

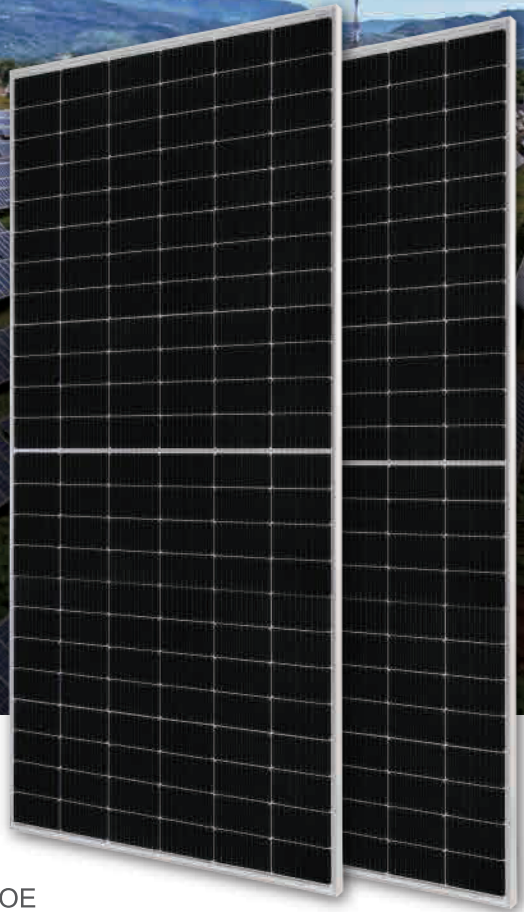
## DEEP BLUE 3.0

**Mono**

**550W MBB Half-cell Module**  
**JAM72S30 525-550/MR/1500V Series**

### Introduction

Assembled with 11BB PERC cells, the half-cell configuration of the modules offers the advantages of higher power output, better temperature-dependent performance, reduced shading effect on the energy generation, lower risk of hot spot, as well as enhanced tolerance for mechanical loading.



Higher output power



Lower LCOE



Less shading and lower resistive loss

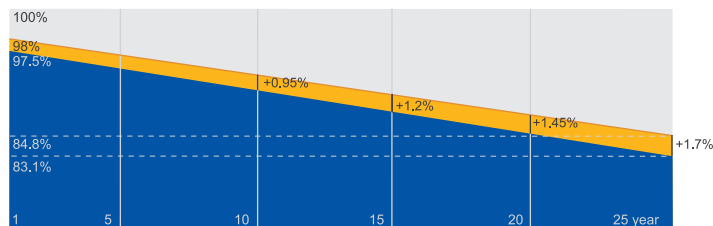


Better mechanical loading tolerance

### Superior Warranty

- 12-year product warranty
- 25-year linear power output warranty

**0.55% Annual Degradation Over 25 years**



■ New linear power warranty ■ Standard module linear power warranty

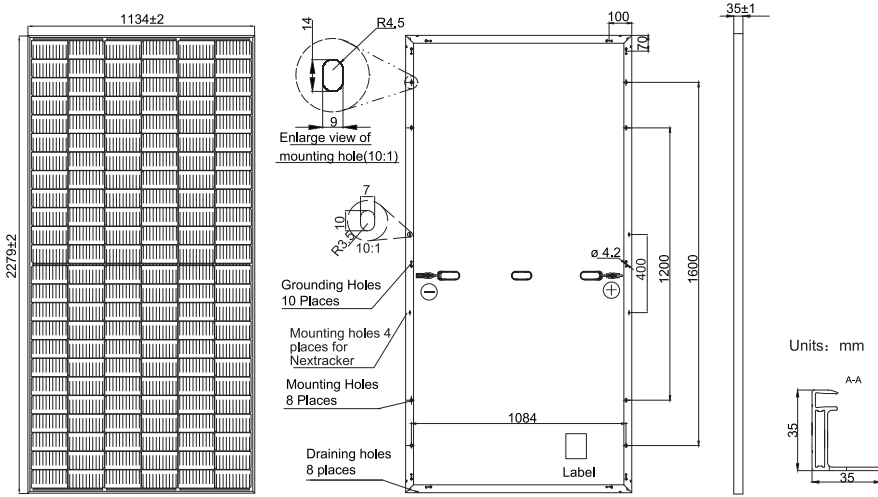
### Comprehensive Certificates

- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems



**MECHANICAL DIAGRAMS**

**SPECIFICATIONS**



|                                       |  |
|---------------------------------------|--|
| Cell                                  | Mono   |
| Weight                                | 28.6kg±3%  |
| Dimensions                            | 2279±2mm×1134±2mm×35±1mm                                       |
| Cable Cross Section Size              | 4mm <sup>2</sup> (IEC) , 12 AWG(UL)                            |
| No. of cells                          | 144(6×24)  |
| Junction Box                          | IP68, 3 diodes   |
| Connector                             | Genuine MC4-EVO2<br>QC 4.10-35/45                              |
| Cable Length<br>(Including Connector) | Portrait: 300mm(+)/400mm(-);<br>Landscape: 1300mm(+)/1300mm(-) |
| Country of Manufacturer               | China/Vietnam  |

Remark: customized frame color and cable length available upon request

**ELECTRICAL PARAMETERS AT STC**

| TYPE   | JAM72S30<br>-525/MR/1500V | JAM72S30<br>-530/MR/1500V | JAM72S30<br>-535/MR/1500V | JAM72S30<br>-540/MR/1500V | JAM72S30<br>-545/MR/1500V | JAM72S30<br>-550/MR/1500V |
|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Rated Maximum Power(Pmax) [W]                      | 525                       | 530                       | 535                       | 540                       | 545                       | 550                       |
| Open Circuit Voltage(Voc) [V]                      | 49.15                     | 49.30                     | 49.45                     | 49.60                     | 49.75                     | 49.90                     |
| Maximum Power Voltage(Vmp) [V]                     | 41.15                     | 41.31                     | 41.47                     | 41.64                     | 41.80                     | 41.96                     |
| Short Circuit Current(Isc) [A]                     | 13.65                     | 13.72                     | 13.79                     | 13.86                     | 13.93                     | 14.00                     |
| Maximum Power Current(Imp) [A]                     | 12.76                     | 12.83                     | 12.90                     | 12.97                     | 13.04                     | 13.11                     |
| Module Efficiency [%]                              | 20.3                      | 20.5                      | 20.7                      | 20.9                      | 21.1                      | 21.3                      |
| Power Tolerance                                    | 0~+5W                     |                           |                           |                           |                           |                           |
| Temperature Coefficient of Isc(α <sub>Isc</sub> )  | +0.045%/°C                |                           |                           |                           |                           |                           |
| Temperature Coefficient of Voc(β <sub>Voc</sub> )  | -0.275%/°C                |                           |                           |                           |                           |                           |
| Temperature Coefficient of Pmax(γ <sub>Pmp</sub> ) | -0.350%/°C                |                           |                           |                           |                           |                           |

STC Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, AM1.5G

Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.  
Measurement tolerance at STC: Pmax ±3%, Voc ±2% and Isc ±4%.

**ELECTRICAL PARAMETERS AT NOCT**

| TYPE                           | JAM72S30-525<br>/MR/1500V | JAM72S30-530<br>/MR/1500V | JAM72S30-535<br>/MR/1500V | JAM72S30-540<br>/MR/1500V | JAM72S30-545<br>/MR/1500V | JAM72S30-550<br>/MR/1500V |
|--------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Rated Max Power(Pmax) [W]      | 397                       | 401                       | 405                       | 408                       | 412                       | 416                       |
| Open Circuit Voltage(Voc) [V]  | 46.05                     | 46.18                     | 46.31                     | 46.43                     | 46.55                     | 46.68                     |
| Max Power Voltage(Vmp) [V]     | 38.36                     | 38.57                     | 38.78                     | 38.99                     | 39.20                     | 39.43                     |
| Short Circuit Current(Isc) [A] | 10.97                     | 11.01                     | 11.05                     | 11.09                     | 11.13                     | 11.17                     |
| Max Power Current(Imp) [A]     | 10.35                     | 10.39                     | 10.43                     | 10.47                     | 10.51                     | 10.55                     |

NOCT Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1m/s, AM1.5G

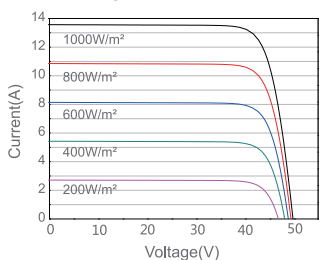
\*For NexTracker installations, Maximum Static Load, Front is 2400Pa while Maximum Static Load, Back is 2400Pa.

**OPERATING CONDITIONS**

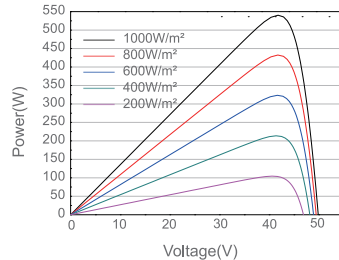
|                             |                |
|-----------------------------|----------------|
| Maximum System Voltage      | 1500V DC (IEC) |
| Operating Temperature       | -40°C ~ +85°C  |
| Maximum Series Fuse Rating  | 25A            |
| Maximum Static Load, Front* | 3600Pa, 1.5    |
| Maximum Static Load, Back*  | 1600Pa, 1.5    |
| NOCT                        | 45±2°C         |
| Safety Class                | Class II       |
| Fire Performance            | UL Type 1      |

**CHARACTERISTICS**

Current-Voltage Curve JAM72S30-540/MR/1500V



Power-Voltage Curve JAM72S30-540/MR/1500V



Current-Voltage Curve JAM72S30-540/MR/1500V

