

JNMM144-435~455(L)

"L" after the module type indicates that the type is suitable for 1000V DC.

High efficiency mono solar module

JNMM144

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

Optimized anti-reflective film and high-impedance encapsulating material to obtain excellent anti-PID performance.

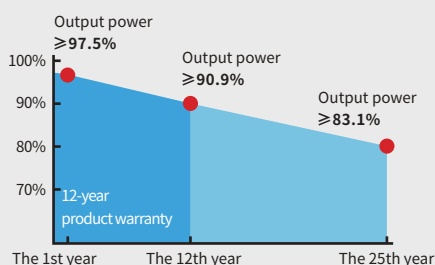
MBB and half-cell design to reduce shadow effects, improve module reliability and reduces loss.

CERTIFICATION



TUV: IEC/EN 61215, IEC/EN 61730
BIS: IS 14286/IEC 61215, IS/IEC 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 >22.8%



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



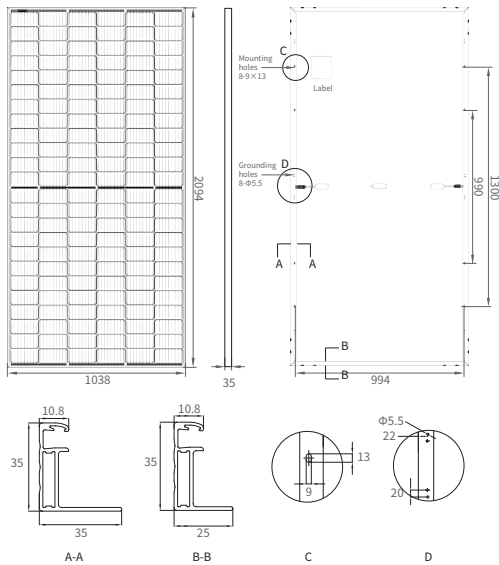
Long weather resistance

Excellent anti-PID performance
Certified in fireproofing for safety



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MECHANICAL PARAMETERS

Cell (mm)	166*83 Mono
Dimensions (L*W*H) (mm)	2094*1038*35
Weight (kg)	23.3
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

ELECTRICAL PARAMETERS

Module Type	(1000V DC)	JNMM144-435L	JNMM144-440L	JNMM144-445L	JNMM144-450L	JNMM144-455L
	(1500V DC)	JNMM144-435	JNMM144-440	JNMM144-445	JNMM144-450	JNMM144-455
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (P _{mp} /W)	435	440	445	450	455
	Output Tolerance (W)	0~+5	0~+5	0~+5	0~+5	0~+5
	Max. Power Voltage (V _{mp} /V)	40.77	40.97	41.16	41.36	41.56
	Max. Power Current (I _{mp} /A)	10.67	10.74	10.82	10.89	10.96
	Open Circuit Voltage (V _{oc} /V)	49.39	49.58	49.78	49.98	50.18
	Short Circuit Current (I _{sc} /A)	11.28	11.35	11.42	11.50	11.58
	Module Efficiency (%)	20.0	20.2	20.5	20.7	20.9
NMOT AM1.5 800W/m ² Ambient Temperature 20°C Wind Speed 1m/s	Max. Power at NMOT (P _{mp} /W)	327.4	331.2	334.9	338.7	342.5
	Max. Power Voltage (V _{mp} /V)	38.36	38.54	38.69	38.88	39.06
	Max. Power Current (I _{mp} /A)	8.54	8.59	8.66	8.71	8.77
	Open Circuit Voltage (V _{oc} /V)	46.63	46.81	47.00	47.18	47.37
	Short Circuit Current (I _{sc} /A)	9.08	9.14	9.19	9.26	9.32

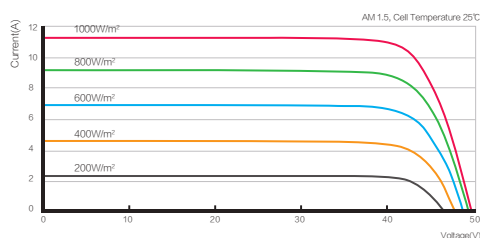
PACKING CONFIGURATION

Pieces Per Pallet	31
Pallets Per Stack	2
Stacks Per Container	11
Pieces Per Container	682

TEMPERATURE COEFFICIENTS

Nominal Module Operating Temperature (NMOT)	43±2°C
Temperature Coefficient Voltage (V _{oc})	-0.29 %/°C
Temperature Coefficient Current (I _{sc})	0.04 %/°C
Temperature Coefficient Power (P _m)	-0.37 %/°C

I-V CURVE(445W)



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
Max. System Voltage	<input type="checkbox"/> 1000V	<input type="checkbox"/> 1500V

Notes: