



## JNHM144-445~465

### Super high efficiency HJT mono solar module

#### JNHM144

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

Excellent temperature coefficient and low light performance, extremely low degradation.

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

44% extra power generation than regular modules.

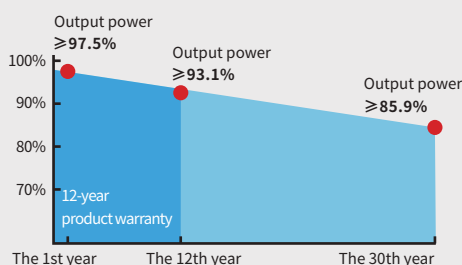
Compatible with 1500V system voltage to reduce construction cost per watt.

#### 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  
OHSAS 18001:2007  
CNAS-CL01: ISO/IEC 17025:2017

#### QUALITY ASSURANCE



#### Leading Cell Technology

Optimized MBB design  
Cell efficiency >24.0%



#### 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



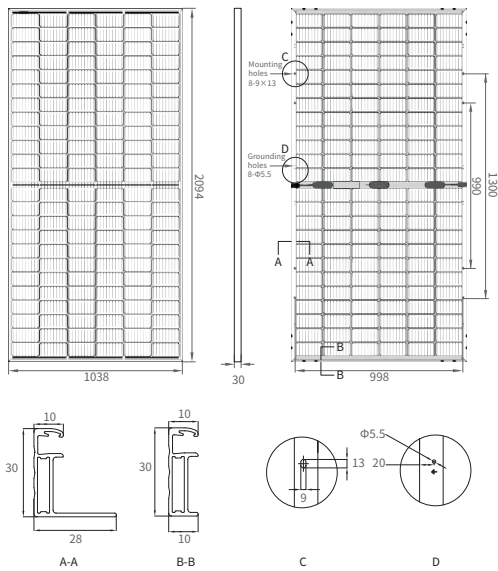
#### Long weather resistance

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



#### JINNENG CLEAN ENERGY TECHNOLOGY LTD JINNENG PHOTOVOLTAIC TECHNOLOGY LTD

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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 <sup>2</sup> )	4
No. of Cells & Connections	144(6*24)
No. of Diodes	3

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

**QUALIFICATION**

**ELECTRICAL PARAMETERS**

JNHM144-445 JNHM144-450 **JNHM144-455** JNHM144-460 JNHM144-465

STC AM1.5 1000W/m <sup>2</sup> Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	445	450	455	460	465
	Output Tolerance (W)	0-+5	0-+5	0-+5	0-+5	0-+5
	Max. Power Voltage (Vmp/V)	44.81	44.98	45.14	45.31	45.48
	Max. Power Current (Imp/A)	9.94	10.01	10.08	10.16	10.23
	Open Circuit Voltage (Voc/V)	53.06	53.14	53.21	53.35	53.50
	Short Circuit Current (Isc/A)	10.66	10.71	10.76	10.81	10.86
	Module Efficiency (%)	20.5	20.7	20.9	21.2	21.4

**BIFACIAL OUTPUT-Backside Power Gain**

		445	450	455	460	465
<b>10%</b>	Max. Power (Pmpp/W)	489.5	495	500.5	506	511.5
	Module Efficiency (%)	22.5	22.8	23.0	23.3	23.5
<b>20%</b>	Max. Power (Pmpp/W)	534	540	546	552	558
	Module Efficiency (%)	24.6	24.8	25.1	25.4	25.7
<b>30%</b>	Max. Power (Pmpp/W)	578.5	585	591.5	598	604.5
	Module Efficiency (%)	26.6	26.9	27.2	27.5	27.8

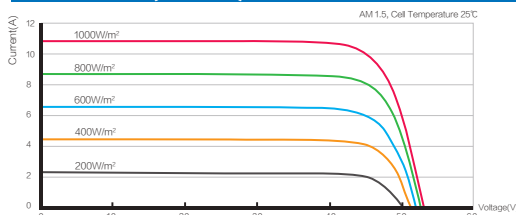
**PACKING CONFIGURATION**

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 (455W)**



**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. Jinergy reserves the right of final interpretation.  
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