

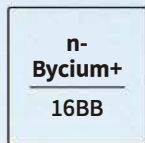
Harvest the Sunshine

JA SOLAR



JAM54D40 LB Black Frame n-type Double Glass Bifacial Modules

Premium Cells



MBB Half-Cell Technology

26%

Up To

Cell Conversion Efficiency

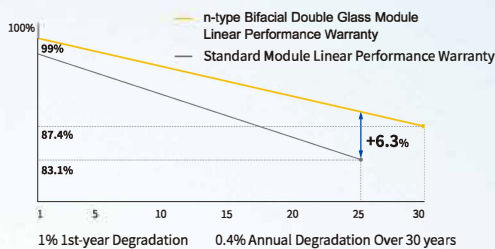
Premium Modules

Higher power generation better LCOE

LID n-type with very Lower LID

Better Temperature Coefficient

Better low irradiance response

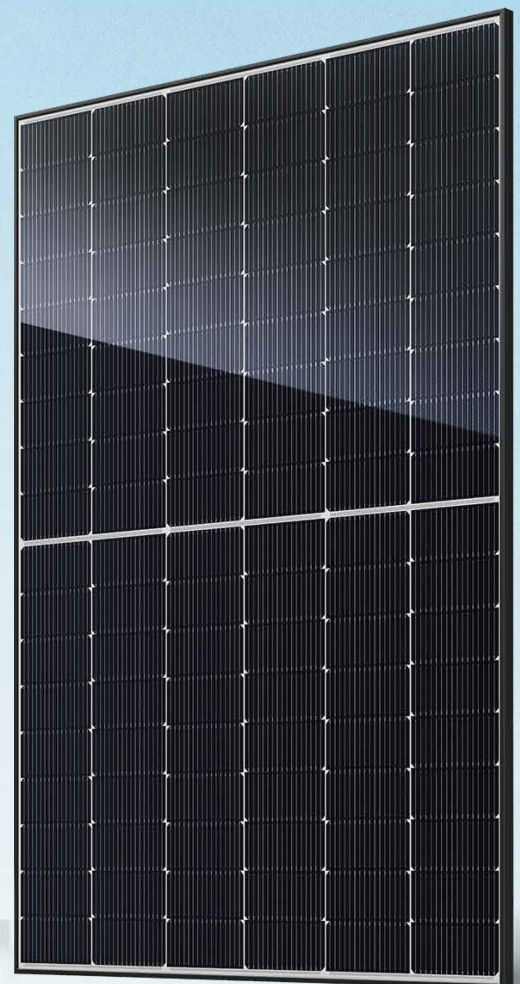


25 25-year product warranty

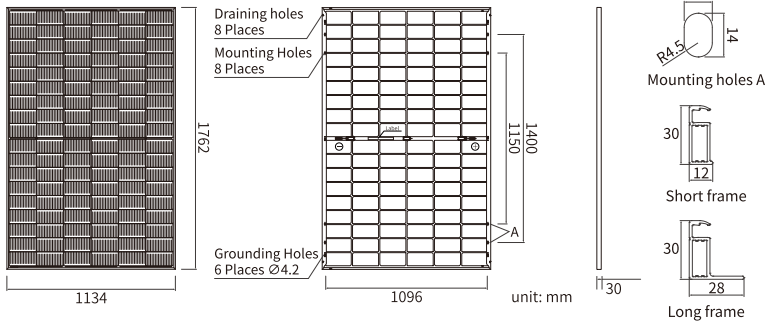
30 30-year linear power output warranty

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

Module Type	Mono
Weight	22kg
Dimensions	1762 × 1134mm × 30mm
Thickness	4mm ² (IEC), 12 AWG(UL)
Cells	108(6 × 18)
Diodes	IP68, 3diodes
Cell Type	QC Solar QC4.10-351/QC4.10-35
Cell Model	Stäubli PV-KST4-EVO2A/xy ,PV-KBT4-EVO2A/xy
Cell Size	Portrait: 300mm(+)/400mm(-) Landscape: 1200mm(+)/1200mm(-)
Frame Thickness	1.6mm/1.6mm
Packing	36pcs/Pallet, 936pcs/40HQ Container
Origin	China/Vietnam

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC and BNPI

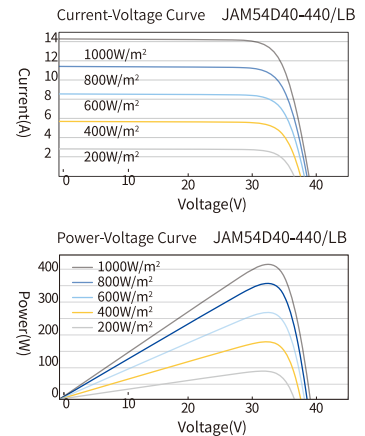
TYPE	JAM54D40	JAM54D40	JAM54D40	JAM54D40	JAM54D40	JAM54D40
	-440/LB	-445/LB	-450/LB	-455/LB	-460/LB	-465/LB
	STC	BNPI	STC	BNPI	STC	BNPI
Rated Maximum Power(Pmax) [W]	440 485	445 490	450 495	455 500	460 505	465 513
Open Circuit Voltage (Voc) [V]	38.90 38.90	39.10 39.10	39.30 39.30	39.50 39.50	39.70 39.70	40.20 40.20
Maximum Power Voltage(Vmp) [V]	32.47 32.47	32.65 32.65	32.82 32.82	33.00 33.00	33.17 33.17	33.50 33.50
Short Circuit Current(Isc) [A]	14.31 15.78	14.40 15.85	14.48 15.93	14.56 16.01	14.64 16.07	14.65 16.17
Maximum Power Current(Imp) [A]	13.55 14.94	13.63 15.01	13.71 15.09	13.79 15.16	13.87 15.23	13.88 15.32
Module Efficiency [%]	22.0	22.3	22.5	22.8	23.0	23.3
Short Circuit Current (Isc) [A] at BSI	17.57	17.64	17.70	17.92	17.98	18.03
Power Tolerance	0~+3%					
Temperature Coefficient of Isc(α _{Isc})	+0.045%/°C					
Temperature Coefficient of Voc (β _{Voc})	-0.250%/°C					
Temperature Coefficient of Pmax(γ _{Pmp})	-0.290%/°C					
STC	Irradiance 1000W/m ² , cell temperature 25°C, AM1.5G					
BNPI	front Irradiance 1000W/m ² , rear Irradiance 135W/m ²					
BSI	front Irradiance 1000W/m ² , rear Irradiance 300W/m ²					

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 and BNPI: Pmax ± 3%, Voc ± 3% and Isc ± 5%.

ELECTRICAL CHARACTERISTICS WITH 10% Bifacial Gains

TYPE	JAM54D40	JAM54D40	JAM54D40	JAM54D40	JAM54D40	JAM54D40
	-440/LB	-445/LB	-450/LB	-455/LB	-460/LB	-465/LB
Rated Max Power(Pmax) [W]	484.0	489.5	495.0	500.5	506.0	511.5
Open Circuit Voltage(Voc) [V]	38.90	39.10	39.30	39.50	39.70	40.20
Max Power Voltage(Vmp) [V]	32.47	32.65	32.82	33.00	33.17	33.50
Short Circuit Current(Isc) [A]	15.74	15.84	15.93	16.02	16.10	16.12
Max Power Current(Imp) [A]	14.91	14.91	14.99	15.17	15.26	15.27

CHARACTERISTICS



OPERATING CONDITIONS

Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	30A
Maximum Static Load, Front	3600Pa,1.5
Maximum Static Load, Back	1600Pa,1.5
NOCT	45 ± 2°C
Bifaciality	φPmax (80 ± 10)%, φVoc (98 ± 5)%, φIsc (80 ± 10)%
Safety Class	Class II
Fire Safety Class	Class C

Specifications subject to technical changes and tests.
JA Solar reserves the right of final interpretation.

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