Harvest the Sunshine

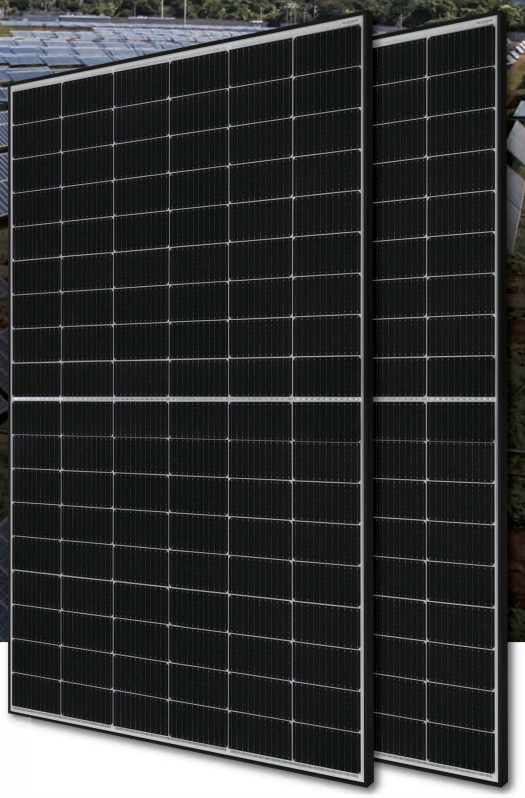
DEEP BLUE 3.0 Light

Mono

415W MBB Half-cell Module
JAM54S30 390-415/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.

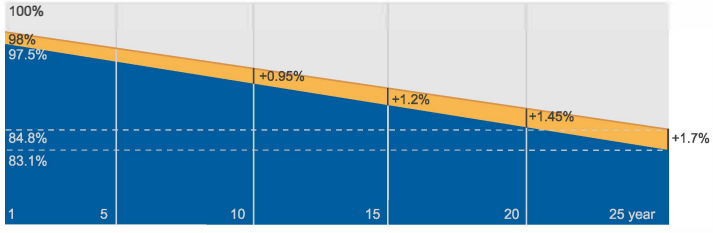


- Higher output power
- Lower LCOE
- Less shading and lower resistive loss
- Better mechanical loading tolerance

Superior Warranty

- 25-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

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Specifications subject to technical changes and tests.
JA Solar reserves the right of final interpretation.
Shanghai JA Solar Technology Co., Ltd.

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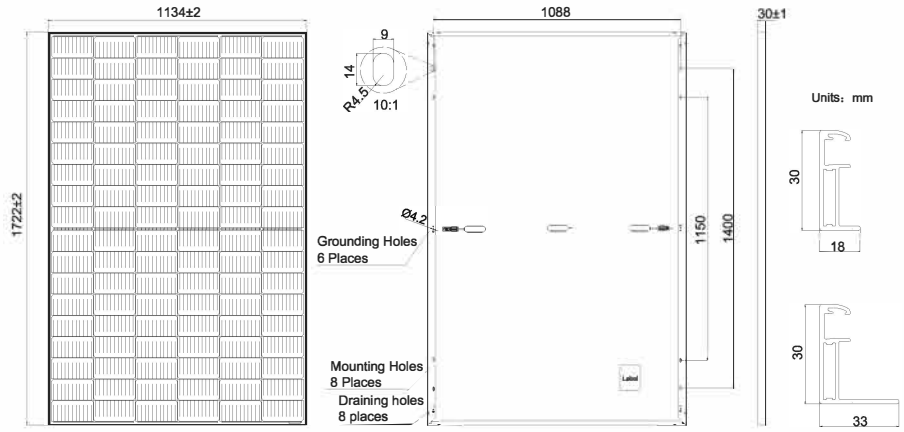
JAM54S30 390-415/MR/1500V Series

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	4mm² (IEC), 12 AWG(UL)
No. of cells	108(6x18)
Junction Box	IP68, 3 diodes
Connector	Stäubli 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/1500V	JAM54S30 -395/MR/1500V	JAM54S30 -400/MR/1500V	JAM54S30 -405/MR/1500V	JAM54S30 -410/MR/1500V	JAM54S30 -415/MR/1500V
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%℃					
Temperature Coefficient of Voc(β_Voc)	-0.275%/℃					
Temperature Coefficient of Pmax(γ_Pmp)	-0.350%/℃					
STC	Irradiance 1000W/m², cell temperature 25℃, 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

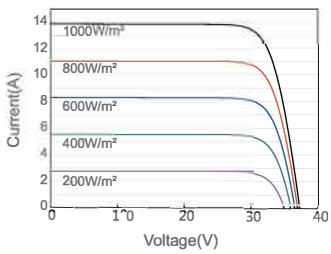
TYPE	JAM54S30 -390/MR/1500V	JAM54S30 -395/MR/1500V	JAM54S30 -400/MR/1500V	JAM54S30 -405/MR/1500V	JAM54S30 -410/MR/1500V	JAM54S30 -415/MR/1500V
Rated Max Power(Pmax) [W]	294	298	302	306	310	314
Open Circuit Voltage(Voc) [V]	34.62	34.75	34.88	35.12	35.23	35.37
Max Power Voltage(Vmp) [V]	28.87	29.08	29.26	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

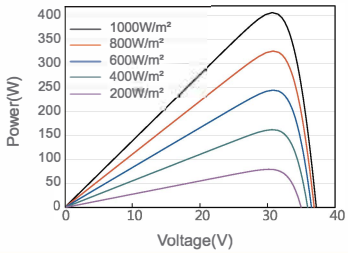
Maximum System Voltage	1500V DC(IEC)
Operating Temperature	-40℃~+85℃
Maximum Series Fuse Rating	25A
Maximum Static Load,Front* Maximum Static Load,Back*	3600Pa, 1.5 1600Pa, 1.5
NOCT	45±2℃
Safety Class	Class Ⅱ
Fire Performance	UL Type 1

CHARACTERISTICS

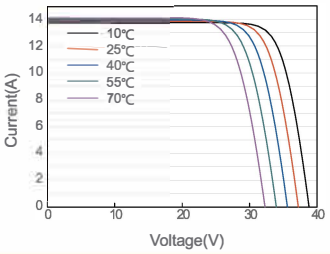
Current-Voltage Curve JAM54S30-405/MR/1500V



Power-Voltage Curve JAM54S30-405/MR/1500V



Current-Voltage Curve JAM54S30-405/MR/1500V



Premium Cells, Premium Modules

Version No. : AU_EN_20220223A

*25 years product warranty is only valid for this type of modules installed in residential rooftop PV systems in Australia.