



## ■ HJT Solar Module

### KEY FEATURES

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Excellent performance in low-light environments
- 

High quality junction box and connector systems
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100% inspection, to guarantee the reliability of solar systems
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More energy yield from the backside
- 

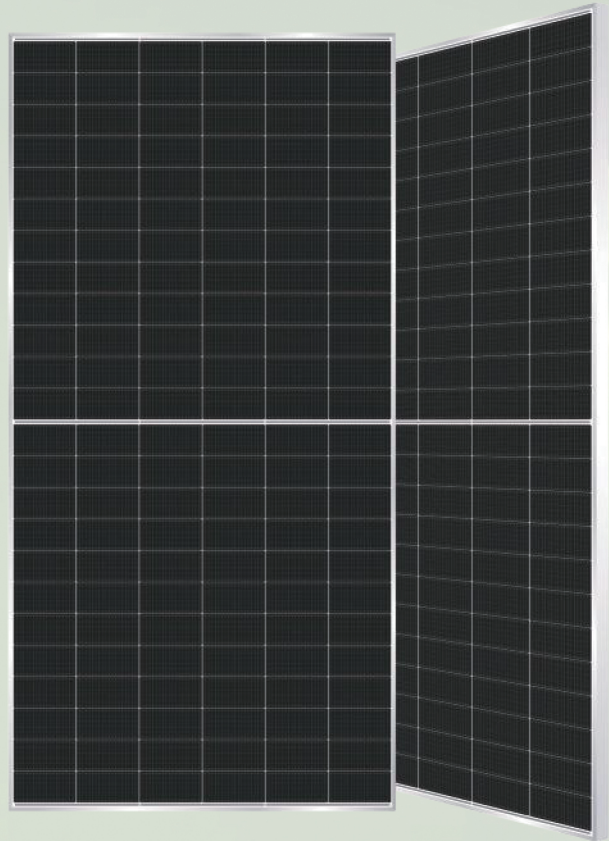
Stronger water resistance, greater air impermeability to extent module lifespan
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Enhanced safety by excellent fire resistance
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Perfect for sandy, snowy and high latitude regions
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Lower operating temperature, more reliable
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Cutcell, Less internal power loss, Less mismatch loss




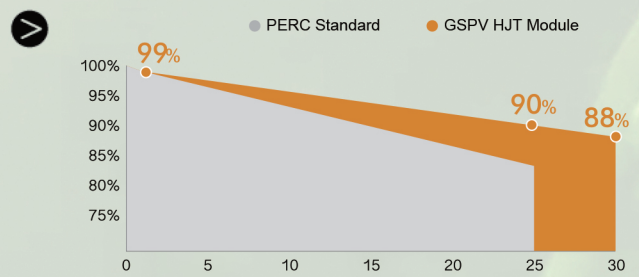
## GSPV-M10/144H-580W-600W 580~600 Watt

➤ 182mm 108cells Bifacial HJT Half Cell Double-glass Solar Module

**BLACK** \*BLACK FRAME/BLACK BACK-SHEET PRODUCTS ARE AVAILABLE UPON REQUEST

➤

|                                     |  |   |
|-------------------------------------|--|---|
| <b>15 Years</b><br>Product Warranty | <b>30 Years</b><br>Linear Power Warranty |  |
|-------------------------------------|--|---|

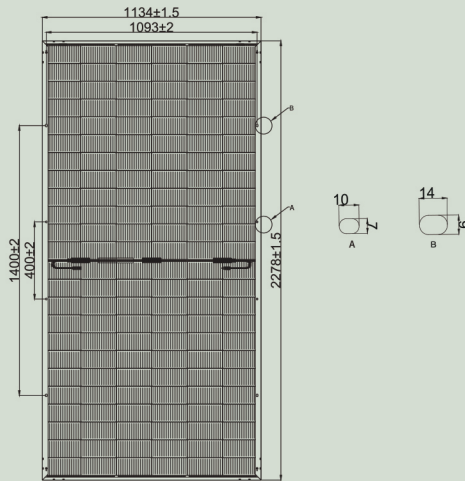


IEC61215  
IEC61730  
UL61215  
UL61730



## Engineering Drawings

Unit: mm



## BSTC\*\*

|                           | (Pmax) | 640W   | 645W   | 650W   | 655W   | 660W   |
|---------------------------|--------|--------|--------|--------|--------|--------|
| Maximum Power             | (Pmax) | 640W   | 645W   | 650W   | 655W   | 660W   |
| Optimum Operating Voltage | (Vmp)  | 45.00V | 45.21V | 45.42V | 45.63V | 45.84V |
| Optimum Operating Current | (Imp)  | 14.23A | 14.27A | 14.32A | 14.36A | 14.40A |
| Open Circuit Voltage      | (Voc)  | 53.92V | 54.12V | 54.31V | 54.50V | 54.70V |
| Short Circuit Current     | (Isc)  | 14.73A | 14.77A | 14.82A | 14.86A | 14.91A |

\*\*BSTC: Front side irradiation 1000W/m<sup>2</sup>, back side reflection irradiation 135W/m<sup>2</sup>, AM=1.5, ambient temperature 25 °C.

## Shipping Configurations

|                             |     |
|-----------------------------|-----|
| Container Size              | HC  |
| Pallets Per Container       | 40' |
| Modules Per Pallet (pcs)    | 20  |
| Modules Per Container (pcs) | 36  |
| Modules Per Container (pcs) | 720 |

## Electrical Characteristics (STC\*)

| Model                           | GSPV-M10/144H-580W | GSPV-M10/144H-585W | GSPV-M10/144H-590W | GSPV-M10/144H-595W | GSPV-M10/144H-600W |
|---------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Maximum Power (Pmax)            | 580W               | 585W               | 590W               | 595W               | 600W               |
| Module Efficiency (%)           | 22.45%             | 22.65%             | 22.84%             | 23.03%             | 23.23%             |
| Optimum Operating Voltage (Vmp) | 45.00V             | 45.21V             | 45.42V             | 45.63V             | 45.84V             |
| Optimum Operating Current (Imp) | 12.89A             | 12.94A             | 12.99A             | 13.04A             | 13.09A             |
| Open Circuit Voltage (Voc)      | 53.92V             | 54.12V             | 54.31V             | 54.50V             | 54.70V             |
| Short Circuit Current (Isc)     | 13.35A             | 13.40A             | 13.45A             | 13.50A             | 13.55A             |
| Operating Module Temperature    | -40 to +85 °C      |                    |                    |                    |                    |
| Maximum System Voltage          | DC1500V (IEC)      |                    |                    |                    |                    |
| Maximum Series Fuse             | 25A                |                    |                    |                    |                    |
| Power Tolerance                 | 0~+5W              |                    |                    |                    |                    |
| Bifaciality                     | 85% ± 5%           |                    |                    |                    |                    |

\*STC: Irradiance 1000 W/m<sup>2</sup>, cell temperature 25 °C, AM=1.5. Tolerance of Pmax is within +/- 3%.

## Temperature Characteristics

|                                     |              |
|-------------------------------------|--------------|
| Nominal Operating Cell Temp. (NOCT) | 44 °C ± 2 °C |
| Temperature Coefficient of Pmax     | -0.26%/°C    |
| Temperature Coefficient of Voc      | -0.24%/°C    |
| Temperature Coefficient of Isc      | 0.04%/°C     |

## Safety & Warranty

|                      |                         |
|----------------------|-------------------------|
| Safety Class         | Class II                |
| Product Warranty     | 15 yrs Workmanship      |
| Performance Warranty | 30 yrs Linear Warranty* |

\* Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.

## Mechanical Characteristics

|                  |   |
|------------------|---|
| Cell Type        | HJT Mono 182 × 91.75mm  |
| Cell Connection  | 144 (6 × 24)  |
| Module Dimension | 2278 × 1134 × 30 mm   |
| Weight           | 32 kg   |
| Junction Box     | IP68  |
| Output Cable     | 4mm <sup>2</sup> , 300mm in length, length can be customized / UV resistant |
| Connectors Type  | MC4 original / MC4 compatible   |
| Frame            | Anodised aluminum alloy   |
| Front Load       | 5400 Pa   |
| Rear Load        | 2400 Pa   |
| Glass Thickness  | Double glass, 2.0mm   |