

Harvest the Sunshine

455W

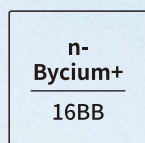


JA SOLAR

JAM54D41 LR

Black Modules
n-type Double Glass Monofacial Modules

Premium Cells



MBB Half-Cell
Technology

26%



Cell Conversion
Efficiency

Premium Modules



Higher power
generation better LCOE



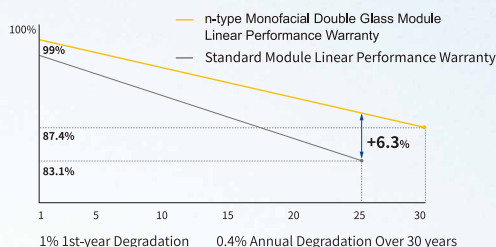
n-type with very
Lower LID



Better Temperature
Coefficient



Better low irradiance
response



15-year product
warranty

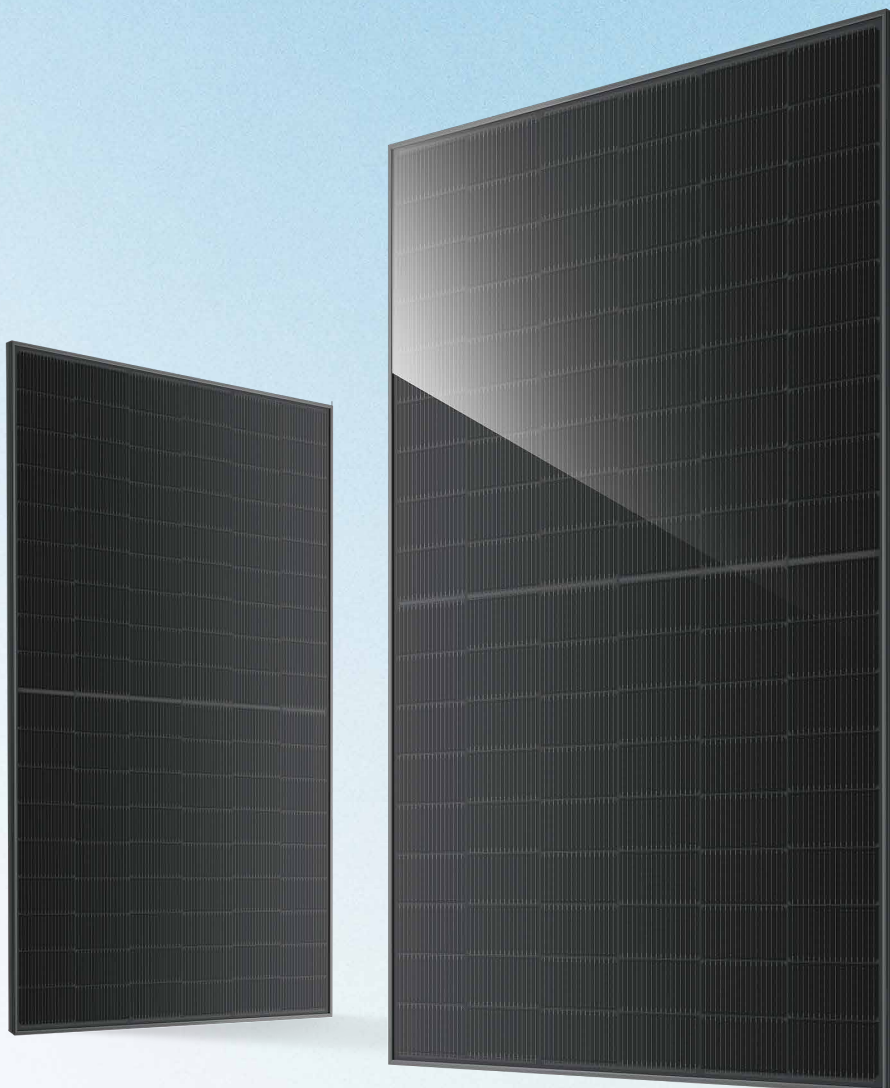


30-year linear power
output warranty

*Remark: The performance warranty applies at STC condition.

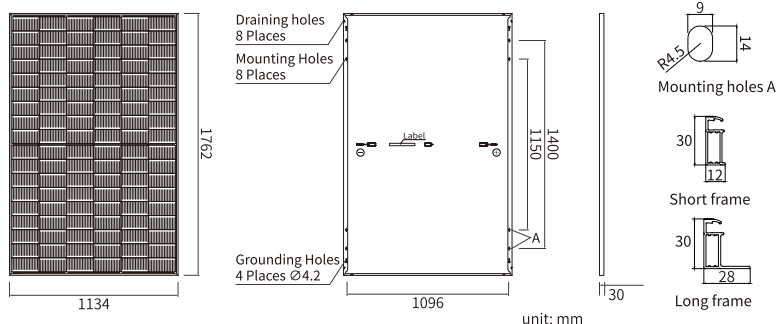
Comprehensive Certificates

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



DEEP BLUE 4.0 Pro

JAM54D41 LR n-type Double Glass Monofacial Modules



MECHANICAL PARAMETERS

Cell	Mono
Weight	22kg
Dimensions	1762mm × 1134mm × 30mm
Cable Cross Section Size	4mm ² (IEC), 12 AWG(UL)
No. of cells	108(6 × 18)
Junction Box	IP68, 3diodes
Connector	Stäubli PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy QC Solar QC4.10-351/ QC4.10-35
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
Country of Manufacturer	China/Vietnam
Remark: customized frame color and cable length available upon request	

ELECTRICAL PARAMETERS AT STC

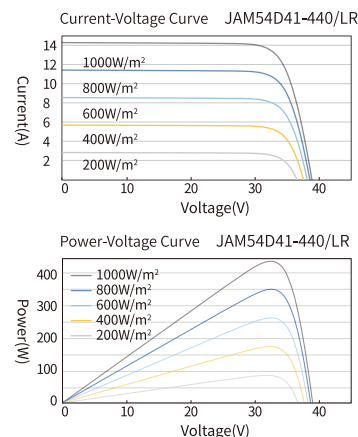
TYPE	JAM54D41 -440/LR	JAM54D41 -445/LR	JAM54D41 -450/LR	JAM54D41 -455/LR
Rated Maximum Power(P _{max}) [W]	440	445	450	455
Open Circuit Voltage (V _{oc}) [V]	38.90	39.10	40.30	40.50
Maximum Power Voltage(V _{mp}) [V]	32.47	32.65	32.99	33.33
Short Circuit Current(I _{sc}) [A]	14.31	14.40	14.41	14.42
Maximum Power Current(I _{mp}) [A]	13.55	13.63	13.64	13.65
Module Efficiency [%]	22.0	22.3	22.5	22.8
Power Tolerance	-5~+10W			
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/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.
Measurement tolerance at STC :P_{max}±3%, V_{oc}±3% and I_{sc}±5%.

ELECTRICAL PARAMETERS AT NOCT And Low Irradiance Of 200W/m²

TYPE	JAM54D41 -440/LR	JAM54D41 -445/LR	JAM54D41 -450/LR	JAM54D41 -455/LR
	10% 200W/m ²	10% 200W/m ²	10% 200W/m ²	10% 200W/m ²
Rated Max Power(P _{max}) [W]	333 85	337 86	341 87	344 88
Open Circuit Voltage(V _{oc}) [V]	36.81 36.60	37.00 36.79	38.14 37.70	38.33 37.95
Max Power Voltage(V _{mp}) [V]	30.73 31.65	30.89 31.94	31.22 32.22	31.54 32.51
Short Circuit Current(I _{sc}) [A]	11.45 2.86	11.52 2.88	11.53 2.88	11.54 2.88
Max Power Current(I _{mp}) [A]	10.84 2.69	10.90 2.70	10.91 2.71	10.92 2.71
NOCT	Irradiance 800W/m ² , ambient temperature 20°C, wind speed 1m/s, AM1.5G			
Low Irradiance	(200±2) W/m ² , module at (25±2) °C			

CHARACTERISTICS



OPERATING CONDITIONS

Maximum System Voltage	1500V DC
Operating Temperature*	-40°C~+70°C
Maximum Series Fuse Rating	25A
Maximum Static Load, Front	3600Pa, 1.5
Maximum Static Load, Back	1600Pa, 1.5
NOCT	45±2°C
Safety Class	Class II
Fire Performance	UL Type 38/Class C

*PV module 98th percentile operating temperature : 70°C