550W MBB Half-cell Module
JAM72S30 525-550/MR/1000V Series

Introduction
Assembled with 11BB PERC cells, the half-cell configuration of the modules offers the advantages of higher power output, better temperature-dependent performance, reduced shading effect on the energy generation, lower risk of hot spot, as well as enhanced tolerance for mechanical loading.

![Higher output power]

![Lower LCOE]

![Less shading and lower resistive loss]

![Better mechanical loading tolerance]

**Superior Warranty**
- 12-year product warranty
- 25-year linear power output warranty

![0.55% Annual Degradation Over 25 years]

**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
**MECHANICAL DIAGRAMS**

**SPECIFICATIONS**

- **Cell:** Mono
- **Weight:** 28.6kg±3%
- **Dimensions:** 2279±2mm×1134±2mm×35±1mm
- **Cable Cross Section Size:** 4mm² (IEC), 12 AWG(UL)
- **No. of cells:** 144(6×24)
- **Junction Box:** IP68, 3 diodes
- **Connector:** Genuine MC4, QC 4.10
- **Cable Length (Including Connector):** Portrait: 300mm(+400mm(-); Landscape: 1200mm(+400mm(-)
- **Country of Manufacturer:** China/Vietnam

**ELECTRICAL PARAMETERS AT STC**

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<tbody>
<tr>
<td>Rated Maximum Power (Pmax) [W]</td>
<td>525</td>
<td>530</td>
<td>535</td>
<td>540</td>
<td>545</td>
<td>550</td>
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<tr>
<td>Open Circuit Voltage (Voc) [V]</td>
<td>49.15</td>
<td>49.30</td>
<td>49.45</td>
<td>49.60</td>
<td>49.75</td>
<td>49.90</td>
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<tr>
<td>Maximum Power Voltage (Vmp) [V]</td>
<td>41.15</td>
<td>41.31</td>
<td>41.47</td>
<td>41.64</td>
<td>41.80</td>
<td>41.96</td>
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<tr>
<td>Module Efficiency [%]</td>
<td>20.3</td>
<td>20.5</td>
<td>20.7</td>
<td>20.9</td>
<td>21.1</td>
<td>21.3</td>
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<tr>
<td>Power Tolerance</td>
<td>0~+5W</td>
<td>0~+5W</td>
<td>0~+5W</td>
<td>0~+5W</td>
<td>0~+5W</td>
<td>0~+5W</td>
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<tr>
<td>Temperature Coefficient of Isc(α_Isc)</td>
<td>+0.045%/°C</td>
<td>+0.045%/°C</td>
<td>+0.045%/°C</td>
<td>+0.045%/°C</td>
<td>+0.045%/°C</td>
<td>+0.045%/°C</td>
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<tr>
<td>Temperature Coefficient of Voc(β_Voc)</td>
<td>-0.275%/°C</td>
<td>-0.275%/°C</td>
<td>-0.275%/°C</td>
<td>-0.275%/°C</td>
<td>-0.275%/°C</td>
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<tr>
<td>Temperature Coefficient of Pmax(v_Pmp)</td>
<td>-0.350%/°C</td>
<td>-0.350%/°C</td>
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**STC**

Irradiance 1000W/m², cell temperature 25°C, AM1.5G

**ELECTRICAL PARAMETERS AT NOCT**

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<tbody>
<tr>
<td>Rated Max Power (Pmax) [W]</td>
<td>397</td>
<td>401</td>
<td>405</td>
<td>408</td>
<td>412</td>
<td>416</td>
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<tr>
<td>Open Circuit Voltage (Voc) [V]</td>
<td>46.05</td>
<td>46.18</td>
<td>46.31</td>
<td>46.43</td>
<td>46.55</td>
<td>46.68</td>
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<tr>
<td>Max Power Voltage (Vmp) [V]</td>
<td>38.36</td>
<td>38.57</td>
<td>38.78</td>
<td>38.99</td>
<td>39.20</td>
<td>39.43</td>
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<tr>
<td>Short Circuit Current (Iscc) [A]</td>
<td>10.97</td>
<td>11.01</td>
<td>11.05</td>
<td>11.09</td>
<td>11.13</td>
<td>11.17</td>
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<tr>
<td>NOCT</td>
<td>Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s, AM1.5G</td>
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**OPERATING CONDITIONS**

- **Maximum System Voltage:** 1000V DC (IEC)
- **Operating Temperature:** -40°C~+85°C
- **Maximum Series Fuse Rating:** 25A
- **Maximum Static Load, Front:** 3600Pa, 1.5
- **Maximum Static Load, Back:** 1500Pa, 1.5
- **NOCT:** 45.2°C
- **Safety Class:** Class II
- **Fire Performance:** UL Type 1

**CHARACTERISTICS**

**Current-Voltage Curve** JAM72S30-540/MR/1000V

**Power-Voltage Curve** JAM72S30-540/MR/1000V

**Current-Voltage Curve** JAM72S30-540/MR/1000V

- **Premium Cells, Premium Modules**

- **Version No.:** Global_EN_20200918A