

Harvest the Sunshine

460W



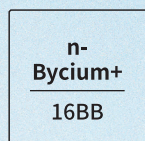
JA SOLAR

JAM54D41 LB

Black Modules

n-type Double Glass Bifacial Modules

Premium Cells



MBB Half-Cell
Technology

26%



Cell Conversion
Efficiency

Premium Modules



Higher power
generation better LCOE



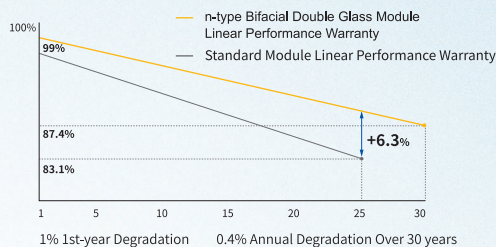
n-type with very
Lower LID



Better Temperature
Coefficient



Better low irradiance
response



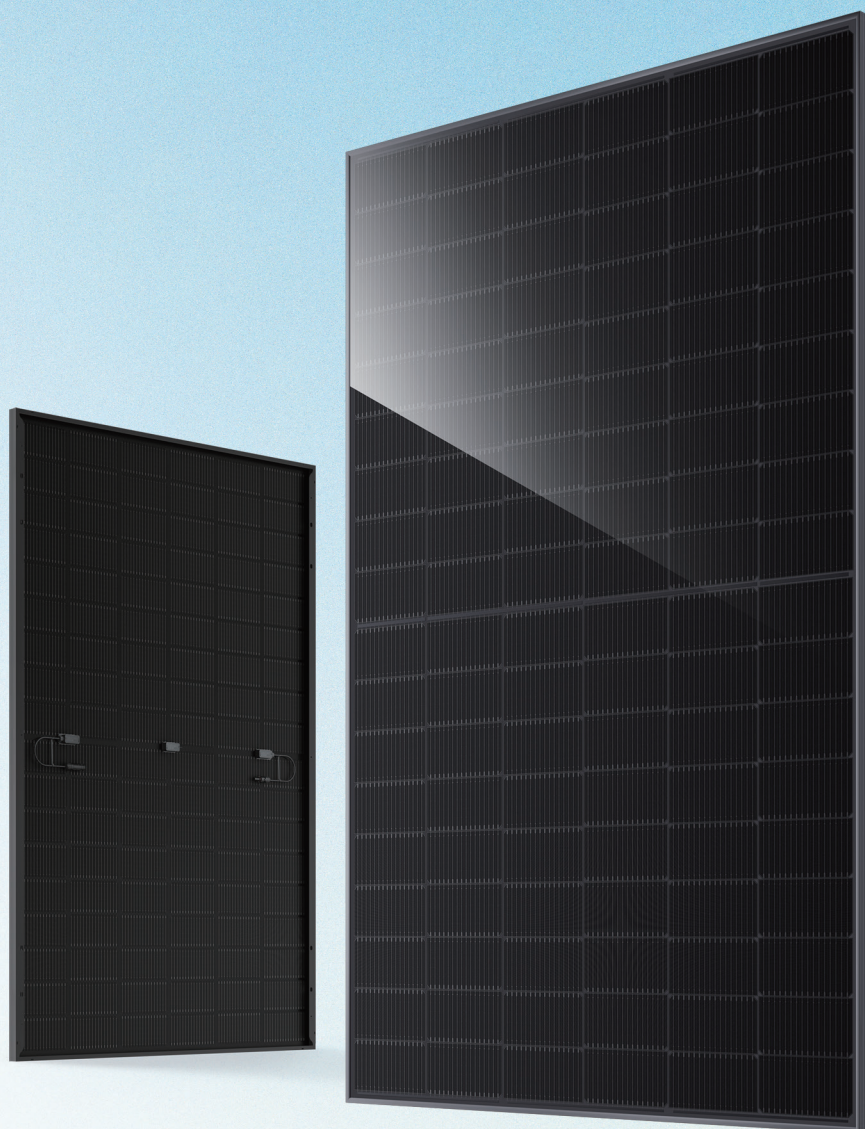
25-year product
warranty



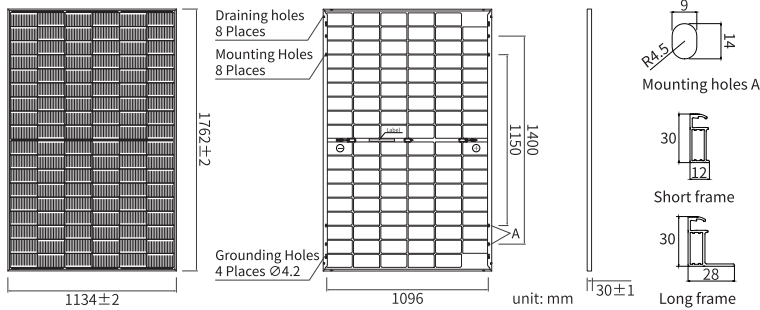
30-year linear power
output warranty

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 4.0 Pro



MECHANICAL PARAMETERS

Cell	Mono
Weight	22kg
Dimensions	1762±2mm×1134±2mm×30±1mm
Cable Cross Section Size	4mm²(IEC), 12 AWG(UL)
No. of cells	108(6×18)
Junction Box	IP68, 3diodes
Connector	QC 4.10-351/ MC4-EVO2A
Cable Length (Including Connector)	Portrait: 400mm(+)/200mm(-) Landscape: 1200mm(+)/1200mm(-)
Front Glass/Back Glass	1.6mm/1.6mm
Packaging Configuration	36pcs/Pallet, 936pcs/40HQ Container

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC

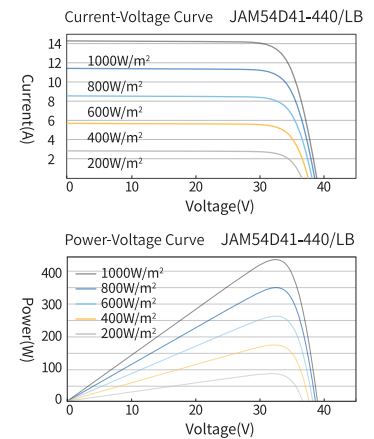
TYPE	JAM54D41 -435/LB	JAM54D41 -440/LB	JAM54D41 -445/LB	JAM54D41 -450/LB	JAM54D41 -455/LB	JAM54D41 -460/LB
Rated Maximum Power(P _{max}) [W]	435	440	445	450	455	460
Open Circuit Voltage (V _{oc}) [V]	38.70	38.90	39.10	40.30	40.50	40.60
Maximum Power Voltage(V _{mp}) [V]	32.29	32.47	32.65	32.99	33.33	33.68
Short Circuit Current(I _{sc}) [A]	14.23	14.31	14.40	14.41	14.42	14.43
Maximum Power Current(I _{mp}) [A]	13.47	13.55	13.63	13.64	13.65	13.66
Module Efficiency [%]	21.8	22.0	22.3	22.5	22.8	23.0
Power Tolerance	0~+3%					
Temperature Coefficient of I _{sc} (α _{Isc})	+0.045%/°C					
Temperature Coefficient of V _{oc} (β _{Voc})	-0.250%/°C					
Temperature Coefficient of P _{max} (γ _{Pmp})	-0.290%/°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 CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

TYPE	JAM54D41 -435/LB	JAM54D41 -440/LB	JAM54D41 -445/LB	JAM54D41 -450/LB	JAM54D41 -455/LB	JAM54D41 -460/LB
Rated Max Power(P _{max}) [W]	470	475	481	486	491	497
Open Circuit Voltage(V _{oc}) [V]	38.70	38.90	39.10	40.30	40.50	40.60
Max Power Voltage(V _{mp}) [V]	32.29	32.47	32.65	32.99	33.33	33.68
Short Circuit Current(I _{sc}) [A]	15.36	15.46	15.55	15.56	15.57	15.58
Max Power Current(I _{mp}) [A]	14.55	14.63	14.72	14.73	14.74	14.75
Irradiation Ratio (rear/front)	10%					

CHARACTERISTICS



OPERATING CONDITIONS

Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	30A
Maximum Static Load, Front	5400Pa(112 lb/ft²)
Maximum Static Load, Back	2400Pa(50 lb/ft²)
NOCT	45±2°C
Bifaciality	80%±10%
Safety Class	Class II
Fire Performance	UL Type 38/Class C