

DEEP BLUE 3.0

Mono

550W MBB Half-cell Module

JAM72S30 525-550/MR 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

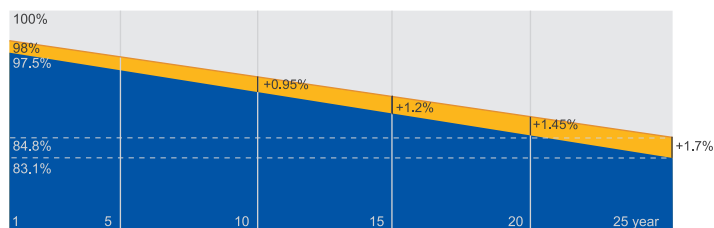


Better mechanical loading tolerance

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

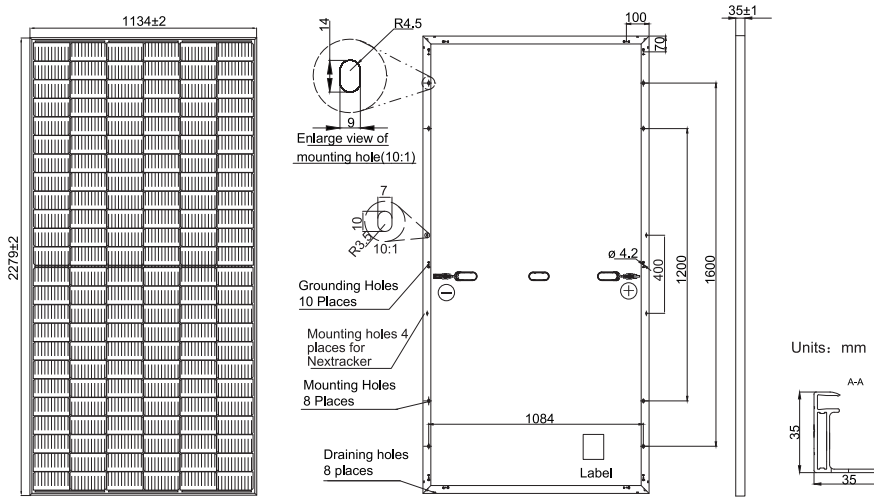
Comprehensive Certificates

- IEC 61215, IEC 61730, 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 | 28.6kg±3% |
| Dimensions | 2279±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 | QC 4.10(1000V) QC 4.10-35(1500V) |
| Cable Length (Including Connector) | Portrait: 300mm(+)/400mm(-); Landscape: 1300mm(+)/1300mm(-) |
| Packaging Configuration | 31pcs/Pallet, 620pcs/40ft Container |

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC

| TYPE | JAM72S30 -525/MR | JAM72S30 -530/MR | JAM72S30 -535/MR | JAM72S30 -540/MR | JAM72S30 -545/MR | JAM72S30 -550/MR |
|---------------------------------------------------|-----------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 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.

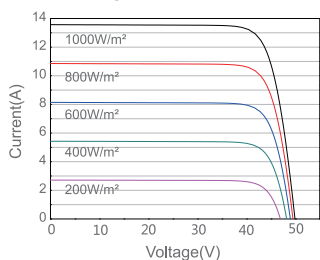
ELECTRICAL PARAMETERS AT NOCT

OPERATING CONDITIONS

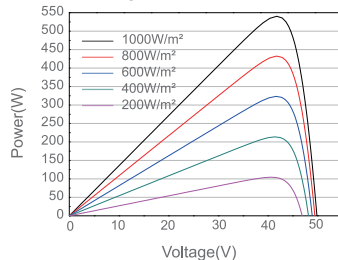
| TYPE | JAM72S30 -525/MR | JAM72S30 -530/MR | JAM72S30 -535/MR | JAM72S30 -540/MR | JAM72S30 -545/MR | JAM72S30 -550/MR | | |
|--------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------------------------------------------|-----------------------------------------------------------------|
| Rated Max Power(Pmax) [W] | 397 | 401 | 405 | 408 | 412 | 416 | Maximum System Voltage | 1000V/1500V DC |
| Open Circuit Voltage(Voc) [V] | 46.05 | 46.18 | 46.31 | 46.43 | 46.55 | 46.68 | Operating Temperature | -40°C~+85°C |
| Max Power Voltage(Vmp) [V] | 38.36 | 38.57 | 38.78 | 38.99 | 39.20 | 39.43 | Maximum Series Fuse Rating | 25A |
| Short Circuit Current(Isc) [A] | 10.97 | 11.01 | 11.05 | 11.09 | 11.13 | 11.17 | Maximum Static Load,Front* Maximum Static Load,Back* | 5400Pa(112lb/ft ²) 2400Pa(50lb/ft ²) |
| Max Power Current(Imp) [A] | 10.35 | 10.39 | 10.43 | 10.47 | 10.51 | 10.55 | NOCT | 45±2°C |
| NOCT | Irradiance 800W/m ² , ambient temperature 20°C,wind speed 1m/s, AM1.5G | | | | | | Safety Class | Class II |
| | *For NexTracker installations, Maximum Static Load, Front is 2400Pa while Maximum Static Load, Back is 2400Pa. | | | | | | Fire Performance | UL Type 1 |

CHARACTERISTICS

Current-Voltage Curve JAM72S30-540/MR



Power-Voltage Curve JAM72S30-540/MR



Current-Voltage Curve JAM72S30-540/MR

