

## DEEP BLUE 3.0

**Mono**

550W MBB Bifacial Mono PERC  
Half-cell Double Glass Module  
JAM72D30 525-550/MB/1500V Series

### Introduction

Assembled with 11BB bifacial PERCUM cells and half-cell configuration, these double glass modules have the capability of converting the incident light from the rear side together with the front side into electricity, providing higher output power, lower temperature coefficient, less shading loss, as well as enhanced tolerance for mechanical loading.



Higher output power



More reliable, more stable power generation



Less shading effect

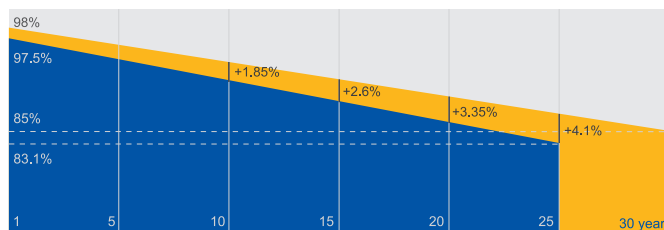


Lower temperature coefficient

### Superior Warranty

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

0.45% Annual Degradation  
Over 30 years



■ Bifacial double glass module linear power warranty

■ Standard module linear power warranty

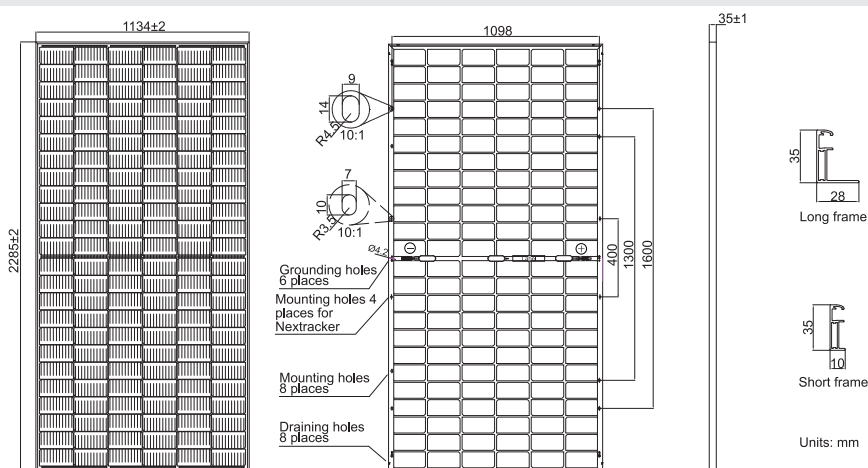
### Comprehensive Certificates

- 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                                | 31.6kg±3%                                                    |
| Dimensions                            | 2285±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(-) |
| Front Glass/Back Glass                | 2.0mm/2.0mm                                                  |
| Country of Manufacturer               | China/Vietnam                                                |

Remark: customized frame color and cable length available upon request

## ELECTRICAL PARAMETERS AT STC

| TYPE                                                            | JAM72D30<br>-525/MB/1500V                                       | JAM72D30<br>-530/MB/1500V | JAM72D30<br>-535/MB/1500V | JAM72D30<br>-540/MB/1500V | JAM72D30<br>-545/MB/1500V | JAM72D30<br>-550/MB/1500V |
|-----------------------------------------------------------------|-----------------------------------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Rated Maximum Power(P <sub>max</sub> ) [W]                      | 525                                                             | 530                       | 535                       | 540                       | 545                       | 550                       |
| Open Circuit Voltage(V <sub>oc</sub> ) [V]                      | 49.15                                                           | 49.30                     | 49.45                     | 49.60                     | 49.75                     | 49.90                     |
| Maximum Power Voltage(V <sub>mp</sub> ) [V]                     | 41.15                                                           | 41.31                     | 41.47                     | 41.64                     | 41.80                     | 41.96                     |
| Short Circuit Current(I <sub>sc</sub> ) [A]                     | 13.65                                                           | 13.72                     | 13.79                     | 13.86                     | 13.93                     | 14.00                     |
| Maximum Power Current(I <sub>mp</sub> ) [A]                     | 12.76                                                           | 12.83                     | 12.90                     | 12.97                     | 13.04                     | 13.11                     |
| Module Efficiency [%]                                           | 20.3                                                            | 20.5                      | 20.6                      | 20.8                      | 21.0                      | 21.2                      |
| Power Tolerance                                                 | 0~+5W                                                           |                           |                           |                           |                           |                           |
| Temperature Coefficient of I <sub>sc</sub> (α <sub>Isc</sub> )  | +0.045%/°C                                                      |                           |                           |                           |                           |                           |
| Temperature Coefficient of V <sub>oc</sub> (β <sub>Voc</sub> )  | -0.275%/°C                                                      |                           |                           |                           |                           |                           |
| Temperature Coefficient of P <sub>max</sub> (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: P<sub>max</sub> ±3 %, V<sub>oc</sub> ±3% and I<sub>sc</sub> ±4%.

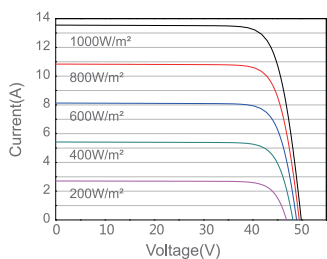
## ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

## OPERATING CONDITIONS

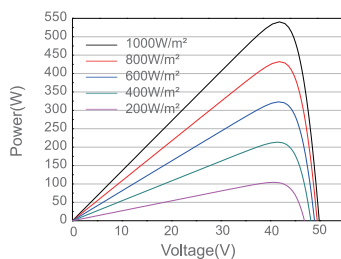
| TYPE                                                                                                           | JAM72D30<br>-525/MB | JAM72D30<br>-530/MB | JAM72D30<br>-535/MB | JAM72D30<br>-540/MB | JAM72D30<br>-545/MB | JAM72D30<br>-550/MB | Maximum System Voltage                                  | 1500V DC                   |
|----------------------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------------------------------------------|----------------------------|
| Rated Max Power(Pmax) [W]                                                                                      | 562                 | 567                 | 572                 | 578                 | 583                 | 589                 | Operating Temperature                                   | -40°C~+85°C                |
| Open Circuit Voltage(Voc) [V]                                                                                  | 49.54               | 49.67               | 49.80               | 49.93               | 50.03               | 50.21               | Maximum Series Fuse Rating                              | 30A                        |
| Max Power Voltage(Vmp) [V]                                                                                     | 41.14               | 41.31               | 41.47               | 41.65               | 41.78               | 41.95               | Maximum Static Load,Front*<br>Maximum Static Load,Back* | 3600Pa, 1.5<br>1600Pa, 1.5 |
| Short Circuit Current(Isc) [A]                                                                                 | 14.61               | 14.68               | 14.76               | 14.83               | 14.91               | 14.98               | NOCT                                                    | 45±2°C                     |
| Max Power Current(Imp) [A]                                                                                     | 13.65               | 13.73               | 13.80               | 13.88               | 13.95               | 14.03               | Bifaciality**                                           | 70%±10%                    |
| Irradiation Ratio(rear/front)                                                                                  |                     |                     |                     |                     |                     |                     | 10%                                                     |                            |
| *For NexTracker installations, Maximum Static Load, Front is 2400Pa while Maximum Static Load, Back is 2400Pa. |                     |                     |                     |                     |                     |                     | Fire Performance                                        | UL Type 29                 |

## CHARACTERISTICS

Current-Voltage Curve JAM72D30-540/MB/1500V



Power-Voltage Curve JAM72D30-540/MB/1500V



Current-Voltage Curve JAM72D30-540/MB/1500V

