

Harvest the Sunshine

465W



JA SOLAR

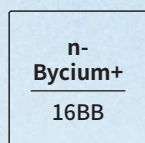
Hail Resistance Class 4

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



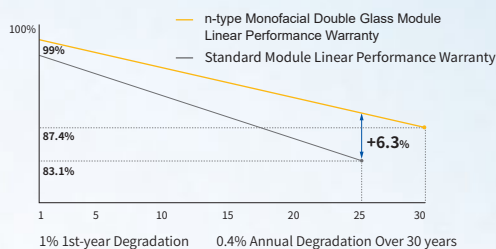
LID n-type with very Lower LID



Better Temperature Coefficient



Better low irradiance response



15-year product warranty



30-year linear power output warranty

Comprehensive Certificates

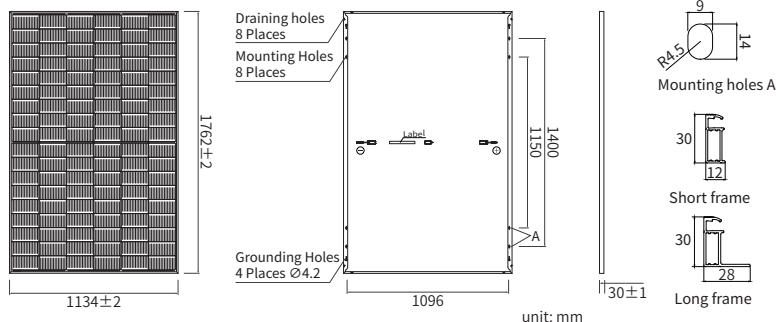
- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC 62941: 2019 Terrestrial photovoltaic (PV) modules - Quality system for PV module manufacturing



DEEP BLUE 4.0 Pro

JAM54D41 LR

n-type Double Glass Monofacial Modules



MECHANICAL PARAMETERS

Cell	Mono
Weight	28kg
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	QC 4.10-351/ MC4-EVO2A
Cable Length (Including Connector)	Portrait: 400mm(+)/200mm(-) Landscape: 1200mm(+)/1200mm(-)
Front Glass/Back Glass	2.8mm/2.0mm
Packaging Configuration	36pcs/Pallet, 792pcs/40HQ Container

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC

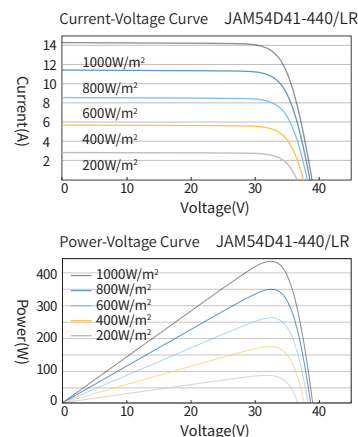
TYPE	JAM54D41 -440/LR	JAM54D41 -445/LR	JAM54D41 -450/LR	JAM54D41 -455/LR	JAM54D41 -460/LR	JAM54D41 -465/LR
Rated Maximum Power(P _{max}) [W]	440	445	450	455	460	465
Open Circuit Voltage (V _{oc}) [V]	38.90	39.10	40.30	40.50	40.60	40.70
Maximum Power Voltage(V _{mp}) [V]	32.47	32.65	32.99	33.33	33.68	34.02
Short Circuit Current(I _{sc}) [A]	14.31	14.40	14.41	14.42	14.43	14.44
Maximum Power Current(I _{mp}) [A]	13.55	13.63	13.64	13.65	13.66	13.67
Module Efficiency [%]	22.0	22.3	22.5	22.8	23.0	23.3
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/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	JAM54D41 -440/LR	JAM54D41 -445/LR	JAM54D41 -450/LR	JAM54D41 -455/LR	JAM54D41 -460/LR	JAM54D41 -465/LR
Rated Max Power(P _{max}) [W]	333	337	341	344	348	352
Open Circuit Voltage(V _{oc}) [V]	36.81	37.00	38.14	38.33	38.42	38.51
Max Power Voltage(V _{mp}) [V]	30.73	30.89	31.22	31.54	31.86	32.19
Short Circuit Current(I _{sc}) [A]	11.45	11.52	11.53	11.54	11.55	11.56
Max Power Current(I _{mp}) [A]	10.84	10.90	10.91	10.92	10.93	10.94
NOCT	Irradiance 800W/m ² , ambient temperature 20°C, wind speed 1m/s, AM1.5G					

CHARACTERISTICS



OPERATING CONDITIONS

Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	25A
Maximum Static Load, Front	8000Pa(167 lb/ft ²)
Maximum Static Load, Back	5000Pa(104 lb/ft ²)
Hail Class	Hail Resistance Class 4(HW4)
NOCT	45±2°C
Safety Class	Class II
Fire Performance	Class C