

Harvest the Sunshine

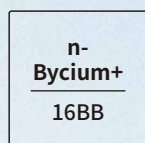
440W



JA SOLAR

JAM54D41 MB Black Module n-type Double Glass Bifacial Modules

Premium Cells



MBB Half-Cell
Technology

26%



Cell Conversion
Efficiency

Premium Modules



Higher power
generation better LCOE



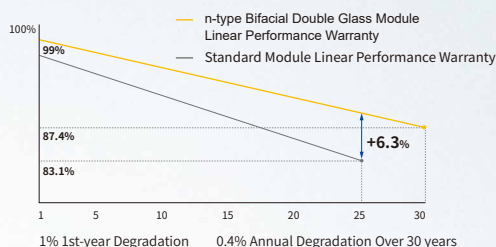
n-type with very
Lower LID



Better Temperature
Coefficient



Better low irradiance
response



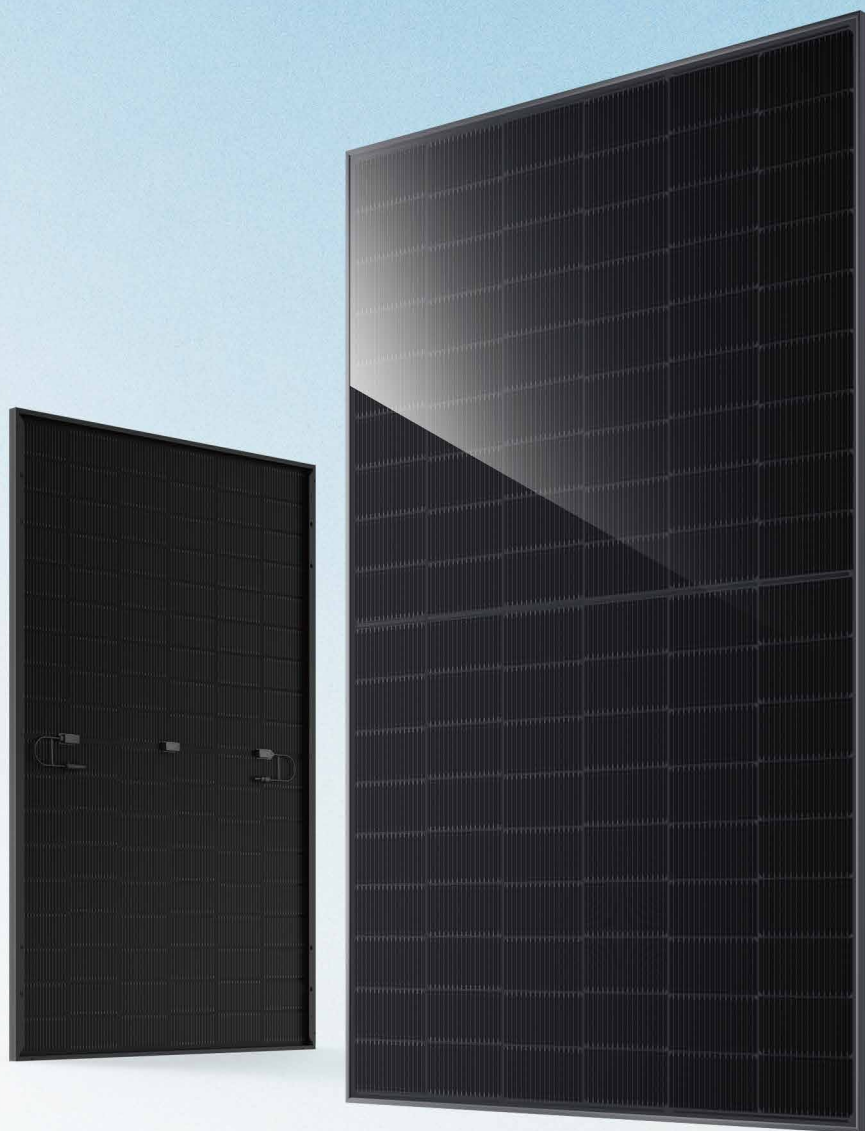
25-year product
warranty



30-year linear power
output warranty

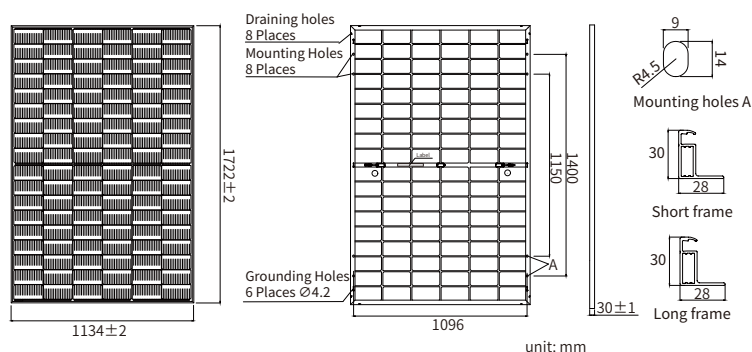
Comprehensive Certificates

- 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

JAM54D41 MB n-type Double Glass Bifacial Modules



MECHANICAL PARAMETERS

Cell	Mono
Weight	21.5kg
Dimensions	1722±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-EVO2
Cable Length (Including Connector)	Portrait: 300mm(+)/400mm(-) Landscape: 1100mm(+)/1100mm(-)
Front Glass/Back Glass	1.6mm/1.6mm
Packaging Configuration	36pcs/Pallet, 864pcs/40HQ Container

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC

TYPE	JAM54D41 415/MB	JAM54D41 420/MB	JAM54D41 425/MB	JAM54D41 435/MB	JAM54D41 435/MB	JAM54D41 440/MB
Rated Maximum Power(P _{max}) [W]	415	420	425	435	435	440
Open Circuit Voltage (V _{oc}) [V]	38.00	38.28	38.56	39.11	39.11	39.38
Maximum Power Voltage(V _{mp}) [V]	32.13	32.38	32.64	33.13	33.13	33.37
Short Circuit Current(I _{sc}) [A]	13.60	13.65	13.70	13.80	13.80	13.85
Maximum Power Current(I _{mp}) [A]	12.92	12.97	13.02	13.13	13.13	13.18
Module Efficiency [%]	21.3	21.5	21.8	22.3	22.3	22.5
Power Tolerance	±2%					
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					

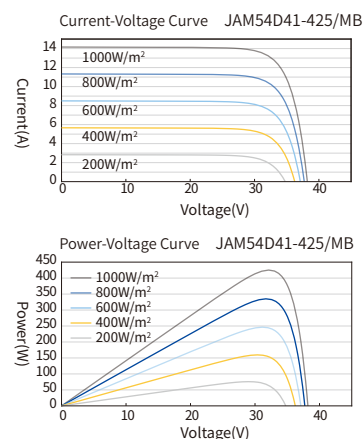
Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

TYPE	JAM54D41 415/MB	JAM54D41 420/MB	JAM54D41 425/MB	JAM54D41 435/MB	JAM54D41 435/MB	JAM54D41 440/MB
Rated Max Power(P _{max}) [W]	448	454	459	470	470	475
Open Circuit Voltage(V _{oc}) [V]	38.00	38.28	38.56	39.11	39.11	39.38
Max Power Voltage(V _{mp}) [V]	32.13	32.38	32.64	33.13	33.13	33.37
Short Circuit Current(I _{sc}) [A]	14.69	14.74	14.80	14.90	14.90	14.96
Max Power Current(I _{mp}) [A]	13.95	14.01	14.06	14.18	14.18	14.24
Irradiation Ratio (rear/front)	10%					

* Bifaciality=P_{max, rear}/Rated P_{max, front}

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/ft ²)
Maximum Static Load, Back	2400Pa(50 lb/ft ²)
NOCT	45±2°C
Bifaciality*	80%±10%
Safety Class	Class II
Fire Performance	UL Type 38/Class C