

Harvest the Sunshine

510W

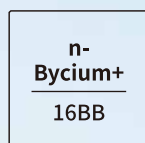


JA SOLAR

JAM60S40 LR

n-type Half-cell Modules

## Premium Cells



MBB Half-Cell  
Technology

26%



Cell Conversion  
Efficiency

## Premium Modules



Higher power  
generation better LCOE



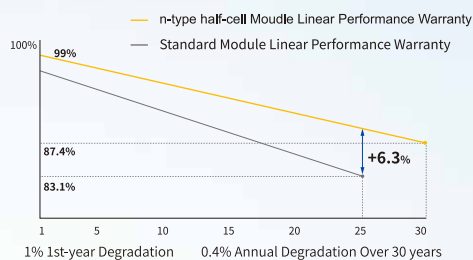
n-type with very  
Lower LID



Better Temperature  
Coefficient



Better low irradiance  
response



15-year product  
warranty



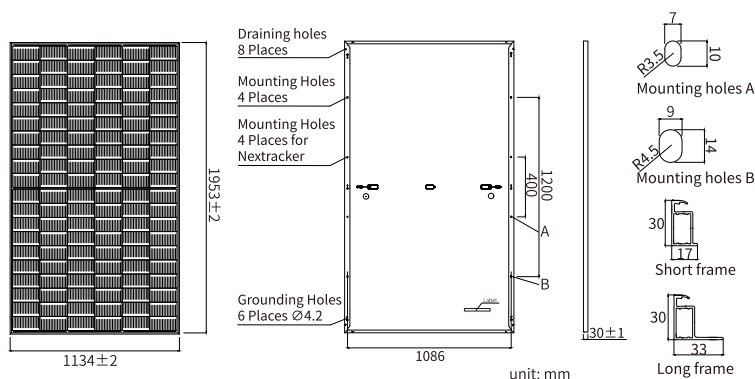
30-year linear power  
output warranty

## 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



## MECHANICAL PARAMETERS

|                                    |                                                               |
|------------------------------------|---------------------------------------------------------------|
| Cell                               | Mono                                                          |
| Weight                             | 24.3kg                                                        |
| Dimensions                         | 1953±2mm×1134±2mm×30±1mm                                      |
| Cable Cross Section Size           | 4mm <sup>2</sup> (IEC), 12 AWG(UL)                            |
| No. of cells                       | 120(6×20)                                                     |
| Junction Box                       | IP68, 3diodes                                                 |
| Connector                          | QC4.10-351/MC4-EVO2A                                          |
| Cable Length (Including Connector) | Portrait: 300mm(+)/400mm(-)<br>Landscape: 1200mm(+)/1200mm(-) |
| Front Glass                        | 3.2mm                                                         |
| Packaging Configuration            | 36pcs/Pallet, 864pcs/40ft Container                           |

Remark: customized frame color and cable length available upon request

## ELECTRICAL PARAMETERS AT STC

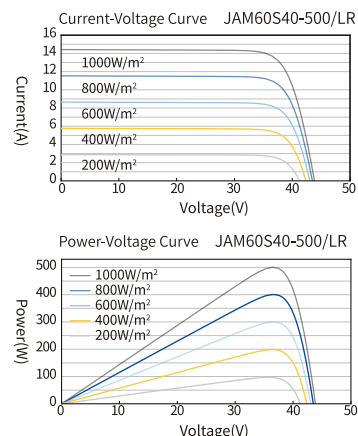
| TYPE                                                            | JAM60S40<br>485/LR                                              | JAM60S40<br>490/LR | JAM60S40<br>495/LR | JAM60S40<br>500/LR | JAM60S40<br>505/LR | JAM60S40<br>510/LR |
|-----------------------------------------------------------------|-----------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Rated Maximum Power(P <sub>max</sub> ) [W]                      | 485                                                             | 490                | 495                | 500                | 505                | 510                |
| Open Circuit Voltage (V <sub>oc</sub> ) [V]                     | 43.25                                                           | 43.45              | 43.65              | 43.85              | 44.05              | 44.25              |
| Maximum Power Voltage(V <sub>mp</sub> ) [V]                     | 36.28                                                           | 36.49              | 36.70              | 36.91              | 37.11              | 37.31              |
| Short Circuit Current(I <sub>sc</sub> ) [A]                     | 14.24                                                           | 14.30              | 14.36              | 14.42              | 14.48              | 14.54              |
| Maximum Power Current(I <sub>mp</sub> ) [A]                     | 13.37                                                           | 13.43              | 13.49              | 13.55              | 13.61              | 13.67              |
| Module Efficiency [%]                                           | 21.9                                                            | 22.1               | 22.4               | 22.6               | 22.8               | 23.0               |
| 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                                        | JAM60S40<br>485/LR                                                                 | JAM60S40<br>490/LR | JAM60S40<br>495/LR | JAM60S40<br>500/LR | JAM60S40<br>505/LR | JAM60S40<br>510/LR |
|---------------------------------------------|------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Rated Max Power(P <sub>max</sub> ) [W]      | 365.5                                                                              | 369.3              | 373.1              | 376.8              | 380.6              | 384.3              |
| Open Circuit Voltage(V <sub>oc</sub> ) [V]  | 40.70                                                                              | 40.90              | 41.10              | 41.30              | 41.50              | 41.60              |
| Max Power Voltage(V <sub>mp</sub> ) [V]     | 33.70                                                                              | 33.90              | 34.10              | 34.20              | 34.40              | 34.60              |
| Short Circuit Current(I <sub>sc</sub> ) [A] | 11.49                                                                              | 11.54              | 11.59              | 11.64              | 11.68              | 11.73              |
| Max Power Current(I <sub>mp</sub> ) [A]     | 10.85                                                                              | 10.90              | 10.95              | 11.00              | 11.05              | 11.11              |
| 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 1/Class C               |