

# WE-132G12RHC620W-650W

## Small in size, bigger on power

- Up to 650W, 24.1% module efficiency with high density interconnect technology
- Reduce installation cost with higher power bin and efficiency
- Boost performance in warm weather with low temperature coefficient and operating temperature

## High customer value

- Lower LCOE, reduced BOS cost, better ROI
- Lowest guaranteed first year and annual degradation
- Optimized compatibility with existing mainstream system components

## High output power

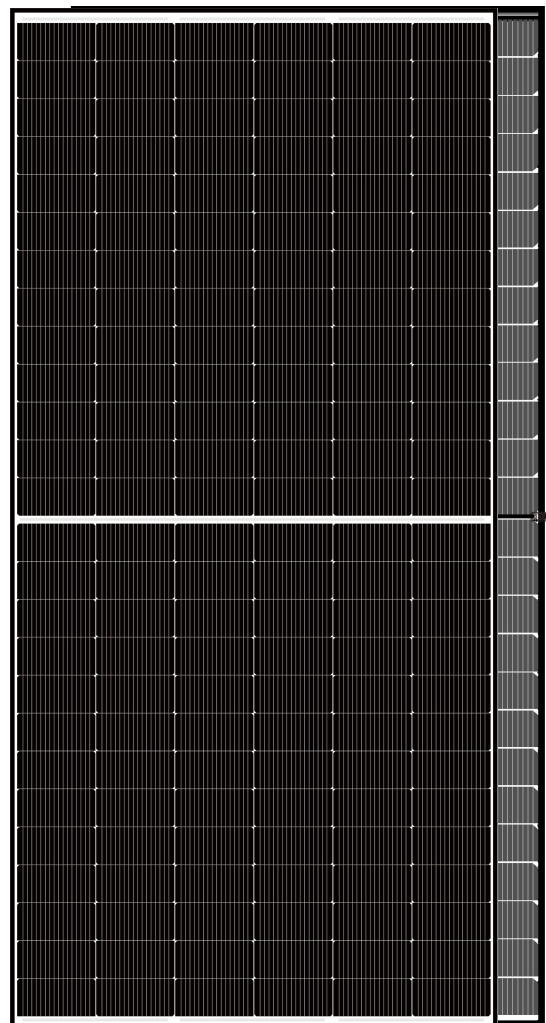
- Based on G12R-210mm solar cells with N-type TopCon technology
- High density interconnection provides improved power density
- MBB technology improves light-trapping effect and current-collection, while lowering series resistance

## High reliability

- Minimized micro-cracks with innovative non-destructive cutting technology minimizes micro-cracking
- Ensured PID resistance through improved cell process and module material control
- Resistant to harsh environments
- Mechanical performance up to +5400/-2400 Pa

## Longer warranty

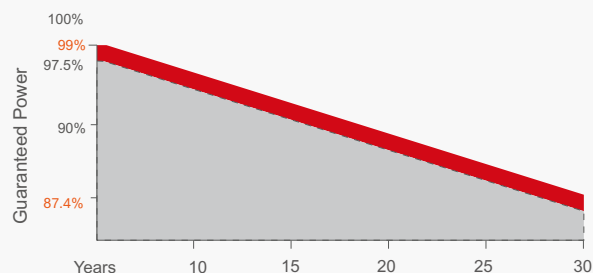
- First-year degradation 1% and annual degradation at 0.4%
- Up to 12 years product warranty and 30 years power warranty



## PRODUCT Warranty

**12 YEARS** Product Warranty

**30 YEARS** Performance guarantee

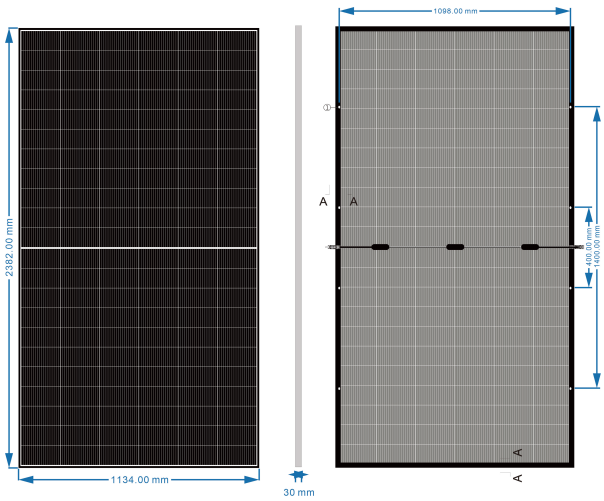


From the 2nd year to the 30th year, the average annual power decline will be no more than 0.4%.

# G12R-BIFACIAL 620W-650W

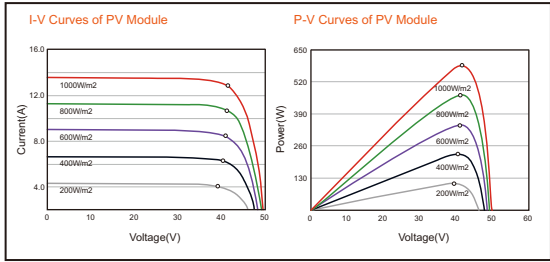
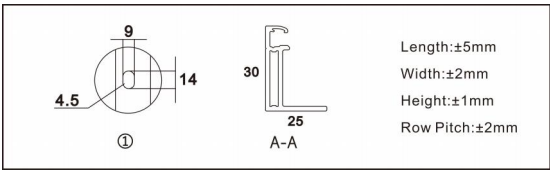
## MECHANICAL PARAMETERS

|               |                                                      |
|---------------|------------------------------------------------------|
| Cell Type     | N-Type TopCon Half-cut Cell                          |
| No. of Cells  | 132                                                  |
| Front Cover   | 2.0 mm glass, high transmission, AR coated, tempered |
| Encapsulation | EVA                                                  |
| Back Cover    | 2.0mm,HeatStrengthenedGlass                          |
| Junction Box  | IP68 rated, 3 bypass diodes                          |
| Frame         | 30mm Composite frame                                 |
| Cable         | 1 x 4 mm <sup>2</sup> , 350 mm length or customized  |
| Connectors    | MC 4/ MC 4 compatible                                |
| Weight        | 32.5Kg                                               |
| Dimension     | 2382*1134*30mm                                       |
| Packaging     | 740pcs/40HQ Container                                |



## OPERATING PARAMETERS

|                                      |                               |
|--------------------------------------|-------------------------------|
| Operational Temperature              | -40~+85°C                     |
| Power Output Tolerance               | 0~5W                          |
| Voc and Isc Tolerance                | ±3%                           |
| Maximum System Voltage               | 1500VDC(IEC)                  |
| Maximum Series Fuse Rating           | 25A                           |
| Nominal Operational Cell Temperature | 43 ± 2°C                      |
| Protection Class                     | Class II                      |
| Fire Rating                          | UL type 1 or 2<br>IEC Class C |



## ELECTRICAL CHARACTERISTICS

| Module Type                      | WE-132G12RHC620W |       | WE-132G12RHC625W |       | WE-132G12RHC630W |       | WE-132G12RHC635W |       | WE-132G12RHC64W |       | WE-132G12RHC645W |       | WE132G12RHC650 |       |
|----------------------------------|------------------|-------|------------------|-------|------------------|-------|------------------|-------|-----------------|-------|------------------|-------|----------------|-------|
| Testing Condition                | STC NOCT         |       | STC NOCT         |       | STC NOCT         |       | STC NOCT         |       | STC NOCT        |       | STC NOCT         |       | STC NOCT       |       |
| Maximum Power(Pmax/W)            | 620W             | 479W  | 625W             | 483W  | 630W             | 479W  | 635W             | 483W  | 640W            | 487W  | 645W             | 491W  | 650W           | 495W  |
| Voltage at Maximum Power(Vmp/V)  | 41.10            | 39.00 | 41.30            | 39.20 | 41.50            | 39.00 | 41.70            | 39.20 | 41.90           | 39.40 | 42.10            | 39.60 | 42.30          | 39.80 |
| Current at Maximum Power(Impp/A) | 15.09            | 12.28 | 15.13            | 12.32 | 15.18            | 12.28 | 15.23            | 12.32 | 15.28           | 12.36 | 15.33            | 12.40 | 15.37          | 12.44 |
| Open Circuit Voltage(Voc/V)      | 49.20            | 47.00 | 49.40            | 47.20 | 49.60            | 47.00 | 49.80            | 47.20 | 50.00           | 47.40 | 50.20            | 47.60 | 50.40          | 47.80 |
| Short Circuit Current(sc/A)      | 15.94            | 12.97 | 15.98            | 13.00 | 16.03            | 12.97 | 16.08            | 13.00 | 16.14           | 13.05 | 16.19            | 13.09 | 16.23          | 13.12 |
| Module Efficiency(%)             | 22.90%           |       | 23.00%           |       | 23.30%           |       | 23.50%           |       | 23.70%          |       | 23.90%           |       | 24.10%         |       |

## MECHANICAL LOADING

|                 |                                  |
|-----------------|----------------------------------|
| Snow Load       | 5400 Pa or 550 kg/m <sup>2</sup> |
| Wind Load       | 2400 Pa or 244 kg/m <sup>2</sup> |
| Hail Resistance | Max. Ø 25 mm at 23 m/s           |

## TEMPERATURE RATINGS(STC)

|                                 |           |
|---------------------------------|-----------|
| Temperature Coefficient of Isc  | 0.04%/°C  |
| Temperature Coefficient of Voc  | -0.24%/°C |
| Temperature Coefficient of Pmax | -0.30%/°C |

## BifacialOutput-RearsidePowerGain

|     |                          |       |       |       |       |       |       |       |
|-----|--------------------------|-------|-------|-------|-------|-------|-------|-------|
| 5%  | Maximum Power (Pmax)     | 651W  | 656W  | 662W  | 667W  | 672W  | 677W  | 683W  |
|     | Module Efficiency STC(%) | 24.0% | 24.2% | 24.5% | 24.7% | 24.9% | 25.1% | 25.3% |
| 10% | Maximum Power (Pmax)     | 682W  | 688W  | 693W  | 699W  | 705W  | 710W  | 715W  |
|     | Module Efficiency STC(%) | 25.2% | 25.3% | 25.6% | 25.9% | 26.1% | 26.3% | 26.5% |



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