

SHBC144T/W

435-450W

20.7% | 144 Layout

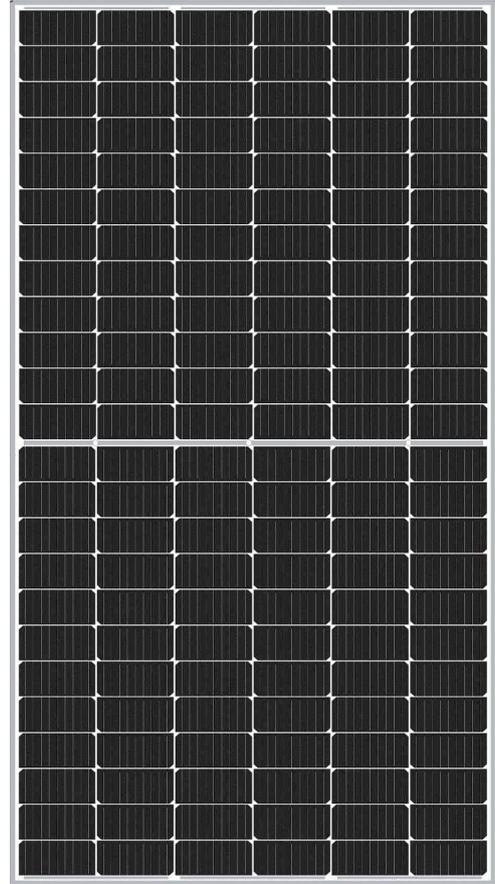
Max efficiency

Monocrystalline module

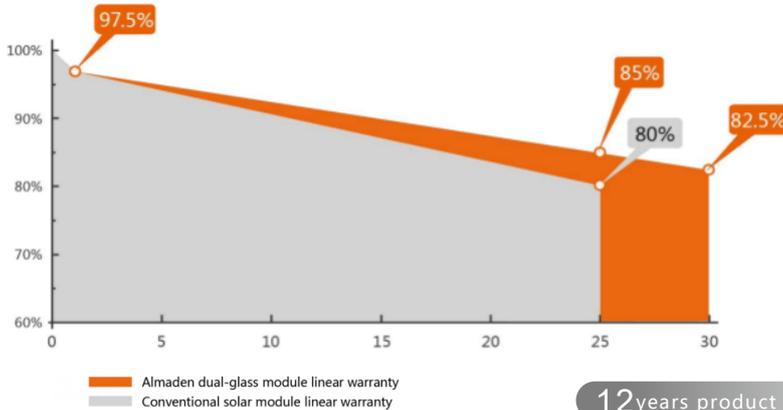
0~ +5W | MBB and Half cell

Power tolerance

Technology



Performance warranty



12years product warranty

30years performance warranty



High efficiency, Module efficiency upto 20.7%



1/2 current, reducing the hot spot temperature



Frame design, easy of transportation and installation



Half Cell, MBB technology, Series-then-parallel cell connection design



Superior low irradiance performance



Excellent temperature coefficient characteristics



Power generated on both sides, up to 30% yield increasing



Highly anti-corrosion, such as ammonia or saline



30 years linear performance warranty ensure higher ROI of the power plant

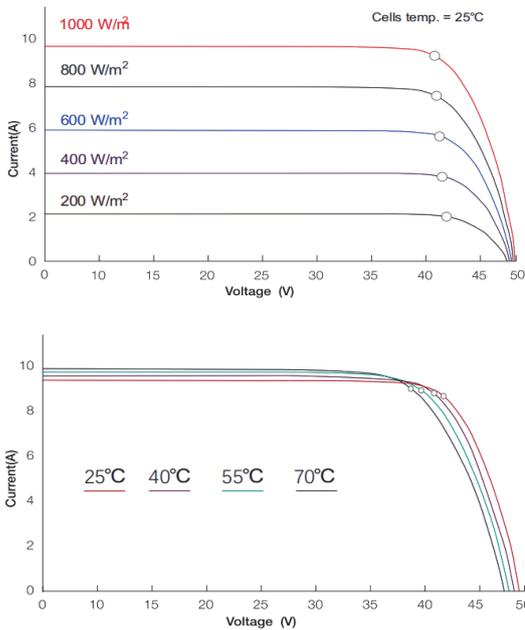


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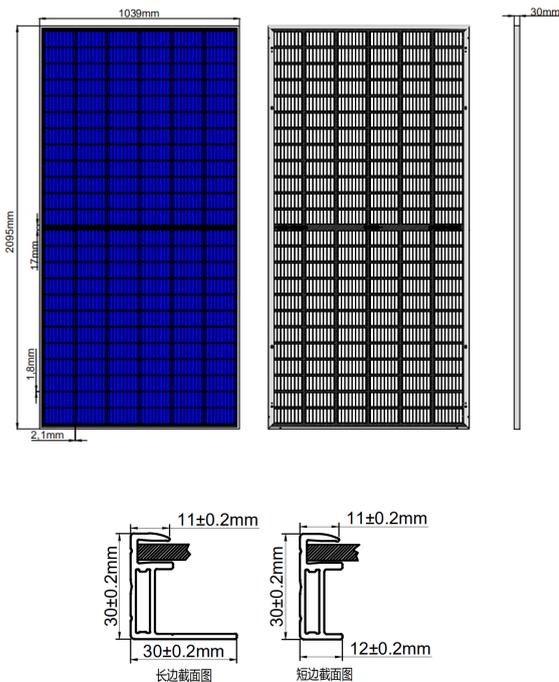
435-450W



I-V Curve (440W)



DIMENSION(mm)



* Declaration:

The technical specifications in this document may be slightly biased and Amaden does not guarantee its complete accuracy. Due to continuous technological innovation and product optimization, Amaden reserves the right to adjust the specification in this document at any time without prior notice. When signing a contract, the client should obtain the latest product datasheet as part of a binding contract.

ELECTRICAL SPECIFICATION (STC)

Module	SHBC144T/W-435	SHBC144T/W-440	SHBC144T/W-445	SHBC144T/W-450
Rated Power (Pmpp) (W)	435	440	445	450
Power Output Tolerance (W)	0~+5			
Rated Current (Imp) (A)	10.68	10.74	10.80	10.87
Rated Voltage (Vmpp) (V)	40.73	40.97	41.20	41.40
Short Circuit Current (Isc) (A)	11.27	11.32	11.37	11.42
Open Circuit Voltage (Voc) (V)	48.46	48.8	49.02	49.23
Efficiency(%)	20.0	20.2	20.4	20.7
Operational Temperature	-40~+85°C			
Maximum Static Load	5400Pa			
Maximum Wind Load	2400Pa			
Maximum System Voltage	1500V			
Maximum Series Fuse Rating	20A			

STC: Irradiance 1000W/m2, Cell Temperature 25°C, Air Mass AM1.5.

ELECTRICAL DATA (NOCT)

Maximum Power (Pmax) (W)	329	333	327	341
Maximum Power Voltage (Vmp) (V)	38.5	38.8	39.0	39.1
Maximum Power Current (Imp) (A)	8.55	8.58	8.63	8.71
Open Circuit Voltage (Voc) (V)	46.2	46.4	46.6	46.7
Short Circuit Current (Isc) (A)	9.05	9.08	9.12	9.15

NOCT: Irradiance at (1+0.1BiF)800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL SPECIFICATION

Cell Type	PERC Mono-crystalline
Cell Orientation	166mm × 83mm,144PCS
Module Dimensions	2095mm × 1039mm × 30mm
Weight	27.6kg
Front Glass	2.0mm tempered AR glass
Encapsulant	EVA/POE
Backsheet	2mm transparent/ceramic coated glass
Junction Box	IP68 (three bypass diodes)
Cable	4mm²
Connector	MC4 / MC4 equivalent

TEMPERATURE COEFFICIENT

NOCT(Nominal Operating Cell Temperature)	45±2°C
Temperature Coefficient of Isc	+0.0268%/K
Temperature Coefficient of Voc (β)	-0.286%/K
Temperature Coefficient of Pmpp (γ)	-0.3904%/K

PACKAGING CONFIGURATION

Modules per box	35 pieces
Modules per 40' container	700 pieces