

# JNBM144-420~440

High efficiency dual-glass bifacial mono solar module

## Adopting bifacial PERC technology

### JNBM144

Providing 5%-25% extra power from backside in different scenarios.

Applicable to harsh environments including desert, and seaside, etc. with higher reliability and stronger corrosion performance.

MBB and half-cut design to improve module reliability and reduces loss.

Higher power output effectively reduces BOS and LCOE.

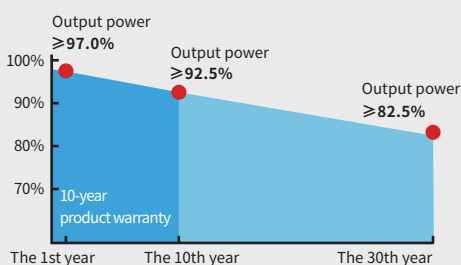
Compatible with 1500V system voltage to reduce construction cost per watt.

### CERTIFICATION



TUV: IEC/EN 61215, IEC/EN 61730  
 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 >22.4%



#### 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



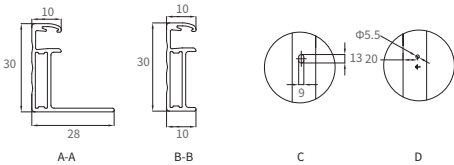
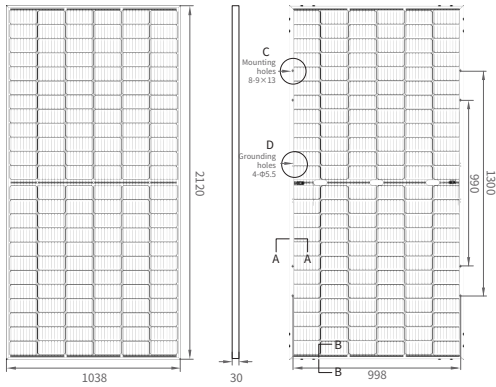
#### Long weather resistance

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)	2120*1038*30
Weight (kg)	27.0
Glass Thickness (mm)	2.0
Cable Cross Section Size (mm <sup>2</sup> )	4
Cable Length (mm)	Positive 295 / Negative 145
No. of Cells & Connections	144(6*24)
No. of Diodes	3

**QUALIFICATION**

Max. System Voltage (V DC)	1500
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
Connector Type	MC4 Compatible
Fire Rating	Class C
Junction Box & Connector Protection Grade	IP68

**TEMPERATURE COEFFICIENTS**

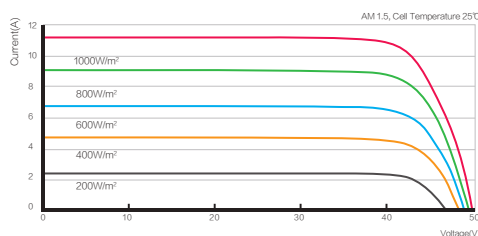
Nominal Module Operating Temperature (NMOT)	45 ± 2 °C
Temperature Coefficient Voltage (Voc)	-0.29%/°C
Temperature Coefficient Current (Isc)	0.04%/°C
Temperature Coefficient Power (Pm)	-0.38%/°C

**ELECTRICAL PARAMETERS**

JNBM144-420 JNBM144-425 JNBM144-430 JNBM144-435 JNBM144-440

	JNBM144-420	JNBM144-425	JNBM144-430	JNBM144-435	JNBM144-440	
<b>STC</b> AM1.5 1000W/m <sup>2</sup> Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	420	425	430	435	440
	Output Tolerance (W)	0-+5	0-+5	0-+5	0-+5	0-+5
	Max. Power Voltage (Vmp/V)	40.78	40.99	41.19	41.39	41.59
	Max. Power Current (Imp/A)	10.30	10.37	10.44	10.51	10.58
	Open Circuit Voltage (Voc/V)	49.20	49.40	49.60	49.80	50.00
	Short Circuit Current (Isc/A)	10.96	11.02	11.09	11.16	11.23
	Module Efficiency (%)	19.1	19.3	19.5	19.8	20.0
<b>BSTC</b> AM1.5 E=(1+0.135BIFI) 1000W/m <sup>2</sup> Cell Temperature 25°C	Max. Power at BSTC (Pmpp/W)	460	465	470	475	480
	Max. Power Voltage (Vmp/V)	40.76	40.96	41.16	41.36	41.56
	Max. Power Current (Imp/A)	11.30	11.36	11.42	11.49	11.56
	Open Circuit Voltage (Voc/V)	49.20	49.42	49.62	49.82	50.02
	Short Circuit Current (Isc/A)	12.06	12.12	12.20	12.28	12.35

**I-V CURVE(430W)**



**PACKING CONFIGURATION**

<b>Container (High cube)</b>	
Pieces Per Pallet	36
Pallets Per Stack	2
Stacks Per Container	11
Pieces Per Container	792

CAUTION: The contents of this specification are measured under standard test conditions and are for reference only and are subject to change without notice. Read safety and installation instructions before using the product.  
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