

# Harvest the Sunshine

# JA SOLAR

# 445W



## JAM54D40 MB n-type Double Glass Bifacial Modules

### Premium Cells

n-  
Bycium+  
16BB

MBB Half-Cell  
Technology

# 26%

Up To

Cell Conversion  
Efficiency

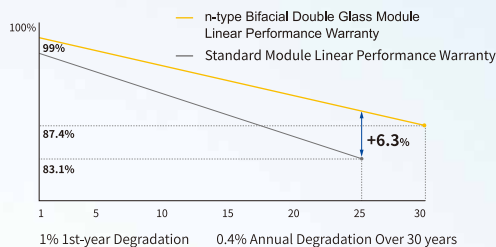
### Premium Modules

⚡ Higher power  
generation better LCOE

LID n-type with very  
Lower LID

°C Better Temperature  
Coefficient

☁ Better low irradiance  
response



12 12-year product  
warranty

30 30-year linear power  
output warranty

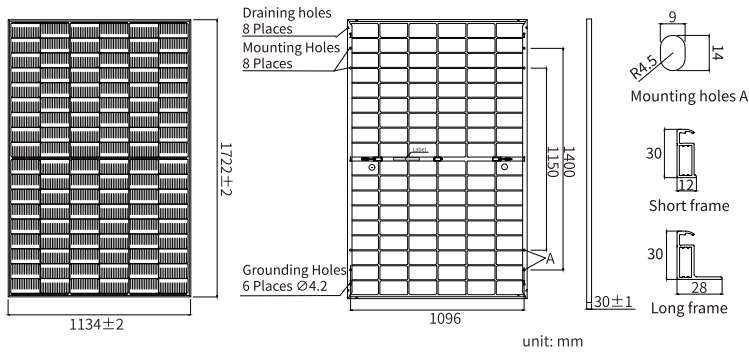
### Comprehensive Certificates

- 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

# JAM54D40 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 <sup>2</sup> (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: 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/MB	JAM54D40 425/MB	JAM54D40 430/MB	JAM54D40 435/MB	JAM54D40 440/MB	JAM54D40 445/MB
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 <sub>Isc</sub> )	+0.045%/°C					
Temperature Coefficient of Voc (β <sub>Voc</sub> )	-0.250%/°C					
Temperature Coefficient of Pmax(γ <sub>Pmp</sub> )	-0.290%/°C					
STC	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, AM1.5G					

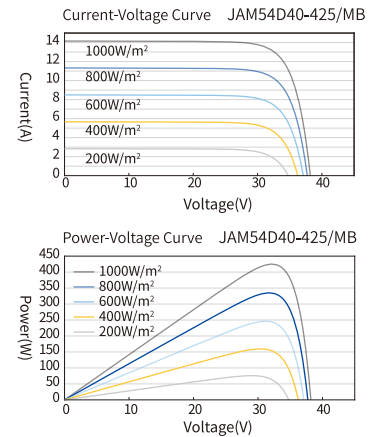
Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

## ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

TYPE	JAM54D40 420/MB	JAM54D40 425/MB	JAM54D40 430/MB	JAM54D40 435/MB	JAM54D40 440/MB	JAM54D40 445/MB
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 <sup>2</sup> )
Maximum Static Load, Back	2400Pa(50 lb/ft <sup>2</sup> )
NOCT	45±2°C
Bifaciality*	80%±10%
Safety Class	Class II
Fire Performance	UL Type 38/Class C