

# Harvest the Sunshine

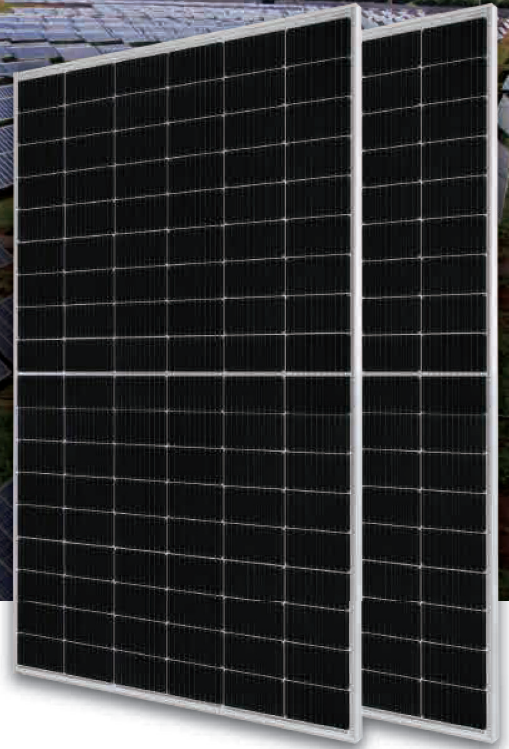
## DEEP BLUE 3.0

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

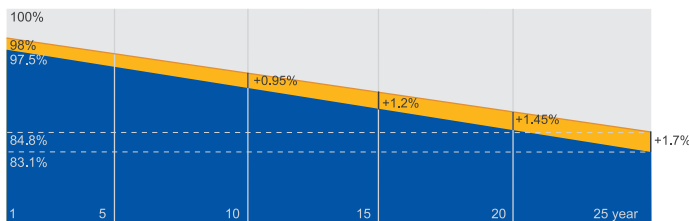


Better mechanical loading tolerance

### 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



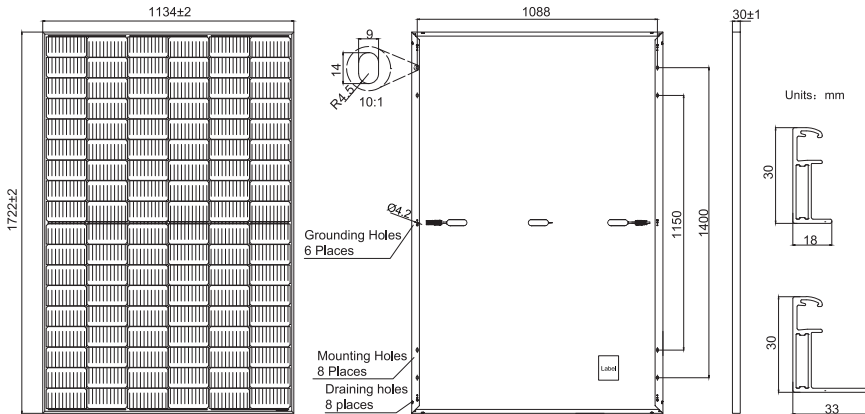
# JA SOLAR

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Specifications subject to technical changes and tests.  
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Shanghai JA Solar Technology Co., Ltd.



**MECHANICAL DIAGRAMS**



**SPECIFICATIONS**

Cell	Mono
Weight	19.5kg or 21.5kg
Dimensions	1722±2mm×1134±2mm×30±1mm
Cable Cross Section Size	4mm <sup>2</sup> (IEC) , 12 AWG(UL)
No. of cells	108(6x18)
Junction Box	IP68, 3 diodes
Connector	Stäubli MC4 QC Solar QC 4.10
Cable Length (Including Connector)	Portrait: 300mm(+)/400mm(-); Landscape: 1200mm(+)/1200mm(-)
Country of Manufacturer	China/Vietnam
Front Glass	2.8mm or 3.2mm

Remark: customized frame color and cable length available upon request

**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
Power Tolerance				0~+5W		
Temperature Coefficient of Isc( $\alpha_{Isc}$ )				+0.045%/°C		
Temperature Coefficient of Voc( $\beta_{Voc}$ )				-0.275%/°C		
Temperature Coefficient of Pmax( $\gamma_{Pmp}$ )				-0.350%/°C		
STC	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, AM1.5G					

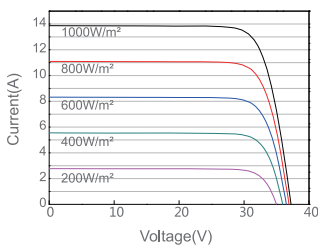
Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types. Measurement tolerance at STC: Pmax ±3%, Voc ±3% and Isc ±4%.

**ELECTRICAL PARAMETERS AT NOCT**

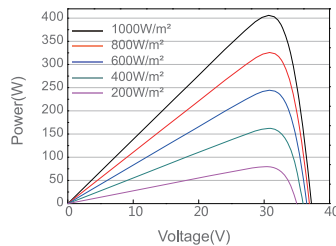
TYPE	JAM54S30 -390/MR/1000V	JAM54S30 -395/MR/1000V	JAM54S30 -400/MR/1000V	JAM54S30 -405/MR/1000V	JAM54S30 -410/MR/1000V	JAM54S30 -415/MR/1000V	OPERATING CONDITIONS	
Rated Max Power(Pmax) [W]	294	298	302	306	310	314	Maximum System Voltage	1000V DC(IEC)
Open Circuit Voltage(Voc) [V]	34.62	34.75	34.88	35.12	35.23	35.37	Operating Temperature	-40°C ~ +85°C
Max Power Voltage(Vmp) [V]	28.87	29.08	29.26	29.47	29.72	29.89	Maximum Series Fuse Rating	25A
Short Circuit Current(Isc) [A]	10.89	10.96	11.03	11.10	11.16	11.22	Maximum Static Load, Front*	3600Pa, 1.5
Max Power Current(Imp) [A]	10.18	10.25	10.32	10.38	10.43	10.50	Maximum Static Load, Back*	1600Pa, 1.5
NOCT	Irradiance 800W/m <sup>2</sup> , ambient temperature 20°C, wind speed 1m/s, AM1.5G						NOCT	45±2°C
							Safety Class	Class II
							Fire Safety Class	Class C

**CHARACTERISTICS**

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



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



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

