

**590W** **MB**  
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 JAM66D42 MB

**565-590**

### Comprehensive Certificates

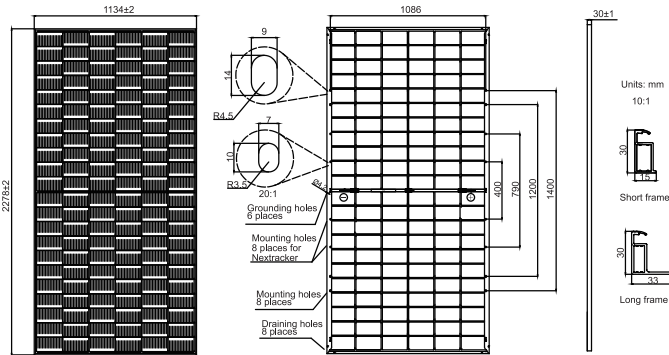
- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC 62941: 2019 Terrestrial photovoltaic (PV) modules - Quality system for PV module manufacturing





590W

**565-590**  
JAM66D42

**MB**  
Series


Remark: customized frame color and cable length available upon request

|                                       |                                                                |
|---------------------------------------|----------------------------------------------------------------|
| Cell                                  | Mono-16BB                                                      |
| Weight                                | 31.8kg                                                         |
| Dimensions                            | 2278±2mm×1134±2mm×30±1mm                                       |
| Cable Cross Section Size              | 4mm <sup>2</sup> (IEC), 12 AWG(UL)                             |
| No. of cells                          | 132(6×22)                                                      |
| Junction Box                          | IP68, 3 diodes                                                 |
| Connector                             | QC 4.10-351/ MC4-EVO2A                                         |
| Cable Length<br>(Including Connector) | Portrait: 300mm(+)/400mm(-);<br>Landscape: 1300mm(+)/1300mm(-) |
| Front Glass/Back Glass                | 2.0mm/2.0mm                                                    |
| Packaging Configuration               | 36pcs/Pallet, 720pcs/40HQ Container                            |

## ELECTRICAL PARAMETERS AT STC

| TYPE                                                            | JAM66D42<br>-565/MB                                              | JAM66D42<br>-570/MB | JAM66D42<br>-575/MB | JAM66D42<br>-580/MB | JAM66D42<br>-585/MB | JAM66D42<br>-590/MB |
|-----------------------------------------------------------------|------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Rated Maximum Power(P <sub>max</sub> ) [W]                      | 565                                                              | 570                 | 575                 | 580                 | 585                 | 590                 |
| Open Circuit Voltage(V <sub>oc</sub> ) [V]                      | 47.58                                                            | 47.78               | 47.98               | 48.18               | 48.38               | 48.58               |
| Maximum Power Voltage(V <sub>mp</sub> ) [V]                     | 39.79                                                            | 40.00               | 40.21               | 40.42               | 40.63               | 40.84               |
| Short Circuit Current(I <sub>sc</sub> ) [A]                     | 15.06                                                            | 15.11               | 15.16               | 15.21               | 15.26               | 15.31               |
| Maximum Power Current(I <sub>mp</sub> ) [A]                     | 14.20                                                            | 14.25               | 14.30               | 14.35               | 14.40               | 14.45               |
| Module Efficiency [%]                                           | 21.9                                                             | 22.1                | 22.3                | 22.5                | 22.6                | 22.8                |
| Power Tolerance                                                 | 0~+5W                                                            |                     |                     |                     |                     |                     |
| Temperature Coefficient of I <sub>sc</sub> (α <sub>Isc</sub> )  | +0.046%/ °C                                                      |                     |                     |                     |                     |                     |
| Temperature Coefficient of V <sub>oc</sub> (β <sub>Voc</sub> )  | -0.260%/ °C                                                      |                     |                     |                     |                     |                     |
| Temperature Coefficient of P <sub>max</sub> (γ <sub>Pmp</sub> ) | -0.300%/ °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                                        | JAM66D42<br>-565/MB | JAM66D42<br>-570/MB | JAM66D42<br>-575/MB | JAM66D42<br>-580/MB | JAM66D42<br>-585/MB | JAM66D42<br>-590/MB |
|---------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Rated Max Power(P <sub>max</sub> ) [W]      | 610                 | 616                 | 621                 | 626                 | 632                 | 637                 |
| Open Circuit Voltage(V <sub>oc</sub> ) [V]  | 47.58               | 47.78               | 47.98               | 48.18               | 48.38               | 48.58               |
| Max Power Voltage(V <sub>mp</sub> ) [V]     | 39.79               | 40.00               | 40.21               | 40.42               | 40.63               | 40.84               |
| Short Circuit Current(I <sub>sc</sub> ) [A] | 16.26               | 16.32               | 16.37               | 16.43               | 16.48               | 16.53               |
| Max Power Current(I <sub>mp</sub> ) [A]     | 15.34               | 15.39               | 15.44               | 15.50               | 15.55               | 15.61               |
| Irradiation Ratio (rear/front)              | 10%                 |                     |                     |                     |                     |                     |

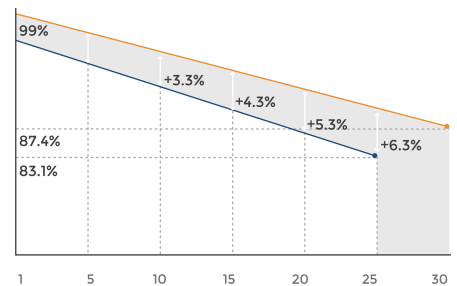
\*For NexTracker installations, maximum static load please take compatibility approve letter between JA Solar and NexTracker for reference.

\*\*Bifaciality=P<sub>max, rear</sub>/Rated P<sub>max, front</sub>

## CHARACTERISTICS

## Superior Warranty

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

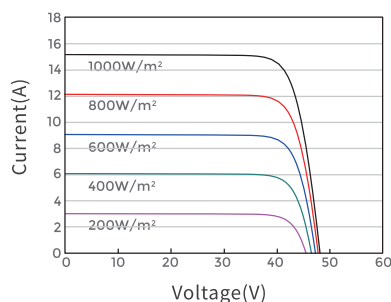


- n-type Bifacial Double Glass Module Linear Performance Warranty
- Standard Module Linear Performance Warranty

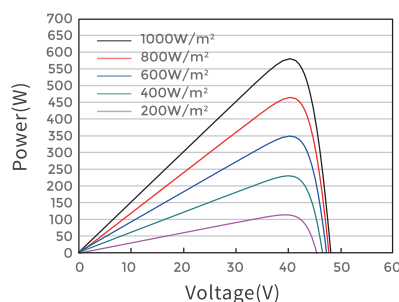
## OPERATING CONDITIONS

|                             |                                  |
|-----------------------------|----------------------------------|
| 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 29                       |

Current-Voltage Curve JAM66D42-580/MB



Power-Voltage Curve JAM66D42-580/MB



Current-Voltage Curve JAM66D42-580/MB

