

**Mono**

## 410W PERC Half-Cell Module

JAM72S10 390-410/PR Series

### Introduction

Assembled with high-efficiency 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 temperature coefficient



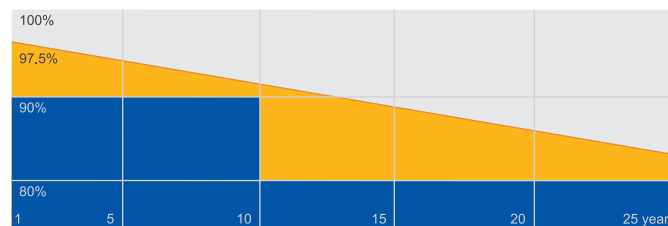
Less shading effect



Better mechanical loading tolerance

### Superior Warranty

- 12-year product warranty
- 25-year linear power output warranty



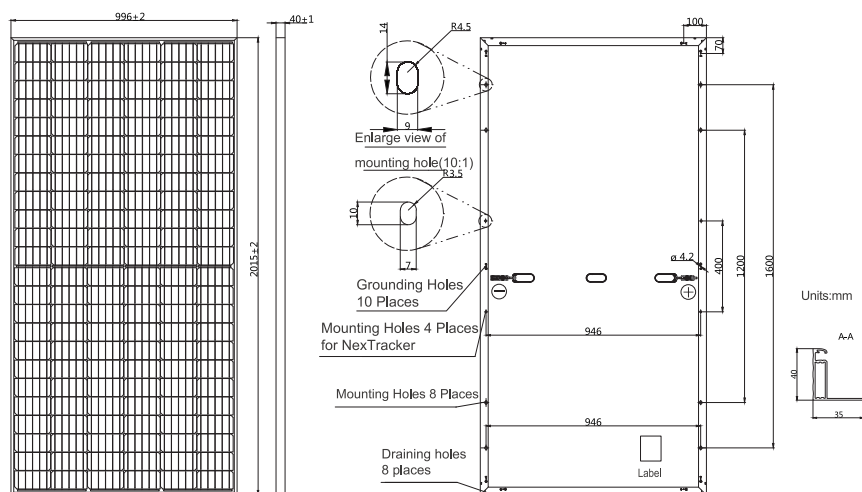
■ JA Linear Power Warranty ■ Industry Warranty

### Comprehensive Certificates

- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval



## MECHANICAL DIAGRAMS



Remark: customized frame color and cable length available upon request

## SPECIFICATIONS

|                                       |                                                              |
|---------------------------------------|--------------------------------------------------------------|
| Cell                                  | Mono                                                         |
| Weight                                | 22.7kg±3%                                                    |
| Dimensions                            | 2015±2mm×996±2mm×40±1mm                                      |
| Cable Cross Section Size              | 4mm <sup>2</sup>                                             |
| No. of cells                          | 144 (6×24)                                                   |
| Junction Box                          | IP68, 3 diodes                                               |
| Connector                             | QC 4.10(1000V)<br>QC 4.10-35(1500V)                          |
| Cable Length<br>(Including Connector) | Portrait:300mm(+)/400mm(-);<br>Landscape:1200mm(+)/1200mm(-) |
| Packaging Configuration               | 27 Per Pallet                                                |

## ELECTRICAL PARAMETERS AT STC

| TYPE                                                            | JAM72S10<br>-390/PR                                             | JAM72S10<br>-395/PR | JAM72S10<br>-400/PR | JAM72S10<br>-405/PR | JAM72S10<br>-410/PR |
|-----------------------------------------------------------------|-----------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|
| Rated Maximum Power(P <sub>max</sub> ) [W]                      | 390                                                             | 395                 | 400                 | 405                 | 410                 |
| Open Circuit Voltage(V <sub>oc</sub> ) [V]                      | 48.91                                                           | 49.21               | 49.50               | 49.81               | 50.12               |
| Maximum Power Voltage(V <sub>mp</sub> ) [V]                     | 40.55                                                           | 40.85               | 41.17               | 41.46               | 41.76               |
| Short Circuit Current(I <sub>sc</sub> ) [A]                     | 10.16                                                           | 10.21               | 10.26               | 10.32               | 10.37               |
| Maximum Power Current(I <sub>mp</sub> ) [A]                     | 9.62                                                            | 9.67                | 9.72                | 9.77                | 9.82                |
| Module Efficiency [%]                                           | 19.4                                                            | 19.7                | 19.9                | 20.2                | 20.4                |
| Power Tolerance                                                 | 0~+5W                                                           |                     |                     |                     |                     |
| Temperature Coefficient of I <sub>sc</sub> (α <sub>Isc</sub> )  | +0.051%/°C                                                      |                     |                     |                     |                     |
| Temperature Coefficient of V <sub>oc</sub> (β <sub>Voc</sub> )  | -0.289%/°C                                                      |                     |                     |                     |                     |
| Temperature Coefficient of P <sub>max</sub> (γ <sub>Pmp</sub> ) | -0.350%/°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.  
\*For NexTracker installations static loading performance: front load measures 2400Pa, while back load measures 2400Pa.

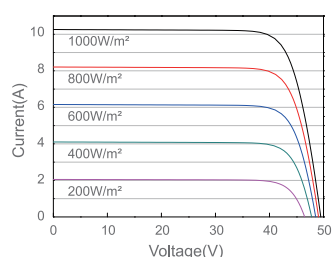
## ELECTRICAL PARAMETERS AT NOCT

| TYPE                                        | JAM72S10<br>-390/PR                                                                   | JAM72S10<br>-395/PR | JAM72S10<br>-400/PR | JAM72S10<br>-405/PR | JAM72S10<br>-410/PR | Maximum System Voltage      | 1000V/1500V DC(IEC) |
|---------------------------------------------|---------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|-----------------------------|---------------------|
| Rated Max Power(P <sub>max</sub> ) [W]      | 289                                                                                   | 292                 | 296                 | 300                 | 303                 | Operating Temperature       | -40°C~+85°C         |
| Open Circuit Voltage(V <sub>oc</sub> ) [V]  | 45.04                                                                                 | 45.30               | 45.56               | 45.81               | 46.06               | Maximum Series Fuse         | 20A                 |
| Max Power Voltage(V <sub>mp</sub> ) [V]     | 37.29                                                                                 | 37.52               | 37.76               | 38.03               | 38.28               | Maximum Static Load, Front* | 5400Pa              |
| Short Circuit Current(I <sub>sc</sub> ) [A] | 8.18                                                                                  | 8.23                | 8.28                | 8.33                | 8.38                | Maximum Static Load, Back*  | 2400Pa              |
| Max Power Current(I <sub>mp</sub> ) [A]     | 7.74                                                                                  | 7.79                | 7.84                | 7.88                | 7.93                | NOCT                        | 45±2°C              |
| NOCT                                        | Irradiance 800W/m <sup>2</sup> , ambient temperature 20°C,<br>wind speed 1m/s, AM1.5G |                     |                     |                     |                     | Safety Class                | Glass II            |

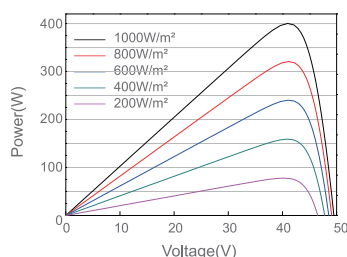
## OPERATING CONDITIONS

## CHARACTERISTICS

Current-Voltage Curve JAM72S10-400/PR



Power-Voltage Curve JAM72S10-400/PR



Current-Voltage Curve JAM72S10-400/PR

