

Harvest the Sunshine

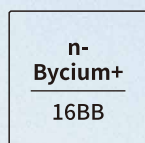
475W



JA SOLAR

JAM54D40 LB n-type Double Glass Bifacial Modules

Premium Cells



MBB Half-Cell Technology

26%



Cell Conversion Efficiency

Premium Modules



Higher power generation better LCOE



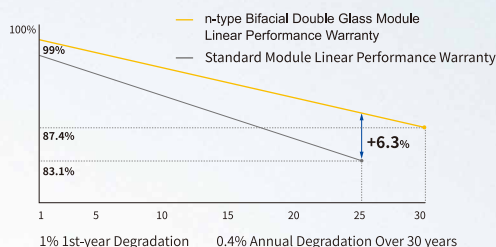
n-type with very Lower LID



Better Temperature Coefficient



Better low irradiance response



15-year product warranty

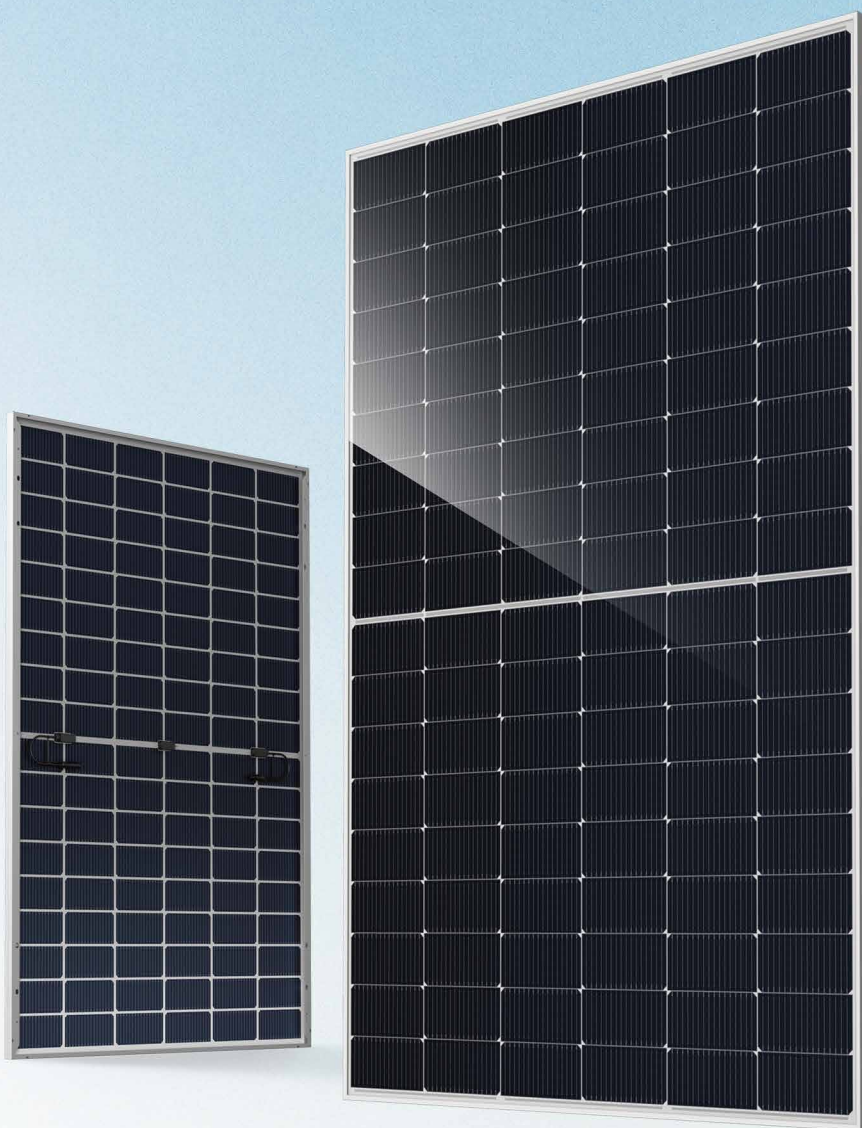


30-year linear power output warranty

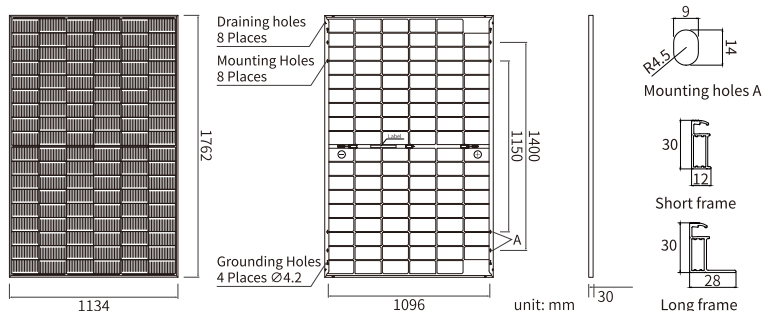
*Remark: The performance warranty applies at STC condition.

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



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 and BNPI

TYPE	JAM54D40 -450/LB STC BNPI	JAM54D40 -455/LB STC BNPI	JAM54D40 -460/LB STC BNPI	JAM54D40 -465/LB STC BNPI	JAM54D40 -470/LB STC BNPI	JAM54D40 -475/LB STC BNPI
Rated Maximum Power(P _{max}) [W]	450 495	455 500	460 505	465 513	470 519	475 524
Open Circuit Voltage (V _{oc}) [V]	39.30 39.30	39.50 39.50	39.70 39.70	40.20 40.20	40.40 40.40	40.55 40.55
Maximum Power Voltage(V _{mp}) [V]	32.82 32.82	33.00 33.00	33.17 33.17	33.50 33.50	33.84 33.84	34.18 34.18
Short Circuit Current(I _{sc}) [A]	14.48 15.93	14.56 16.01	14.64 16.07	14.65 16.17	14.66 16.18	14.67 16.19
Maximum Power Current(I _{mp}) [A]	13.71 15.09	13.79 15.16	13.87 15.23	13.88 15.32	13.89 15.33	13.90 15.34
Module Efficiency [%]	22.5	22.8	23.0	23.3	23.5	23.8
Short Circuit Current (I _{sc}) [A] at BSI	17.70	17.92	17.98	18.03	18.05	18.06
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					
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.

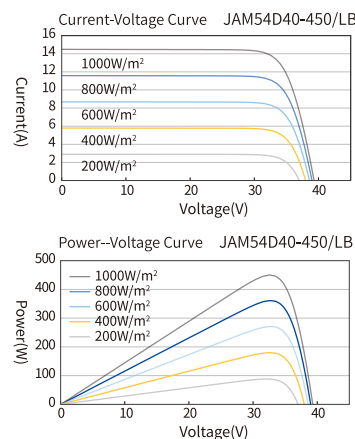
They only serve for comparison among different module types.

Measurement tolerance at STC and BNPI: P_{max}±3%, V_{oc}±3%, I_{sc}±5% and the tolerance of I_{sc} at BSI: ±5%.

ELECTRICAL CHARACTERISTICS WITH 10% Bifacial Gains and Low Irradiance Of 200W/m²

	JAM54D40 -450/LB		JAM54D40 -455/LB		JAM54D40 -460/LB		JAM54D40 -465/LB		JAM54D40 -470/LB		JAM54D40 -475/LB	
TYPE	10% 200W/m²		10% 200W/m²		10% 200W/m²		10% 200W/m²		10% 200W/m²		10% 200W/m²	
Rated Max Power(Pmax) [W]	495	87	501	88	506	89	512	90	517	91	523	92
Open Circuit Voltage(Voc) [V]	39.30	36.96	39.50	37.16	39.70	37.35	40.20	37.82	40.40	38.01	40.55	38.16
Max Power Voltage(Vmp) [V]	32.82	31.96	32.99	32.13	33.17	32.31	33.50	32.59	33.84	32.90	34.18	33.05
Short Circuit Current(Isc) [A]	15.93	2.90	16.02	2.91	16.10	2.93	16.12	2.93	16.13	2.93	16.14	2.93
Max Power Current(Imp) [A]	14.99	2.73	15.17	2.74	15.26	2.76	15.27	2.77	15.28	2.77	15.29	2.79
Irradiation Ratio (rear/front)	10%											
Low Irradiance	(200±2) W/m², module at (25±2) °C											

CHARACTERISTICS



OPERATING CONDITIONS

Maximum System Voltage	1500V DC
Operating Temperature*	-40°C~+70°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	φP _{max} (80±5)%, φV _{oc} (98±5)%, φI _{sc} (80±5)%
Safety Class	Class II
Fire Performance	Class C

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