

Harvest the Sunshine

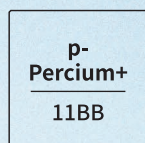
440W



JA SOLAR

JAM54S31 LR Black Module p-type Monofacial Modules

Premium Cells



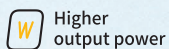
MBB Half-Cell
Technology

24%

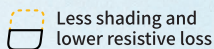


Cell Conversion
Efficiency

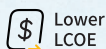
Premium Modules



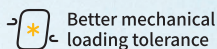
Higher
output power



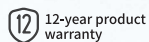
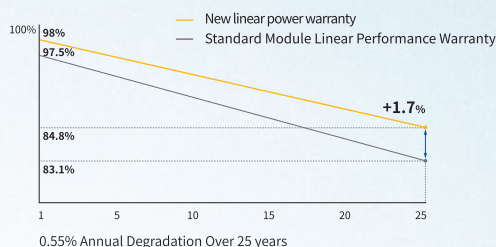
Less shading and
lower resistive loss



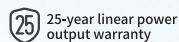
Lower
LCOE



Better mechanical
loading tolerance



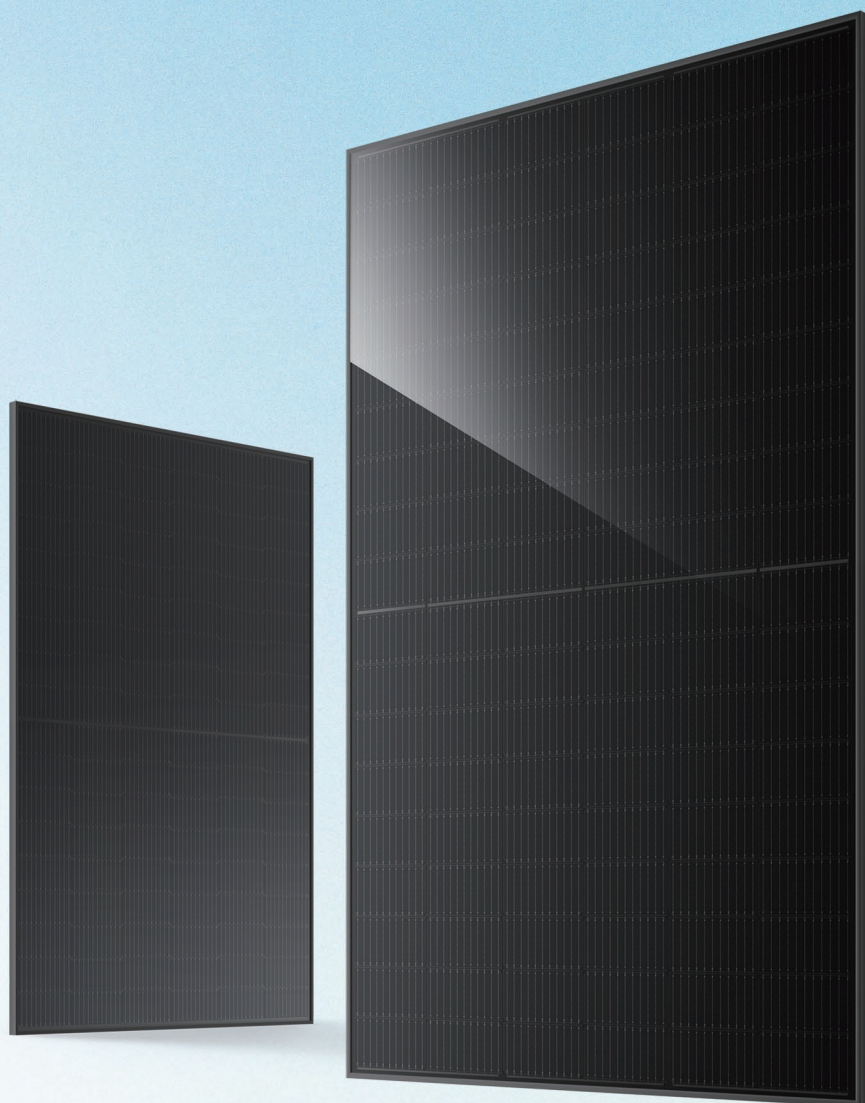
12-year product
warranty



25-year linear power
output warranty

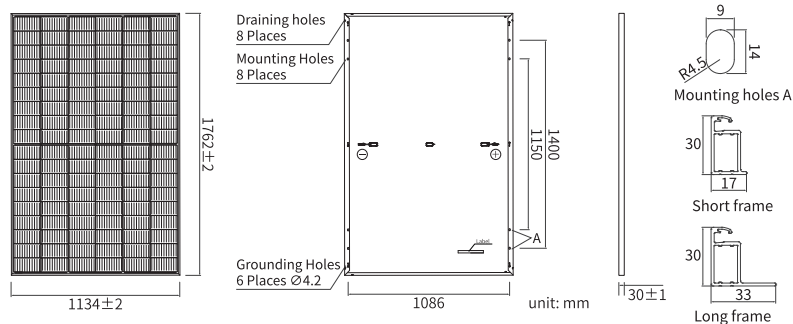
Comprehensive Certificates

- 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



DEEP BLUE 3.0 Pro

JAM54S31 LR p-type Monofacial Modules



MECHANICAL PARAMETERS

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(6×18)
Junction Box	IP68, 3diodes
Connector	QC4.10-351/ MC4-EVO2A
Cable Length (Including Connector)	Portrait: 300mm(+)/400mm(-) Landscape: 1200mm(+)/1200mm(-)
Front Glass	2.8mm
Packaging Configuration	36pcs/Pallet, 936pcs/40ft Container

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC

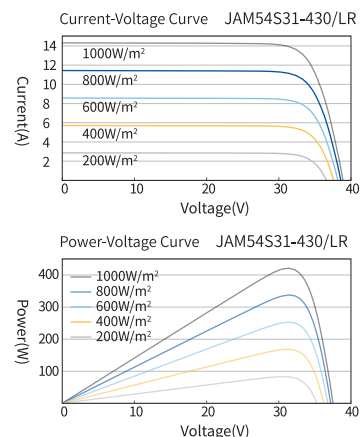
TYPE	JAM54S31 415/LR	JAM54S31 420/LR	JAM54S31 425/LR	JAM54S31 430/LR	JAM54S31 435/LR	JAM54S31 440/LR
Rated Maximum Power(P _{max}) [W]	415	420	425	430	435	440
Open Circuit Voltage (V _{oc}) [V]	37.55	37.73	37.91	38.09	38.27	38.45
Maximum Power Voltage(V _{mp}) [V]	30.92	31.11	31.30	31.49	31.68	31.86
Short Circuit Current(I _{sc}) [A]	14.17	14.25	14.33	14.42	14.50	14.58
Maximum Power Current(I _{mp}) [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~+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/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	JAM54S31 415/LR	JAM54S31 420/LR	JAM54S31 425/LR	JAM54S31 430/LR	JAM54S31 435/LR	JAM54S31 440/LR
Rated Max Power(P _{max}) [W]	314	318	322	326	329	333
Open Circuit Voltage(V _{oc}) [V]	35.53	35.70	35.87	36.04	36.21	36.38
Max Power Voltage(V _{mp}) [V]	29.26	29.44	29.62	29.80	29.98	30.15
Short Circuit Current(I _{sc}) [A]	11.33	11.40	11.47	11.53	11.60	11.67
Max Power Current(I _{mp}) [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					

CHARACTERISTICS



OPERATING CONDITIONS

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