

Harvest the Sunshine

455W



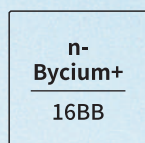
JA SOLAR

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



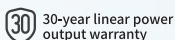
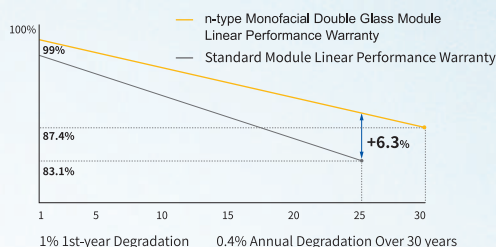
n-type with very Lower LID



Better Temperature Coefficient



Better low irradiance response



*Remark: The performance warranty applies at STC condition.

Comprehensive Certificates

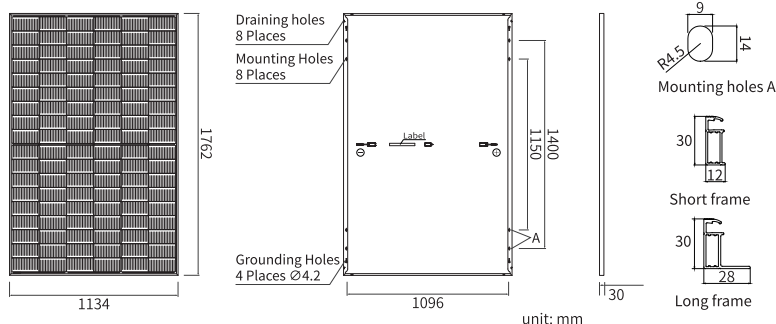
- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC 62941: 2019 Terrestrial photovoltaic (PV) modules - Quality system for PV module manufacturing



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

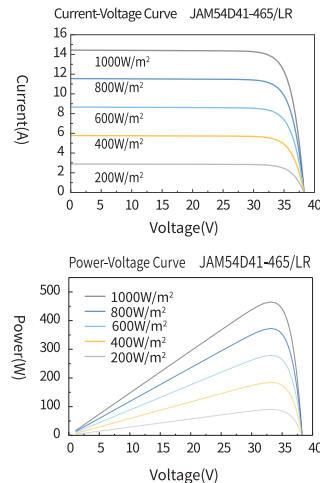
TYPE	JAM54D41 -455/LR	JAM54D41 -460/LR	JAM54D41 -465/LR	JAM54D41 -470/LR
Rated Maximum Power(P _{max}) [W]	455	460	465	470
Open Circuit Voltage (V _{oc}) [V]	40.50	40.60	40.70	40.85
Maximum Power Voltage(V _{mp}) [V]	33.33	33.68	34.02	34.35
Short Circuit Current(I _{sc}) [A]	14.42	14.43	14.44	14.50
Maximum Power Current(I _{mp}) [A]	13.65	13.66	13.67	13.68
Module Efficiency [%]	22.8	23.0	23.3	23.5
Power Sorting 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 With Low Irradiance Of 200W/m²

TYPE	JAM54D41 -455/LR	JAM54D41 -460/LR	JAM54D41 -465/LR	JAM54D41 -470LR
Rated Max Power(P _{max}) [W]	88.21	89.26	90.30	91.20
Open Circuit Voltage(V _{oc}) [V]	37.96	38.19	38.29	38.44
Max Power Voltage(V _{mp}) [V]	32.85	33.00	33.14	33.26
Short Circuit Current(I _{sc}) [A]	2.88	2.89	2.89	2.90
Max Power Current(I _{mp}) [A]	2.69	2.71	2.73	2.74
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

**3600Pa/1600Pa refers to the design load, 1.5 refers to safety factors