

## BIFACIAL MODULE WITH DUAL GLASS

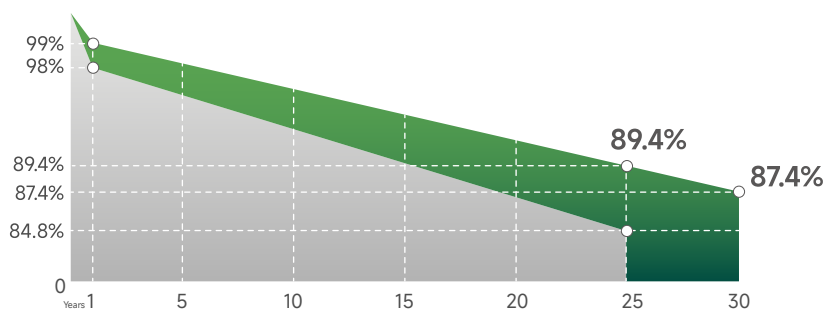
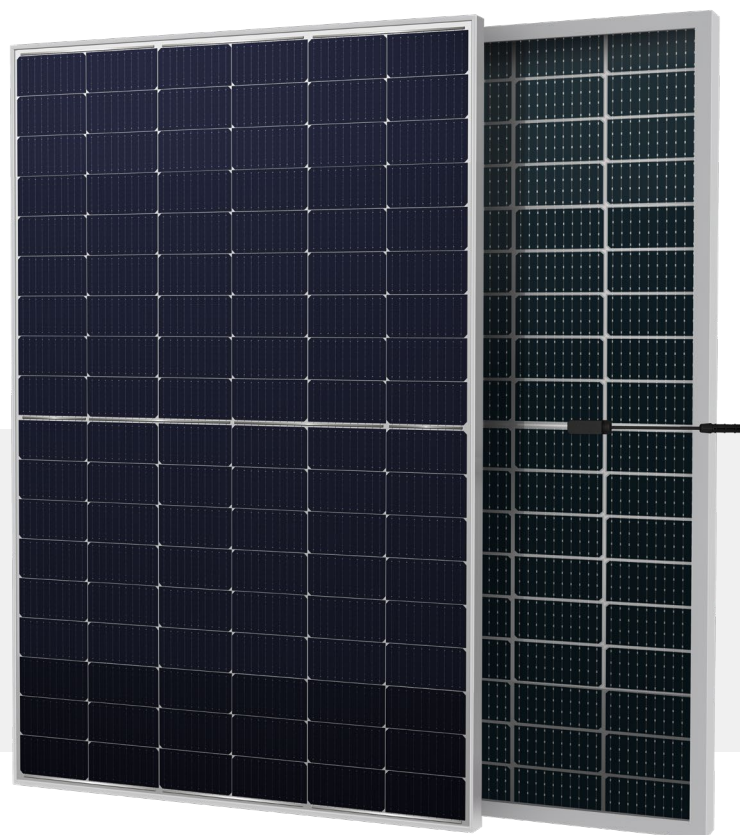
# RS41H-445~465NBG-E1

N-Type /Positive power tolerance of  $\pm 3\%$ /Max module efficiency 22.78%.

- Suitable for ground power plants and distributed projects
- Advanced module technology delivers superior module efficiency
  - Non destructive cutting · MBB half-cut
- Excellent power generation performance
  - Excellent IAM and low irradiation performance · Lower temperature coefficient
  - 0.40% linear Power decline
- High module quality ensures long-term reliability
  - Strict selected material · Advanced technology · Leading standard
- Ultra-hydrophilic self-cleaning coating techniques
- Enhanced Mechanical Load
  - Mechanical performance up to 5400pa positive load and 2400pa negative load

Complete System  
and IEC Product Certification

IEC 61215(2021), IEC 61730(2016) ISO9001:  
2015:Quality Management System ISO14001:  
2015:Environment Management System  
ISO45001:2018:Occupational Health  
and Safety Management System

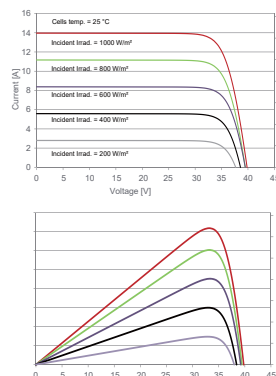
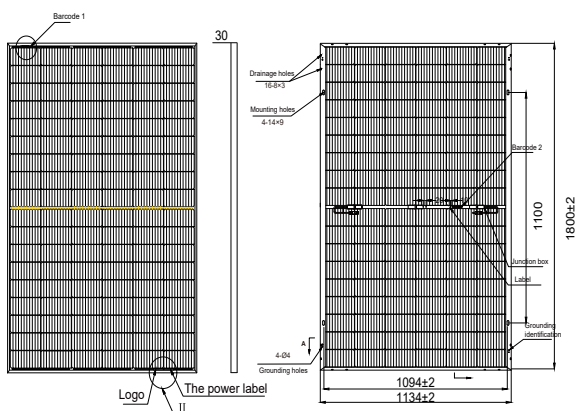


30-Year excess linear power output warranty

滚滚长江东逝

# RS41H-445~465NBG-E1

BIFACIAL MODULE WITH DUAL GLASS



PV Connectors Make:Zerun Co.,Ltd.  
PV Connectors Model:Z4S-abcde

| Electrical Characteristics STC | RS41H-445NBG-E1 | RS41H-450NBG-E1 | RS41H-455NBG-E1 | RS41H-460NBG-E1 | RS41H-465NBG-E1 |
|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Maximum Power(Pmax)            | 445W            | 450W            | 455W            | 460W            | 465W            |
| Power Sorting Tolerance        | 0~+5W           | 0~+5W           | 0~+5W           | 0~+5W           | 0~+5W           |
| Module Efficiency              | 21.80%          | 22.05%          | 22.30%          | 22.54%          | 22.78%          |
| Maximum Power Current(Imp)     | 13.55A          | 13.63A          | 13.70A          | 13.78A          | 13.85A          |
| Maximum Power Voltage(Vmp)     | 32.87V          | 33.08V          | 33.28V          | 33.49V          | 33.70V          |
| Short Circuit Voltage(Isc)     | 14.18A          | 14.25A          | 14.32A          | 14.39A          | 14.46A          |
| Open Circuit Voltage(Voc)      | 39.71V          | 39.91V          | 40.11V          | 40.31V          | 40.51V          |

Values at Standard Test Conditions STC(AM1.5, Irradiance 1000W/m², Cell Temperature 25°C)  
Tolerance of Power/Voc/ISC : ±3%/±3%/±3%

| Electrical Characteristics BNPI | RS41H-445NBG-E1 | RS41H-450NBG-E1 | RS41H-455NBG-E1 | RS41H-460NBG-E1 | RS41H-465NBG-E1 |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Maximum Power(Pmax)             | 493W            | 500W            | 505W            | 510W            | 515W            |
| Maximum Power Current(Imp)      | 15.01A          | 15.10A          | 15.18A          | 15.27A          | 15.35A          |
| Maximum Power Voltage(Vmp)      | 32.87V          | 33.08V          | 33.28V          | 33.49V          | 33.70V          |
| Short Circuit Voltage(Isc)      | 15.71A          | 15.79A          | 15.87A          | 15.94A          | 16.02A          |
| Open Circuit Voltage(Voc)       | 39.71V          | 39.91V          | 40.11V          | 40.31V          | 40.51V          |

Short-circuit current bifaciality coefficient:(80±5)%; open circuit voltage bifaciality coefficient:(98±5)%; maximum power bifaciality coefficient:(80±5)%;

| Electrical Characteristics with 21% rear side power gain | RS41H-445NBG-E1 | RS41H-450NBG-E1 | RS41H-455NBG-E1 | RS41H-460NBG-E1 | RS41H-465NBG-E1 |
|----------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Maximum Power(Pmax)                                      | 538.45W         | 544.5W          | 550.55W         | 556.6W          | 562.65W         |
| Maximum Power Current(Imp)                               | 16.40A          | 16.49A          | 16.58A          | 16.67A          | 16.76A          |
| Maximum Power Voltage(Vmp)                               | 32.87V          | 33.08V          | 33.28V          | 33.49V          | 33.70V          |
| Short Circuit Voltage(Isc)                               | 17.16A          | 17.24A          | 17.33A          | 17.41A          | 17.50A          |
| Open Circuit Voltage(Voc)                                | 39.71V          | 39.91V          | 40.11V          | 40.31V          | 40.51V          |

## Mechanical Characteristics

|                            |                                                   |
|----------------------------|---------------------------------------------------|
| Cell Type                  | MonoN-Type,108(6×18)Half-Cut cells                |
| Glass                      | 2mm+2mm,High Transmission,Low Iron,Tempered Glass |
| Frame                      | Anodized Aluminum Alloy                           |
| Junction Box               | IP68 Rated, With Bypass Diodes                    |
| Dimension                  | 1800×1134×30mm                                    |
| Output Cable               | 4 mm2 (EU),300 mm,length can be customized        |
| Weight                     | 25.4kg                                            |
| Installation Hole Location | See Drawing Above                                 |

## Packing Information

|                       |        |
|-----------------------|--------|
| Container             | 40' HQ |
| Pallets per Container | 26     |
| Pieces per Container  | 936    |

## Characteristics

|                                           |             |
|-------------------------------------------|-------------|
| Temperature Coefficient of Voc            | -0.25%/°C   |
| Temperature Coefficient of Isc            | +0.045%/°C  |
| Temperature Coefficient of Pmax           | -0.29%/°C   |
| Nominal Operating Cell Temperature (NOCT) | 45°C±2°C    |
| Fire Performance                          | IEC Class C |

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.

## Maximum Ratings

|                            |             |
|----------------------------|-------------|
| Operating Temperature      | -40°C~+85°C |
| Maximum System Voltage     | 1500VDC     |
| Maximum Series Fuse Rating | 30A         |

