

Harvest the Sunshine

465W

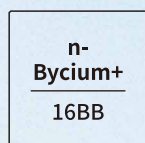


JA SOLAR

# JAM54D41 LR

Black Modules  
n-type Double Glass Monofacial Modules

## Premium Cells



MBB Half-Cell  
Technology

26%



Cell Conversion  
Efficiency

## Premium Modules



Higher power  
generation better LCOE



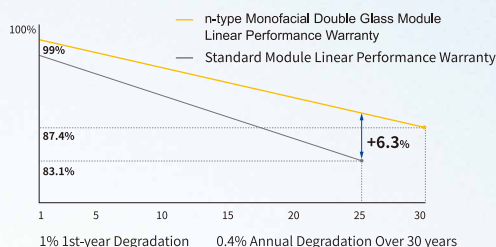
n-type with very  
Lower LID



Better Temperature  
Coefficient



Better low irradiance  
response



25-year product  
warranty



30-year linear power  
output warranty

## Comprehensive Certificates

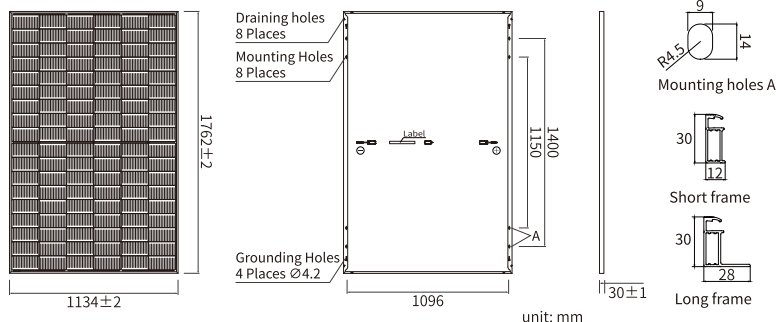
- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC 62941: 2019 Terrestrial photovoltaic (PV) modules - Quality system for PV module manufacturing



DEEP BLUE 4.0 Pro

# JAM54D41 LR

n-type Double Glass Monofacial 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<br>(Including Connector) | Portrait: 400mm(+)/200mm(-)<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

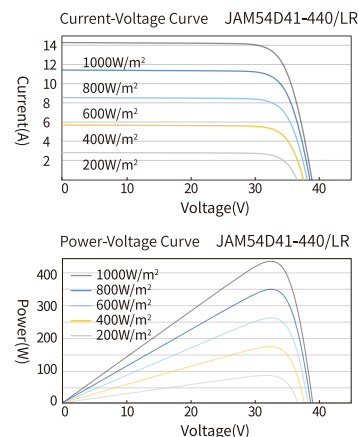
| TYPE                                                            | JAM54D41<br>-440/LR                                             | JAM54D41<br>-445/LR | JAM54D41<br>-450/LR | JAM54D41<br>-455/LR | JAM54D41<br>-460/LR | JAM54D41<br>-465/LR |
|-----------------------------------------------------------------|-----------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Rated Maximum Power(P <sub>max</sub> ) [W]                      | 440                                                             | 445                 | 450                 | 455                 | 460                 | 465                 |
| Open Circuit Voltage (V <sub>oc</sub> ) [V]                     | 38.90                                                           | 39.10               | 40.30               | 40.50               | 40.60               | 40.70               |
| Maximum Power Voltage(V <sub>mp</sub> ) [V]                     | 32.47                                                           | 32.65               | 32.99               | 33.33               | 33.68               | 34.02               |
| Short Circuit Current(I <sub>sc</sub> ) [A]                     | 14.31                                                           | 14.40               | 14.41               | 14.42               | 14.43               | 14.44               |
| Maximum Power Current(I <sub>mp</sub> ) [A]                     | 13.55                                                           | 13.63               | 13.64               | 13.65               | 13.66               | 13.67               |
| Module Efficiency [%]                                           | 22.0                                                            | 22.3                | 22.5                | 22.8                | 23.0                | 23.3                |
| Power Tolerance                                                 | 0~+3%                                                           |                     |                     |                     |                     |                     |
| Temperature Coefficient of I <sub>sc</sub> (α <sub>Isc</sub> )  | +0.045%/°C                                                      |                     |                     |                     |                     |                     |
| Temperature Coefficient of V <sub>oc</sub> (β <sub>Voc</sub> )  | -0.250%/°C                                                      |                     |                     |                     |                     |                     |
| Temperature Coefficient of P <sub>max</sub> (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 PARAMETERS AT NOCT

| TYPE                                        | JAM54D41<br>-440/LR                                                                | JAM54D41<br>-445/LR | JAM54D41<br>-450/LR | JAM54D41<br>-455/LR | JAM54D41<br>-460/LR | JAM54D41<br>-465/LR |
|---------------------------------------------|------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Rated Max Power(P <sub>max</sub> ) [W]      | 333                                                                                | 337                 | 341                 | 344                 | 348                 | 352                 |
| Open Circuit Voltage(V <sub>oc</sub> ) [V]  | 36.81                                                                              | 37.00               | 38.14               | 38.33               | 38.42               | 38.51               |
| Max Power Voltage(V <sub>mp</sub> ) [V]     | 30.73                                                                              | 30.89               | 31.22               | 31.54               | 31.86               | 32.19               |
| Short Circuit Current(I <sub>sc</sub> ) [A] | 11.45                                                                              | 11.52               | 11.53               | 11.54               | 11.55               | 11.56               |
| Max Power Current(I <sub>mp</sub> ) [A]     | 10.84                                                                              | 10.90               | 10.91               | 10.92               | 10.93               | 10.94               |
| NOCT                                        | Irradiance 800W/m <sup>2</sup> , ambient temperature 20°C, wind speed 1m/s, AM1.5G |                     |                     |                     |                     |                     |

## CHARACTERISTICS



## OPERATING CONDITIONS

|                            |                                 |
|----------------------------|---------------------------------|
| Maximum System Voltage     | 1500V DC                        |
| Operating Temperature      | -40°C~+85°C                     |
| Maximum Series Fuse Rating | 25A                             |
| 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                          |
| Safety Class               | Class II                        |
| Fire Performance           | UL Type 38/Class C              |