

DEEP BLUE 3.0 Light

Mono

440W MBB Half-cell Module
JAM54S30 -415-440/LR 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

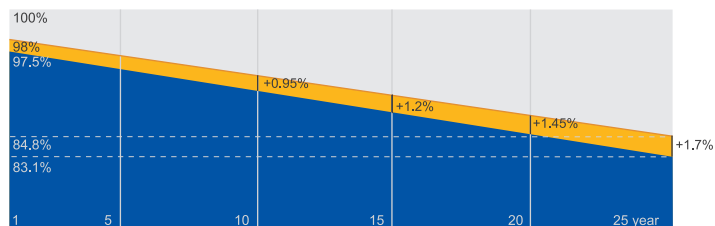


Better mechanical loading tolerance

Superior Warranty

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

0.55% Annual Degradation Over 25 years



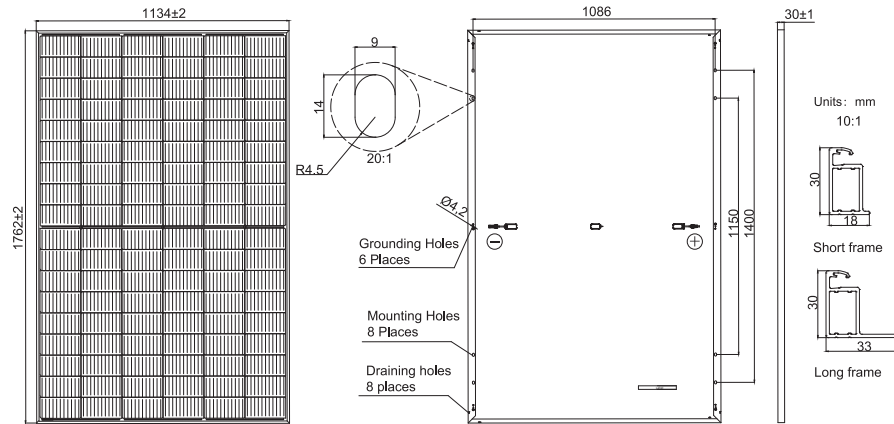
■ New linear power warranty ■ Standard module linear power warranty

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 62941: 2019 Terrestrial photovoltaic (PV) modules - Quality system for PV module manufacturing



MECHANICAL DIAGRAMS



Remark: customized frame color and cable length available upon request

SPECIFICATIONS

Cell	Mono
Weight	20kg
Dimensions	1762±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	QC 4.10-351/ MC4-EVO2A
Cable Length (Including Connector)	Portrait: 200mm(+)/300mm(-); 800mm(+)/800mm(-)(Leapfrog) Landscape: 1100mm(+)/1100mm(-)
Front Glass	2.8mm
Packaging Configuration	36pcs/Pallet, 936pcs/40ft Container

ELECTRICAL PARAMETERS AT STC

TYPE	JAM54S30 -415/LR	JAM54S30 -420/LR	JAM54S30 -425/LR	JAM54S30 -430/LR	JAM54S30 -435/LR	JAM54S30 -440/LR
Rated Maximum Power(Pmax) [W]	415	420	425	430	435	440
Open Circuit Voltage(Voc) [V]	37.01	37.19	37.37	37.55	37.73	37.91
Maximum Power Voltage(Vmp) [V]	30.92	31.11	31.30	31.49	31.68	31.86
Short Circuit Current(Isc) [A]	14.17	14.25	14.33	14.42	14.50	14.58
Maximum Power Current(Imp) [A]	13.42	13.50	13.58	13.65	13.73	13.81
Module Efficiency [%]	20.8	21.0	21.3	21.5	21.8	22.0
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

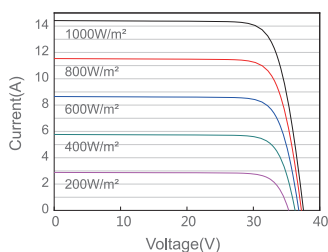
TYPE	JAM54S30 -415/LR	JAM54S30 -420/LR	JAM54S30 -425/LR	JAM54S30 -430/LR	JAM54S30 -435/LR	JAM54S30 -440/LR
Rated Max Power(Pmax) [W]	314	318	322	326	329	333
Open Circuit Voltage(Voc) [V]	35.02	35.19	35.36	35.53	35.70	35.87
Max Power Voltage(Vmp) [V]	29.26	29.44	29.62	29.80	29.98	30.15
Short Circuit Current(Isc) [A]	11.33	11.40	11.47	11.53	11.60	11.67
Max Power Current(Imp) [A]	10.74	10.80	10.86	10.92	10.99	11.05
NOCT	Irradiance 800W/m ² , ambient temperature 20°C,wind speed 1m/s, AM1.5G					

OPERATING CONDITIONS

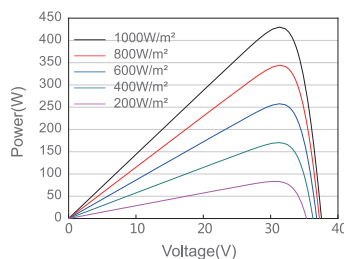
Maximum System Voltage	1000V/1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	25A
Maximum Static Load,Front*	5400Pa(112lb/ft ²)
Maximum Static Load,Back*	2400Pa(50lb/ft ²)
NOCT	45±2°C
Safety Class	Class II
Fire Performance	UL Type 1

CHARACTERISTICS

Current-Voltage Curve JAM54S30-430/LR



Power-Voltage Curve JAM54S30-430/LR



Current-Voltage Curve JAM54S30-430/LR

