

# Harvest the Sunshine

# JA SOLAR

# 455W



## JAM54D40 LB Black Frame n-type Double Glass Bifacial Modules

### Premium Cells

n-  
Bycium+  
16BB

MBB Half-Cell  
Technology

# 26%



Cell Conversion  
Efficiency

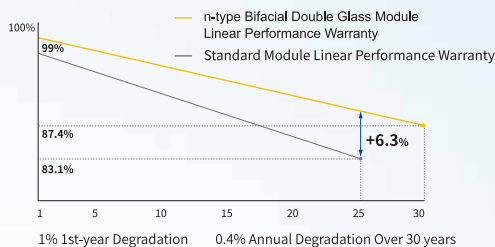
### Premium Modules

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

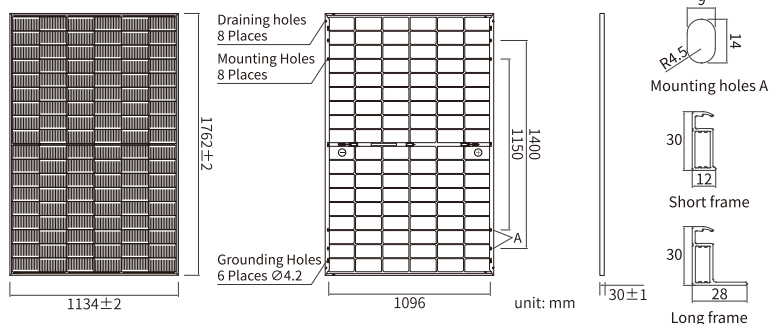
### Comprehensive Certificates

- 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

# JAM54D40 LB n-type Double Glass Bifacial Modules



## MECHANICAL PARAMETERS

|                                    |   |
|------------------------------------|---|
| Cell                               | Mono  |
| Weight                             | 22kg  |
| Dimensions                         | 1762±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(-)<br>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<br>430/LB  | JAM54D40<br>435/LB | JAM54D40<br>440/LB | JAM54D40<br>445/LB | JAM54D40<br>450/LB | JAM54D40<br>455/LB |
|--|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| Rated Maximum Power(Pmax) [W]                      | 430   | 435                | 440                | 445                | 450                | 455                |
| Open Circuit Voltage (Voc) [V]                     | 38.50   | 38.70              | 38.90              | 39.10              | 39.30              | 39.50              |
| Maximum Power Voltage(Vmp) [V]                     | 32.12   | 32.29              | 32.47              | 32.65              | 32.82              | 33.00              |
| Short Circuit Current(Isc) [A]                     | 14.14   | 14.23              | 14.31              | 14.40              | 14.48              | 14.56              |
| Maximum Power Current(Imp) [A]                     | 13.39   | 13.47              | 13.55              | 13.63              | 13.71              | 13.79              |
| 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 |                    |                    |                    |                    |                    |

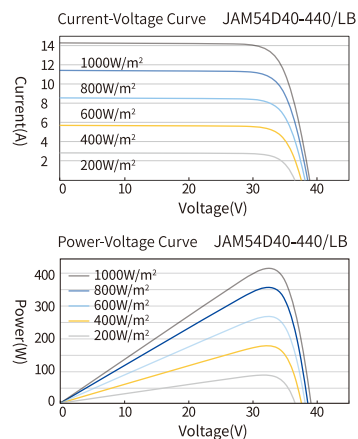
Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

## ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

| TYPE                           | JAM54D40<br>430/LB | JAM54D40<br>435/LB | JAM54D40<br>440/LB | JAM54D40<br>445/LB | JAM54D40<br>450/LB | JAM54D40<br>455/LB |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Rated Max Power(Pmax) [W]      | 464                | 470                | 475                | 481                | 486                | 491                |
| Open Circuit Voltage(Voc) [V]  | 38.50              | 38.70              | 38.90              | 39.10              | 39.30              | 39.50              |
| Max Power Voltage(Vmp) [V]     | 32.11              | 32.29              | 32.47              | 32.65              | 32.82              | 32.99              |
| Short Circuit Current(Isc) [A] | 15.27              | 15.36              | 15.46              | 15.55              | 15.64              | 15.73              |
| Max Power Current(Imp) [A]     | 14.46              | 14.55              | 14.63              | 14.72              | 14.81              | 14.89              |
| 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              |