

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

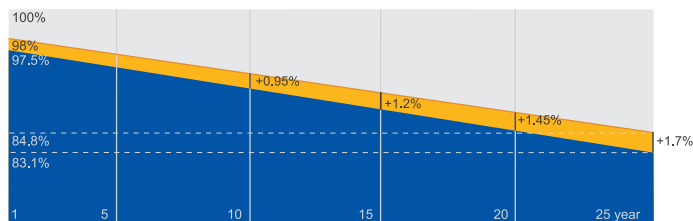


Better mechanical loading tolerance

Superior Warranty

- 15-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



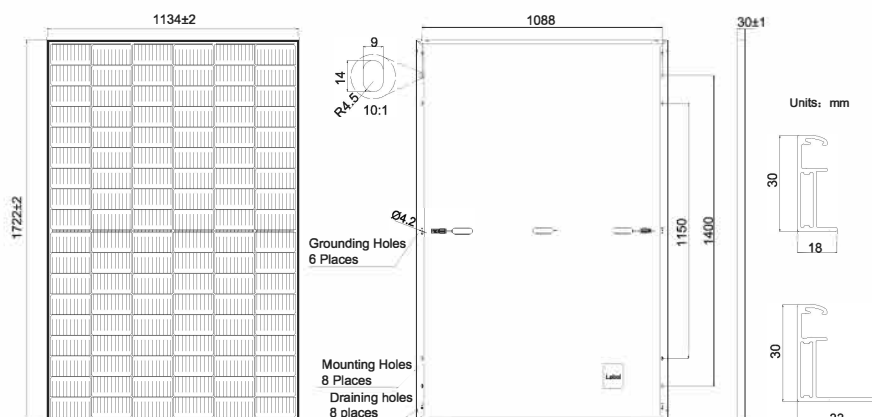
JA SOLAR

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



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	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(P _{max}) [W]	390	395	400	405	410	415
Open Circuit Voltage(V _{oc}) [V]	36.85	36.98	37.07	37.23	37.32	37.45
Maximum Power Voltage(V _{mp}) [V]	30.64	30.84	31.01	31.21	31.45	31.61
Short Circuit Current(I _{sc}) [A]	13.61	13.70	13.79	13.87	13.95	14.02
Maximum Power Current(I _{mp}) [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 I _{sc} (α _{Isc})	+0.045%/°C					
Temperature Coefficient of V _{oc} (β _{Voc})	-0.275%/°C					
Temperature Coefficient of P _{max} (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.

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(P _{max}) [W]	294	298	302	306	310	314
Open Circuit Voltage(V _{oc}) [V]	34.62	34.75	34.88	35.12	35.23	35.37
Max Power Voltage(V _{mp}) [V]	28.87	29.08	29.26	29.47	29.72	29.89
Short Circuit Current(I _{sc}) [A]	10.89	10.96	11.03	11.10	11.16	11.22
Max Power Current(I _{mp}) [A]	10.18	10.25	10.32	10.38	10.43	10.50

NOCT

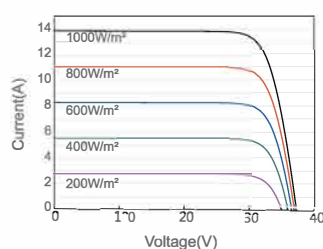
Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s, AM1.5G

OPERATING CONDITIONS

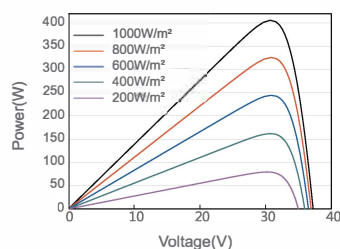
Maximum System Voltage	1500V DC(IEC)
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	25A
Maximum Static Load, Front*	4500 Pa
Maximum Static Load, Back*	2400 Pa
NOCT	45±2°C
Safety Class	Class II
Fire Performance	UL Type 1

CHARACTERISTICS

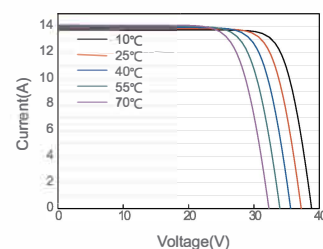
Current-Voltage Curve JAM54S30-405/MR/1500V



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



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



Premium Cells, Premium Modules

Version No. : AU_EN_20220223A

*15 years product warranty is only valid for this type of modules installed in PV systems under 100kW in Australia.