

Harvest the Sunshine

545W



JA SOLAR

# JAM54D50 GR

n-type Double Glass Monofacial Modules



DEEP BLUE 5.0

Intelligent · Quality · Evolution

## Premium Modules



### Higher Power Output

Bycium+ 5.0 Cell Technology

Superior Full-Screen Design



### Enhanced Reliability

Composite Structure  
Enhancement Technology



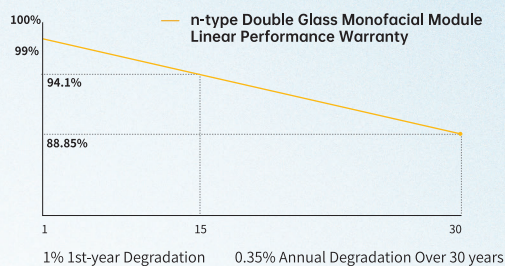
### Higher Power Generation

Better Temperature Coefficient ( $-0.26\%/^{\circ}\text{C}$ )

Excellent Low-Light Performance



### Lower LCOE Higher Customer Value



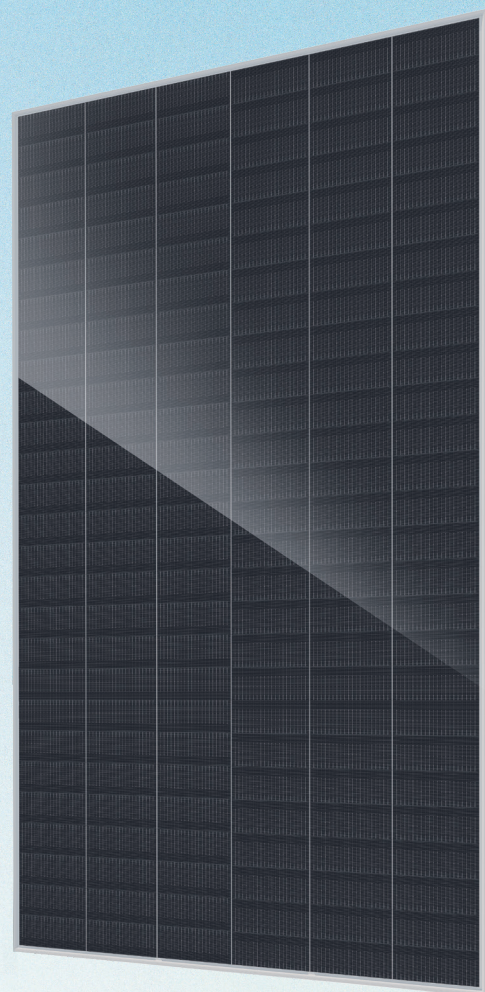
15 15-year product warranty

30 30-year linear power output warranty

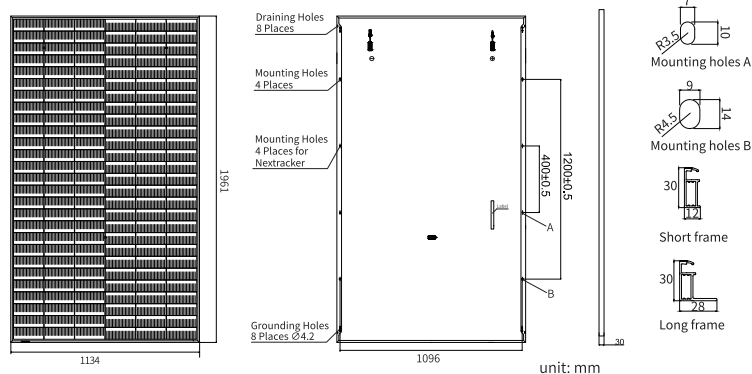
\*Remark: The performance warranty applies at STC condition.

### 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



# JAM54D50 GR n-type Double Glass Monofacial Modules



## MECHANICAL PARAMETERS

|                                       |                                                                             |
|---------------------------------------|-----------------------------------------------------------------------------|
| Cell                                  | Mono                                                                        |
| Weight                                | 27.5kg                                                                      |
| Dimensions                            | 1961mm×1134mm×30mm                                                          |
| Cable Cross Section Size              | 4mm <sup>2</sup> (IEC), 12 AWG(UL)                                          |
| No. of cells                          | 162(6×27)                                                                   |
| Junction Box                          | IP68, 3diodes                                                               |
| Connector                             | Stäubli PV-KST4-EVO2A/xy,PV-KBT4-EVO2A/xy<br>QC Solar QC4.10-351/ QC4.10-35 |
| Cable Length<br>(Including Connector) | Portrait: 300mm(+)/400mm(-)<br>Landscape: 1200mm(+)/1200mm(-)               |
| Frame                                 | Anodized Aluminium Alloy                                                    |
| Front Glass                           | 2.0mm, Anti-reflection Coating                                              |
| Back Glass                            | 2.0mm, Heat Strengthened Glass                                              |
| Packaging Configuration               | 37pcs/Pallet, 888pcs/40HQ Container                                         |
| Country of Manufacturer               | China/Vietnam                                                               |

Remark: customized frame color and cable length available upon request

## ELECTRICAL PARAMETERS AT STC

| TYPE                                                            | JAM54D50<br>-530/GR                                             | JAM54D50<br>-535/GR | JAM54D50<br>-540/GR | JAM54D50<br>-545/GR |
|-----------------------------------------------------------------|-----------------------------------------------------------------|---------------------|---------------------|---------------------|
| Rated Maximum Power(P <sub>max</sub> ) [W]                      | 530                                                             | 535                 | 540                 | 545                 |
| Open Circuit Voltage (V <sub>oc</sub> ) [V]                     | 40.88                                                           | 40.95               | 41.02               | 41.10               |
| Maximum Power Voltage(V <sub>mp</sub> ) [V]                     | 33.26                                                           | 33.48               | 33.69               | 33.90               |
| Short Circuit Current(I <sub>sc</sub> ) [A]                     | 16.73                                                           | 16.78               | 16.83               | 16.88               |
| Maximum Power Current(I <sub>mp</sub> ) [A]                     | 15.93                                                           | 15.98               | 16.03               | 16.08               |
| Module Efficiency [%]                                           | 23.8                                                            | 24.1                | 24.3                | 24.5                |
| Power Sorting Tolerance                                         | 0~+3%                                                           |                     |                     |                     |
| Temperature Coefficient of I <sub>sc</sub> /α <sub>Isc</sub>    | +0.041%/°C                                                      |                     |                     |                     |
| Temperature Coefficient of V <sub>oc</sub> (β <sub>Voc</sub> )  | -0.220%/°C                                                      |                     |                     |                     |
| Temperature Coefficient of P <sub>max</sub> (γ <sub>Pmp</sub> ) | -0.260%/°C                                                      |                     |                     |                     |
| STC                                                             | Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, AM1.5G |                     |                     |                     |

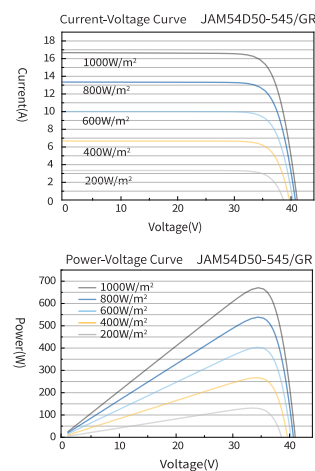
**Remark:** Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.  
Measurement tolerance at STC and BNPI: P<sub>max</sub>±3%, V<sub>oc</sub>±3%, I<sub>sc</sub>±5% and the tolerance of I<sub>sc</sub> at BSI: ±5%.

## ELECTRICAL PARAMETERS With Low Irradiance Of 200W/m<sup>2</sup>

| TYPE                                        | JAM54D50<br>-530/GR                            | JAM54D50<br>-535/GR | JAM54D50<br>-540/GR | JAM54D50<br>-545/GR |
|---------------------------------------------|------------------------------------------------|---------------------|---------------------|---------------------|
| Rated Max Power(P <sub>max</sub> ) [W]      | 102.92                                         | 103.94              | 104.84              | 105.80              |
| Open Circuit Voltage(V <sub>oc</sub> ) [V]  | 38.35                                          | 38.46               | 38.54               | 38.66               |
| Max Power Voltage(V <sub>mp</sub> ) [V]     | 32.95                                          | 33.17               | 33.26               | 33.41               |
| Short Circuit Current(I <sub>sc</sub> ) [A] | 3.35                                           | 3.36                | 3.37                | 3.38                |
| Max Power Current(I <sub>mp</sub> ) [A]     | 3.12                                           | 3.13                | 3.15                | 3.17                |
| Low Irradiance                              | (200±2) W/m <sup>2</sup> , module at (25±2) °C |                     |                     |                     |

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

## CHARACTERISTICS



## OPERATING CONDITIONS

|                              |                    |
|------------------------------|--------------------|
| Maximum System Voltage       | 1500V DC           |
| Operating Temperature*       | -40°C~+70°C        |
| Maximum Series Fuse Rating   | 30A                |
| Maximum Static Load, Front** | 3600Pa, 1.5        |
| Maximum Static Load, Back**  | 1600Pa, 1.5        |
| NOCT                         | 45±2°C             |
| Safety Class                 | Class II           |
| Fire Performance             | UL Type 29/Class C |

\*PV module 98th percentile operating temperature : 70°C

\*\*3600Pa/1600Pa refers to the design load, 1.5 refers to safety factors