

**445W** **GB**  
Series



Higher power generation better LCOE



n-type with very Lower LID



Better Temperature Coefficient



Better low irradiance response



12-year product warranty



30-year linear power output warranty

**n-type Bifacial Double Glass  
High Efficiency Mono Module  
JAM54D40 GB Black Frame**

**420-445**

**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

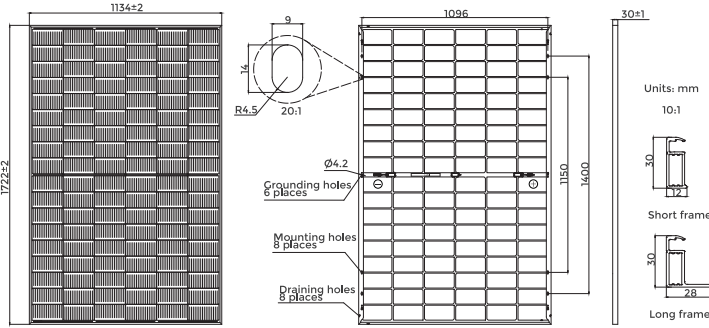




# 445W

# 420-445

JAM54D40



Remark: customized frame color and cable length available upon request

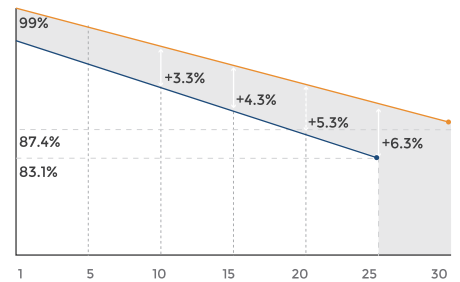
|                                    |  |
|------------------------------------|--|
| Cell                               | Mono   |
| Weight                             | 21.5kg   |
| Dimensions                         | 1722±2mm×1134±2mm×30±1mm                                       |
| Cable Cross Section Size           | 4mm <sup>2</sup> (IEC), 12 AWG(UL)                             |
| No. of cells                       | 108(6×18)  |
| Junction Box                       | IP68, 3 diodes   |
| 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                            |

## ELECTRICAL PARAMETERS AT STC

| TYPE   | JAM54D40<br>-420/GB  | JAM54D40<br>-425/GB | JAM54D40<br>-430/GB | JAM54D40<br>-435/GB | JAM54D40<br>-440/GB | JAM54D40<br>-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 <sub>Isc</sub> )  | +0.046%/ °C  |                     |                     |                     |                     |                     |
| Temperature Coefficient of Voc(β <sub>Voc</sub> )  | -0.260%/ °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 |                     |                     |                     |                     |                     |

## Superior Warranty

1% 1st-year Degradation  
0.4% Annual Degradation Over 30 years



- n-type Bifacial Double Glass Module Linear Performance Warranty
- Standard Module Linear Performance Warranty

## ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

| TYPE                           | JAM54D40<br>-420/GB | JAM54D40<br>-425/GB | JAM54D40<br>-430/GB | JAM54D40<br>-435/GB | JAM54D40<br>-440/GB | JAM54D40<br>-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%                 |                     |                     |                     |                     |                     |

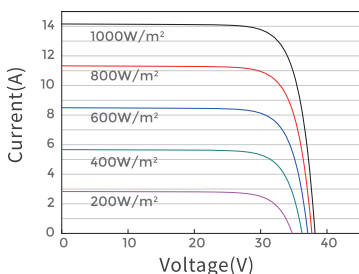
\*Bifaciality=Pmax,rear/Rated Pmax,front

## OPERATING CONDITIONS

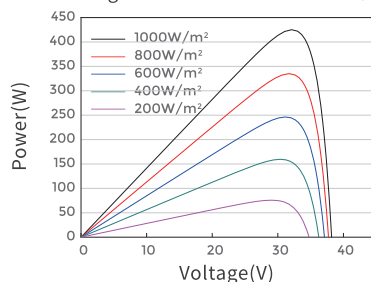
|                            |                                 |
|----------------------------|---------------------------------|
| Maximum System Voltage     | 1500V DC                        |
| Operating Temperature      | -40 °C ~+85 °C                  |
| Maximum Series Fuse Rating | 30A                             |
| 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%                         |
| Fire Performance           | UL Type 38                      |

## CHARACTERISTICS

Current-Voltage Curve JAM54D40-425/GB



Power-Voltage Curve JAM54D40-425/GB



Current-Voltage Curve JAM54D40-425/GB

