

JNBM144-430~450

High efficiency dual-glass bifacial mono solar module

JNBM144

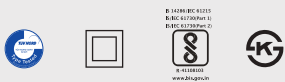
Ga-doped silicon wafer, effectively reduce LID and LeTID. SE technology effectively improves cell conversion efficiency.

MBB and half-cell design to reduce shadow effects, improve module reliability and reduces loss.

The dual-glass structure effectively reduces the risk of cell cracking and improves the weatherability of the module. Al frame improves mechanical performance, making it easier to transport and install.

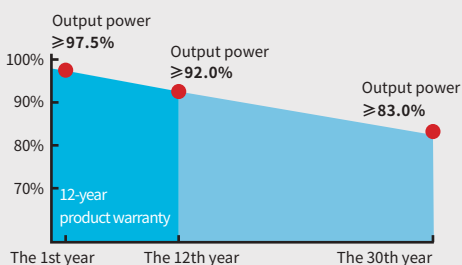
Compatible with 1500V system voltage to reduce construction cost per watt.

CERTIFICATION



TUV: IEC/EN 61215, IEC/EN 61730
 BIS: IS 14286/IEC 61215, IS/IEC 61730
 KS: KS C 8561
 GB/T 19001-2016/ISO 9001:2015
 GB/T 24001-2016/ISO 14001:2015
 OHSAS 18001:2007
 CNAS-CL01: ISO/IEC 17025:2017

QUALITY ASSURANCE



Advanced production process

Optimized MBB design
 Cell efficiency >22.8%



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



Stable mechanical performance

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



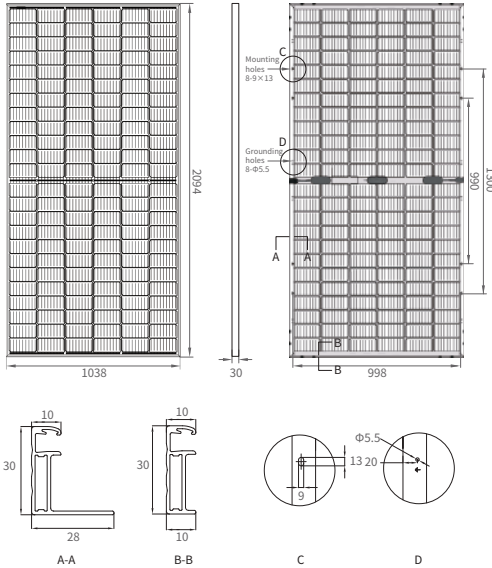
Long weather resistance

Excellent anti-PID performance
 Certified in fireproofing for safety



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MECHANICAL PARAMETERS

Cell (mm)	166*83 Bifacial Mono
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(%)	70±5

ELECTRICAL PARAMETERS

	JNBM144-430	JNBM144-435	JNBM144-440	JNBM144-445	JNBM144-450	
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	430	435	440	445	450
	Output Tolerance (W)	0+5	0+5	0+5	0+5	0+5
	Max. Power Voltage (Vmp/V)	41.19	41.39	41.59	41.79	41.99
	Max. Power Current (Imp/A)	10.44	10.51	10.58	10.65	10.72
	Open Circuit Voltage (Voc/V)	49.60	49.80	50.00	50.20	50.40
	Short Circuit Current (Isc/A)	11.09	11.16	11.23	11.30	11.37
	Module Efficiency (%)	19.8	20.0	20.2	20.5	20.7

BIFACIAL OUTPUT-Backside Power Gain

		JNBM144-430	JNBM144-435	JNBM144-440	JNBM144-445	JNBM144-450
10%	Max. Power (Pmpp/W)	473	478.5	484	489.5	495
	Module Efficiency (%)	21.8	22.0	22.3	22.5	22.8
20%	Max. Power (Pmpp/W)	516	522	528	534	540
	Module Efficiency (%)	23.7	24.0	24.3	24.6	24.8
30%	Max. Power (Pmpp/W)	559	565.5	572	578.5	585
	Module Efficiency (%)	25.7	26.0	26.3	26.6	26.9

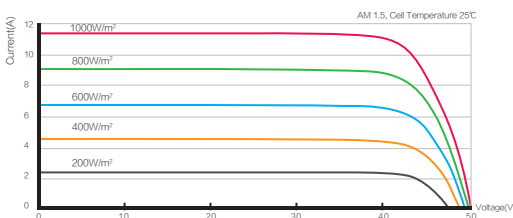
PACKING CONFIGURATION

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)	-0.29 %/°C
Temperature Coefficient Current (Isc)	0.04 %/°C
Temperature Coefficient Power (Pm)	-0.37 %/°C

I-V CURVE(440W)



Optional

Connector Type	<input type="checkbox"/> MC4 Compatible	<input type="checkbox"/> MC4
Cable Length	<input type="checkbox"/> 295mm / 145mm	<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, nor are they promised in the contract. 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. Jinneng reserves the right of final interpretation.
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