



JNHM144-450~470

Super high efficiency HJT mono solar module

JNHM144

Bifaciality>85%, effectively improving backside power generation. Providing 10%-35% extra power from backside in different scenarios.

N-type silicon and amorphous silicon combination contributes to excellent temperature coefficient and low light performance, extremely low degradation.

MBB and half-cell design to improve module reliability and reduce loss.

Compatible with 1500V system voltage to reduce cost per watt.

CERTIFICATION



TUV: IEC/EN 61215, IEC/EN 61730

KS: KS C 8561

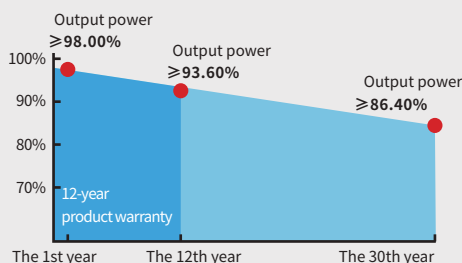
GB/T 19001-2016/ ISO 9001:2015

GB/T 24001-2016/ ISO 14001:2015

GB/T 45001-2020/ ISO 45001:2018

CNAS-CL01: ISO/IEC 17025:2017

QUALITY ASSURANCE



Leading Cell Technology

Optimized MBB design
Cell efficiency >24.6%



Superior quality control

Full automatic production line
MES and ERP digitizing logistics management
100% three times EL and appearance inspection



Excellent power generation performance

0~+5W positive power tolerance
Improved low light irradiance performance and low degradation during morning, night and cloudy days
Save over 34% power loss under high temperature owing to low temperature coefficient



Stable mechanical performance

Passed rigorous hail test
Withstands 5400Pa snow and 2400Pa wind loads



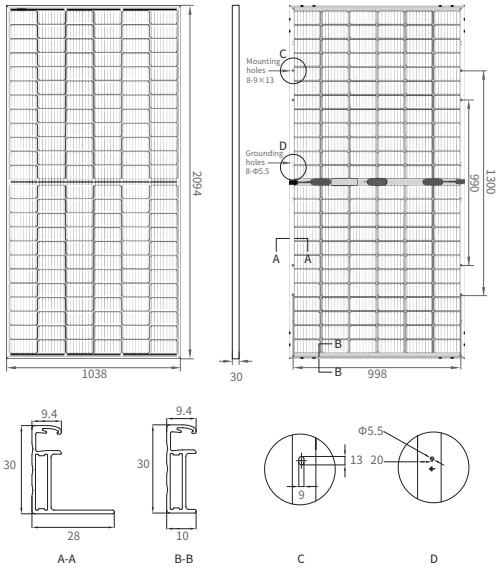
Long weather resistance

LID-free, PID-free
Certified in fireproofing for safety



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MECHANICAL PARAMETERS

Cell (mm)	166*83 HJT
Dimensions (L*W*H) (mm)	2094*1038*30
Weight (kg)	26.3
Cable Cross Section Size (mm ²)	4
No. of Cells & Connections	144(6*24)
No. of Diodes	3

QUALIFICATION	
Temperature Cycling Range (°C)	-40~+85
Max. Series Fuse Rating (A)	20
Max. Wind Load / Max. Snow Load (Pa)	2400 / 5400
Hot Spot Rate	100% Free
Fire Rating	Class C
Junction Box & Connector Protection Grade	IP68
Bifacial Factor(%)	>85

ELECTRICAL PARAMETERS

Module Type (1500V DC)	JNHM144-450	JNHM144-455	JNHM144-460	JNHM144-465	JNHM144-470	
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	450	455	460	465	470
	Output Tolerance (W)	0-+5	0-+5	0-+5	0-+5	0-+5
	Max. Power Voltage (Vmp/V)	44.98	45.14	45.31	45.48	45.65
	Max. Power Current (Imp/A)	10.01	10.08	10.16	10.23	10.30
	Open Circuit Voltage (Voc/V)	53.14	53.21	53.35	53.50	53.57
	Short Circuit Current (Isc/A)	10.71	10.76	10.81	10.86	10.91
	Module Efficiency (%)	20.70	20.93	21.16	21.39	21.62
Backside Power Gain		10%	20%		30%	
With Different Power Generation Gain (Regarding 460W as an example)	Max. Power at STC (Pmpp/W)		506	552	598	
	Max. Power Voltage (Vmp/V)		45.26	45.29	45.27	
	Max. Power Current (Imp/A)		11.18	12.19	13.21	
	Open Circuit Voltage (Voc/V)		53.53	53.52	53.50	
	Short Circuit Current (Isc/A)		11.89	12.97	14.06	
Module Efficiency (%)		23.28	25.40	27.51		

*Measurement tolerance: Pmax: ±3%, Voc: ±3%; Isc: ±5%.

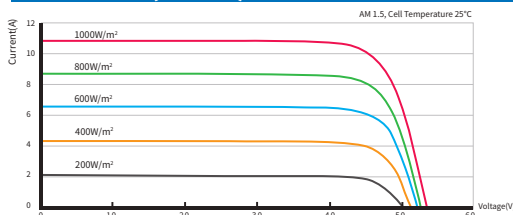
PACKING CONFIGURATION

Pieces Per Pallet	36
Pallets Per Stack	2
Stacks Per Container	11
Pieces Per Container	792

TEMPERATURE COEFFICIENTS

Nominal Module Operating Temperature (NMOT)	43±2°C
Temperature Coefficient Voltage (Voc)	-0.21 %/°C
Temperature Coefficient Current (Isc)	0.015 %/°C
Temperature Coefficient Power (Pm)	-0.26 %/°C

I-V CURVE (460W)



Optional

Connector Type	<input type="checkbox"/> MC4 Compatible	<input type="checkbox"/> MC4
Cable Length	<input type="checkbox"/> 400mm / 200mm	<input type="checkbox"/> Customized
Frame Color	<input type="checkbox"/> Silver	<input type="checkbox"/> Black

Notes:

CAUTION: The electrical parameters in this product datasheet do not refer to only one module. Read safety and installation instructions before using the product. The contents of this specification are for reference only and are subject to change without notice. Jinery reserves the right of final interpretation.
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