

DEEP BLUE 3.0

Mono

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

Introduction

Assembled with 11BB bifacial PERCIUM 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

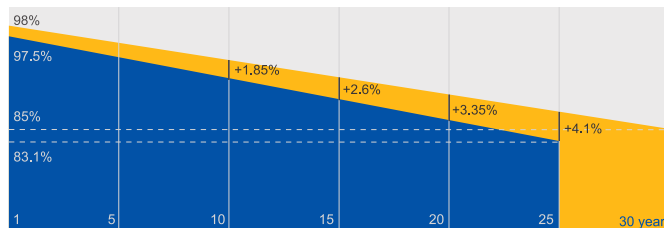


Lower temperature coefficient

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

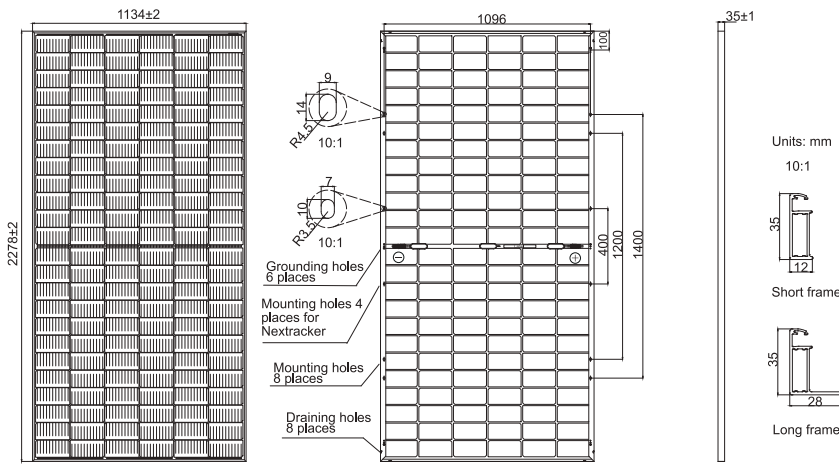
Comprehensive Certificates

- IEC 61215, IEC 61730, UL 61215, UL 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval



MECHANICAL DIAGRAMS

SPECIFICATIONS



| | |
|------------------------------------|--|
| Cell | Mono |
| Weight | 31.8kg±3% |
| Dimensions | 2278±2mm×1134±2mm×35±1mm |
| Cable Cross Section Size | 4mm ² (IEC), 12 AWG(UL) |
| No. of cells | 144(6×24) |
| Junction Box | IP68, 3 diodes |
| Connector | MC4-EVO2 |
| Cable Length (Including Connector) | Portrait:300mm(+)/400mm(-); Landscape:1300mm(+)/1300mm(-) |
| Front Glass/Back Glass | 2.0mm/2.0mm |
| Packaging Configuration | 31 pcs/Pallet 589pcs/40HQ Container |

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC

| TYPE | JAM72D30 -525/MB | JAM72D30 -530/MB | JAM72D30 -535/MB | JAM72D30 -540/MB | JAM72D30 -545/MB | JAM72D30 -550/MB |
|---|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| 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_{Isc}) | +0.045%/°C | | | | | |
| Temperature Coefficient of Voc(β_{Voc}) | -0.275%/°C | | | | | |
| Temperature Coefficient of Pmax(γ_{Pmp}) | -0.350%/°C | | | | | |
| STC | Irradiance 1000W/m ² , 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.

ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

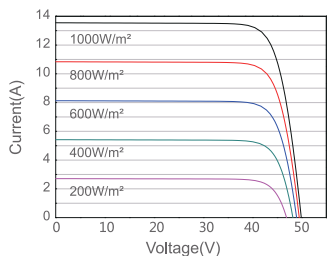
OPERATING CONDITIONS

| TYPE | JAM72D30 -525/MB | JAM72D30 -530/MB | JAM72D30 -535/MB | JAM72D30 -540/MB | JAM72D30 -545/MB | JAM72D30 -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* Maximum Static Load,Back* | 5400Pa(112 lb/ft ²) 2400Pa(50 lb/ft ²) |
| 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% | | | | | | Fire Performance | UL Type 29 |

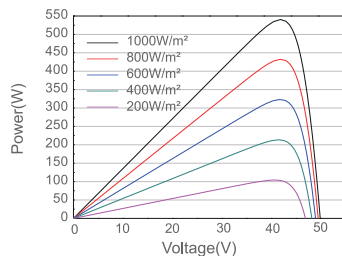
*For NexTracker installations, Maximum Static Load, Front is 2400Pa while Maximum Static Load, Back is 2400Pa.
**Bifaciality=Pmax,rear/Rated Pmax,front

CHARACTERISTICS

Current-Voltage Curve JAM72D30-540/MB



Power-Voltage Curve JAM72D30-540/MB



Current-Voltage Curve JAM72D30-540/MB

