

Harvest the Sunshine

JA SOLAR

445W



JAM54D40 GB Black Frame n-type Double Glass Bifacial Modules

Premium Cells

n-
Bycium+
16BB

MBB Half-Cell
Technology

26%

Up To

Cell Conversion
Efficiency

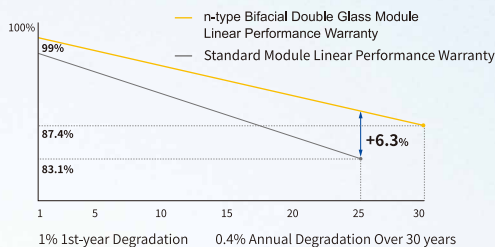
Premium Modules

Higher power
generation better LCOE

LID n-type with very
Lower LID

Better Temperature
Coefficient

Better low irradiance
response

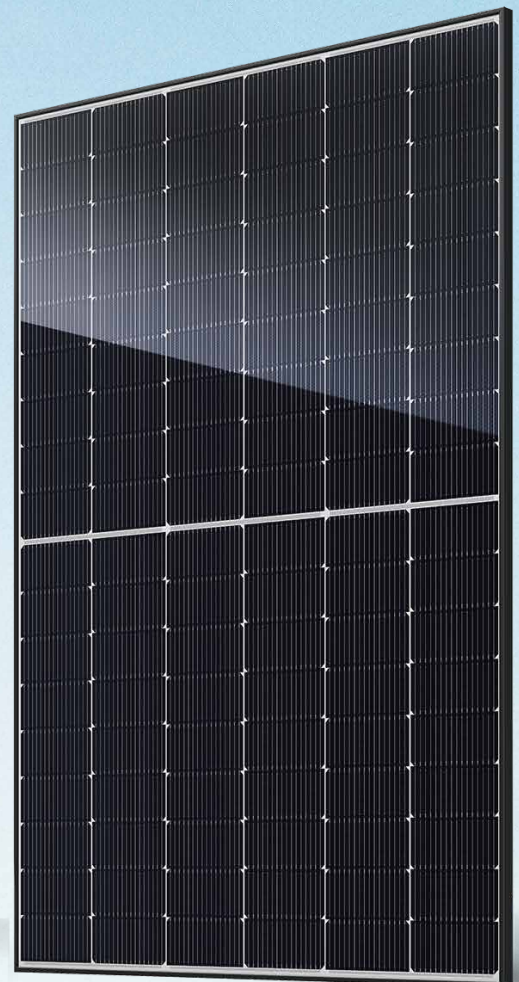


25 25-year product warranty

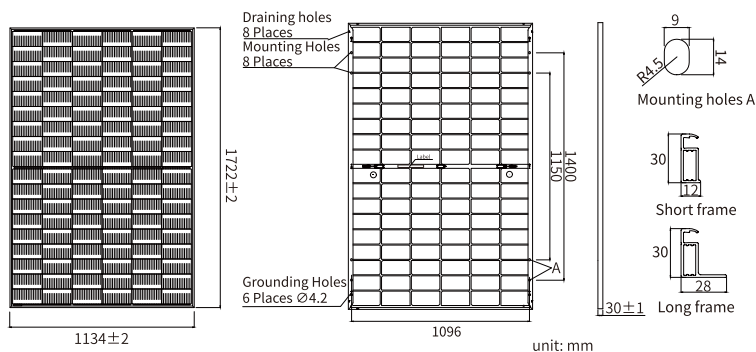
30 30-year linear power output warranty

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

Cell	Mono
Weight	21.5kg
Dimensions	1722 \pm 2mm \times 1134 \pm 2mm \times 30 \pm 1mm
Cable Cross Section Size	4mm ² (IEC), 12 AWG(UL)
No. of cells	108(6 \times 18)
Junction Box	IP68, 3diodes
Connector	QC 4.10-351/ MC4-EVO2A
Cable Length (Including Connector)	Portrait: 300mm(+)/400mm(-) Landscape: 1200mm(+)/1200mm(-)
Front Glass/Back Glass	1.6mm/1.6mm
Packaging Configuration	36pcs/Pallet, 936pcs/40HQ Container

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC

TYPE	JAM54D40 420/GB	JAM54D40 425/GB	JAM54D40 430/GB	JAM54D40 435/GB	JAM54D40 440/GB	JAM54D40 445/GB
Rated Maximum Power(Pmax) [W]	420	425	430	435	440	445
Open Circuit Voltage (Voc) [V]	38.28	38.56	38.84	39.11	39.38	39.65
Maximum Power Voltage(Vmp) [V]	32.38	32.64	32.88	33.13	33.37	33.64
Short Circuit Current(Isc) [A]	13.65	13.70	13.75	13.80	13.85	13.90
Maximum Power Current(Imp) [A]	12.97	13.02	13.08	13.13	13.18	13.23
Module Efficiency [%]	21.5	21.8	22.0	22.3	22.5	22.8
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					

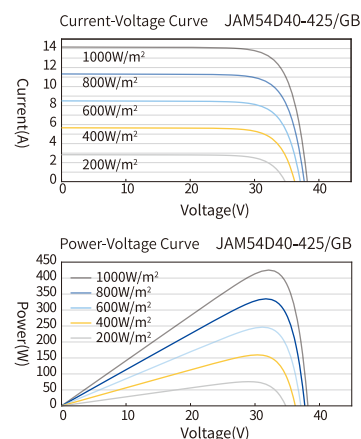
Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

TYPE	JAM54D40 420/GB	JAM54D40 425/GB	JAM54D40 430/GB	JAM54D40 435/GB	JAM54D40 440/GB	JAM54D40 445/GB
Rated Max Power(Pmax) [W]	454	459	464	470	475	481
Open Circuit Voltage(Voc) [V]	38.28	38.56	38.84	39.11	39.38	39.65
Max Power Voltage(Vmp) [V]	32.38	32.64	32.88	33.13	33.37	33.64
Short Circuit Current(Isc) [A]	14.74	14.80	14.85	14.90	14.96	15.01
Max Power Current(Imp) [A]	14.01	14.06	14.12	14.18	14.24	14.29
Irradiation Ratio (rear/front)	10%					

* Bifaciality=Pmax, rear/Rated Pmax, 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 \pm 2°C
Bifaciality*	80% \pm 10%
Safety Class	Class II
Fire Performance	UL Type 38/Class C