

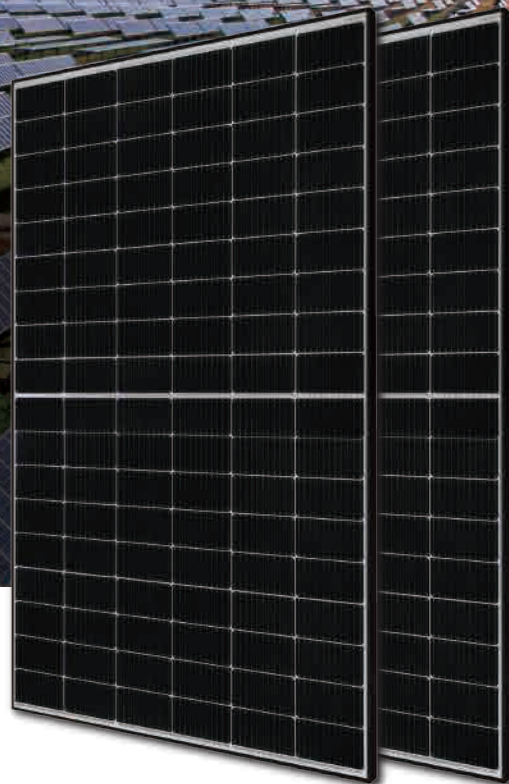
DEEP BLUE 3.0

Mono

415W MBB Half-cell Module
JAM54S30 390-415/MR/1000V 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

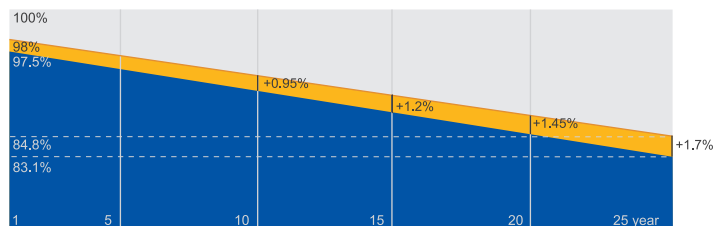


Better mechanical loading tolerance

Superior Warranty

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

0.55% Annual Degradation Over 25 years



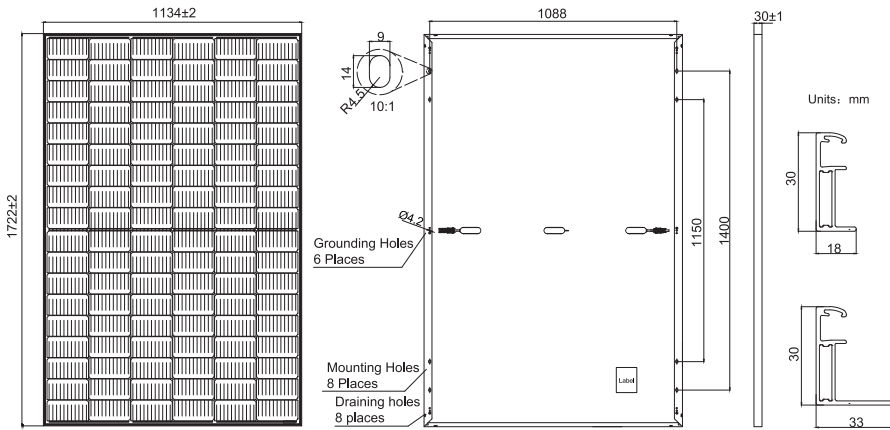
■ New linear power warranty ■ Standard module linear power warranty

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



Remark: customized frame color and cable length available upon request

SPECIFICATIONS

| | |
|---------------------------------------|--|
| Cell | Mono |
| Weight | 21.5kg±3% |
| Dimensions | 1722±2mm×1134±2mm×30±1mm |
| Cable Cross Section Size | 4mm ² (IEC) , 12 AWG(UL) |
| No. of cells | 108(6x18) |
| Junction Box | IP68, 3 diodes |
| Connector | Genuine MC4 QC4.10 |
| Cable Length (Including Connector) | Portrait: 300mm(+)/400mm(-); Landscape: 1200mm(+)/1200mm(-) |
| Country of Manufacturer | China/Vietnam |

ELECTRICAL PARAMETERS AT STC

| TYPE | JAM54S30 -390/MR/1000V | JAM54S30 -395/MR/1000V | JAM54S30 -400/MR/1000V | JAM54S30 -405/MR/1000V | JAM54S30 -410/MR/1000V | JAM54S30 -415/MR/1000V |
|---|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Rated Maximum Power(Pmax) [W] | 390 | 395 | 400 | 405 | 410 | 415 |
| Open Circuit Voltage(Voc) [V] | 36.85 | 36.98 | 37.07 | 37.23 | 37.32 | 37.45 |
| Maximum Power Voltage(Vmp) [V] | 30.64 | 30.84 | 31.01 | 31.21 | 31.45 | 31.61 |
| Short Circuit Current(Isc) [A] | 13.61 | 13.70 | 13.79 | 13.87 | 13.95 | 14.02 |
| Maximum Power Current(Imp) [A] | 12.73 | 12.81 | 12.90 | 12.98 | 13.04 | 13.13 |
| Module Efficiency [%] | 20.0 | 20.2 | 20.5 | 20.7 | 21.0 | 21.3 |
| 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/m², 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 ±3% and Isc ±4%.

ELECTRICAL PARAMETERS AT NOCT

| TYPE | JAM54S30 -390/MR/1000V | JAM54S30 -395/MR/1000V | JAM54S30 -400/MR/1000V | JAM54S30 -405/MR/1000V | JAM54S30 -410/MR/1000V | JAM54S30 -415/MR/1000V |
|--------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Rated Max Power(Pmax) [W] | 294 | 298 | 302 | 306 | 310 | 314 |
| Open Circuit Voltage(Voc) [V] | 34.62 | 34.75 | 34.88 | 35.12 | 35.23 | 35.37 |
| Max Power Voltage(Vmp) [V] | 28.87 | 29.08 | 29.26 | 29.47 | 29.72 | 29.89 |
| Short Circuit Current(Isc) [A] | 10.89 | 10.96 | 11.03 | 11.10 | 11.16 | 11.22 |
| Max Power Current(Imp) [A] | 10.18 | 10.25 | 10.32 | 10.38 | 10.43 | 10.50 |

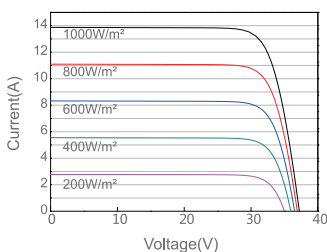
NOCT Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s, AM1.5G

OPERATING CONDITIONS

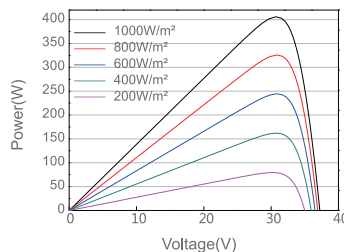
| | |
|-----------------------------|---------------|
| Maximum System Voltage | 1000V DC(IEC) |
| Operating Temperature | -40 C ~+85 C |
| Maximum Series Fuse Rating | 25A |
| Maximum Static Load, Front* | 3600Pa, 1.5 |
| Maximum Static Load, Back* | 1600Pa, 1.5 |
| NOCT | 45±2 C |
| Safety Class | Class II |
| Fire Performance | UL Type 1 |

CHARACTERISTICS

Current-Voltage Curve JAM54S30-405/MR/1000V



Power-Voltage Curve JAM54S30-405/MR/1000V



Current-Voltage Curve JAM54S30-405/MR/1000V

