

JNMM60-290~310

High-efficiency mono solar module

Adopting PERC+ cell technology

JNMM60

Approved by CQC, CGC “Front Runner”.

Leading passivated emitter and rear contact technology in the industry.

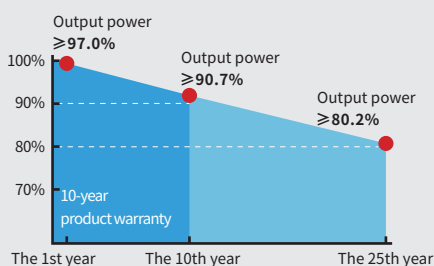
Advanced process to reduce extra degradation of PERC cell.

Higher conversion efficiency to reduce system cost per watt.

CERTIFICATION



QUALITY ASSURANCE



Advanced production process

5 bus-bar design

Average cell efficiency >22.3%



Superior quality control

Full automatic production line

ISO 9001:2015 Quality Management System

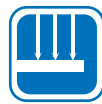
100% three times EL and appearance inspection



Excellent power generation performance

0~+5W positive power tolerance

Improved low light irradiance performance



Stable mechanical performance

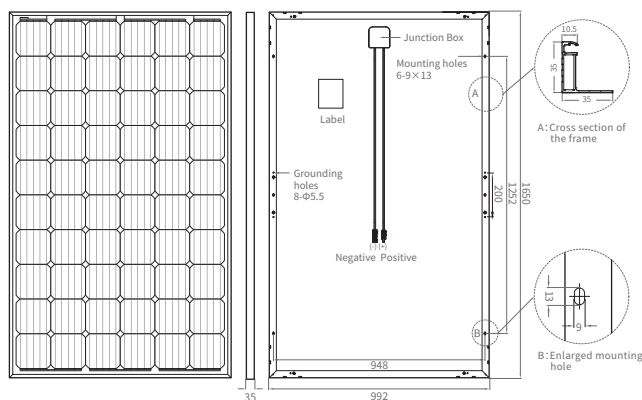
Passed rigorous hail test

Withstands 5400 Pa snow and 2400 Pa wind loads



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MECHANICAL PARAMETERS

| | |
|---|----------------------|
| Cell (mm) | 156.75*156.75 Mono |
| Dimensions (L*W*H) (mm) | 1640/1650*992*35/40 |
| Weight (kg) | 17.9/18.1/ 18.1/18.2 |
| Cable Cross Section Size (mm ²) | 4 |
| Cable Length (mm) | 800/1000 |
| No. of Cells and Connections | 60(6*10) |
| No. of Diodes | 3 |

*Type of Connector:
 PV-JN01/PV-KST4/xy-UR, PV-KBT4/xy-UR/PV-KST4-EVO 2/xy_UR,
 PV-KBT4-EVO 2/xy_UR/05-6/05-8

TEMPERATURE COEFFICIENTS

| | |
|---------------------------------------|-------------|
| Normal Operating Cell Temp (NOCT) | 45±2°C |
| Temperature Coefficient Voltage (Voc) | -0.29% / °C |
| Temperature Coefficient Current (Isc) | 0.04% / °C |
| Temperature Coefficient Power (Pm) | -0.40% / °C |

QUALIFICATION

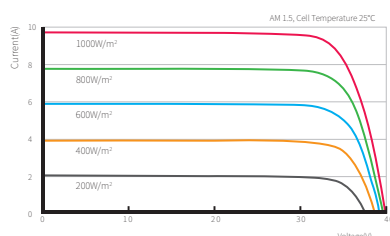
| | |
|------------------------------------|-----------|
| Max.System Voltage (V DC) | 1000 |
| Temperature Cycling Range (°C) | -40~+85 |
| Max.Series Fuse Rating (A) | 15 |
| Max Reverse Current (A) | 15 |
| Max.Wind Load / Max.Snow Load (Pa) | 2400/5400 |
| Hot Spot Rate | 100% Free |
| Fire Rating | Class C |

ELECTRICAL PARAMETERS

| | JNMM60-290 | JNMM60-295 | JNMM60-300 | JNMM60-305 | JNMM60-310 | |
|---|-------------------------------|------------|------------|------------|------------|-------|
| STC AM1.5, 1000W/m ² Cell Temperature 25°C | Max. Power at STC (Pmpp/W) | 290 | 295 | 300 | 305 | 310 |
| | Output Tolerance (W) | 0+5 | 0+5 | 0+5 | 0+5 | 0+5 |
| | Max. Power Voltage (Vmp/V) | 32.03 | 32.33 | 32.62 | 32.92 | 33.16 |
| | Max. Power Current (Imp/A) | 9.06 | 9.13 | 9.20 | 9.27 | 9.35 |
| | Open Circuit Voltage (Voc/V) | 39.42 | 39.58 | 39.75 | 39.92 | 40.09 |
| | Short Circuit Current (Isc/A) | 9.51 | 9.57 | 9.64 | 9.71 | 9.76 |
| | Module Efficiency (%) | 17.7 | 18.0 | 18.3 | 18.6 | 18.9 |
| NOCT AM1.5, 800W/m ² , Ambient Temperature 20°C, Wind Speed 1m/s | Max. Power at NOCT (Pmpp/W) | 215.8 | 219.6 | 223.3 | 227.0 | 230.7 |
| | Max. Power Voltage (Vmp/V) | 29.78 | 30.06 | 30.34 | 30.61 | 30.84 |
| | Max. Power Current (Imp/A) | 7.25 | 7.30 | 7.36 | 7.42 | 7.48 |
| | Open Circuit Voltage (Voc/V) | 36.97 | 37.12 | 37.28 | 37.44 | 37.60 |
| | Short Circuit Current (Isc/A) | 7.67 | 7.72 | 7.78 | 7.83 | 7.87 |

*Power measurement tolerance: ±3%.

I-V CURVE(300W)



PACKING CONFIGURATION

Container (High cube)

| | |
|------------------------|--------------------|
| Pieces Per Pallet | 31/27/ 31/27 |
| Pallets Per Stack | 2 |
| Extra Pieces Per Stack | 4 |
| Stacks Per Container | 14 |
| Pieces Per Container | 924/ 812 /924/ 812 |

Platform Semi-Trailer

| | |
|---------------------|---------------------|
| Pieces Per Pallet | 31/27/31/27 |
| Pallets Per Stack | 2 |
| Stacks Per Platform | 25 |
| Pieces Per Platform | 1550/1350/1550/1350 |