



Tiger Plus

Monocrystalline Module

Type: AS-7M144-HC

565W

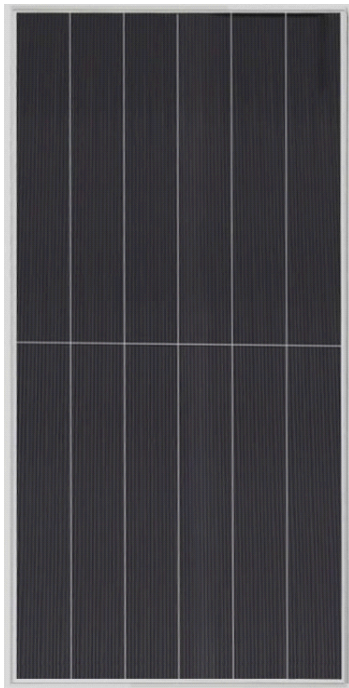
Maximum Power

21.86%

Maximum Efficiency

0~+5W

Power Tolerance



ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 21.86% by using unique flexible interconnection technology and flexible back circuit encapsulation technology.
- Lower resistance loss and lower risk of hot-spot by adopting unique 1/4-cut 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

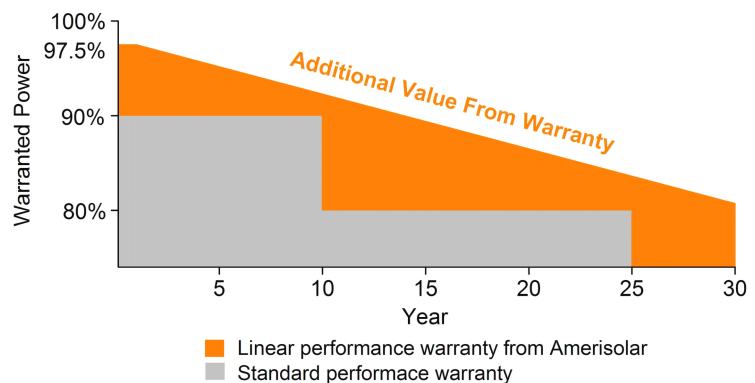
- IEC 61215, IEC 61730, CE
- ISO 9001:2015: Quality management system
- ISO 14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system



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_{max})	540W	545W	550W	555W	560W	565W
Open Circuit Voltage (V_{OC})	50.8V	51.0V	51.2V	51.4V	51.6V	51.8V
Short Circuit Current (I_{SC})	13.47A	13.52A	13.57A	13.62A	13.67A	13.72A
Voltage at Maximum Power (V_{mp})	42.4V	42.6V	42.8V	43.0V	43.2V	43.4V
Current at Maximum Power (I_{mp})	12.74A	12.80A	12.86A	12.91A	12.97A	13.02A
Module Efficiency (%)	20.89	21.09	21.28	21.48	21.67	21.86
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; Measurement Tolerance: ±3%

ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power (P_{max})	403W	407W	411W	415W	419W	423W
Open Circuit Voltage (V_{OC})	46.7V	46.9V	47.1V	47.3V	47.5V	47.7V
Short Circuit Current (I_{SC})	10.91A	10.95A	10.99A	11.03A	11.07A	11.11A
Voltage at Maximum Power (V_{mp})	38.6V	38.8V	39.0V	39.2V	39.4V	39.6V
Current at Maximum Power (I_{mp})	10.45A	10.49A	10.54A	10.59A	10.64A	10.69A

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

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline PERC
Cell size	182x45.5mm
Module dimensions	2279x1134x35mm (89.72x44.65x1.38inches)
Weight	28.5kg (62.8lbs)
Front cover	3.2mm (0.13inches) tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68
Cable	4mm ² (0.006inches ²), Portrait: 300mm (11.81inches); Landscape: 1300mm (51.18inches)
Connector	MC4 or MC4 compatible

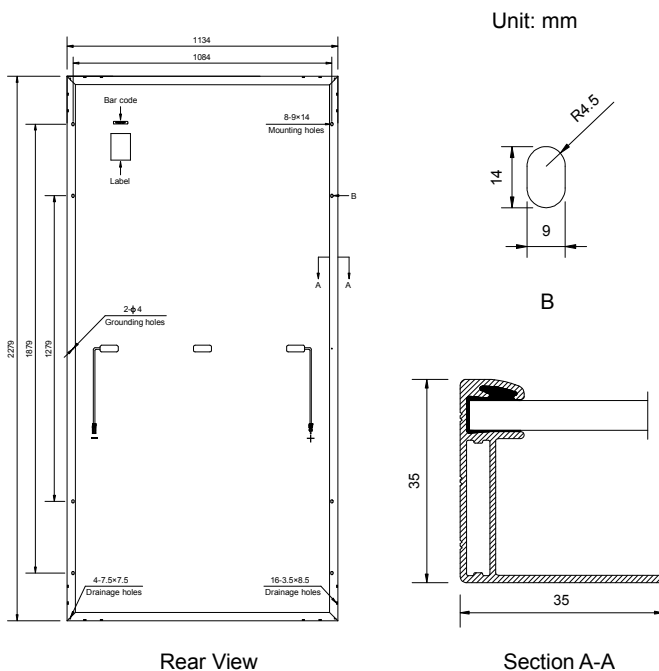
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of P_{max}	-0.34%/°C
Temperature Coefficients of V_{OC}	-0.28%/°C
Temperature Coefficients of I_{SC}	0.05%/°C

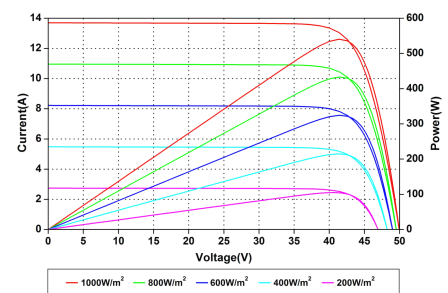
PACKAGING

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

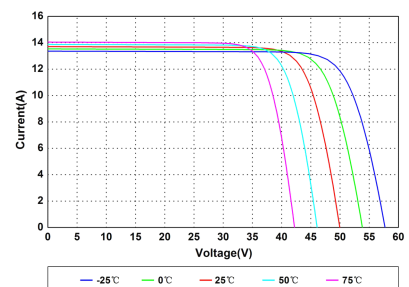
ENGINEERING DRAWINGS



IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

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