEERING DRAWINGS



IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures