

## HY-DH132N11

# 600-630W

**23.3%**

Max. Efficiency

**N-Type**

Bifacial & Dual Glass

**132 Pieces**

Half-Cell



### Leading Technology

Based on n-type cell and 210R technology platform; Advanced design and manufacturing process; Industry leading reliability and efficiency of mass production



### High Power

Bifacial higher power output, lower temperature coefficient and better low light performance; Significantly enhanced power output and lower LCOE



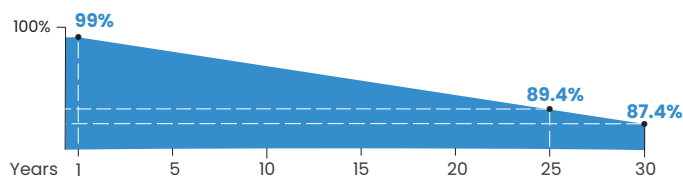
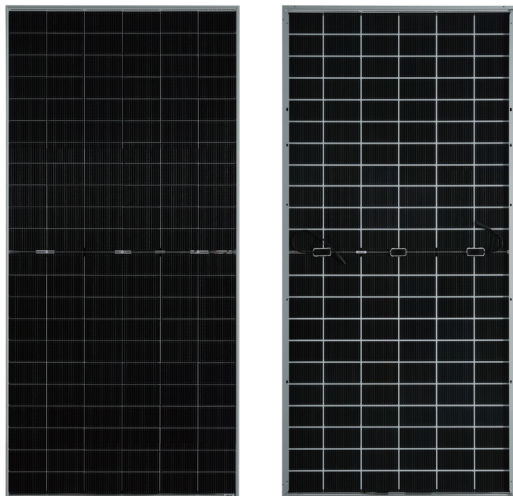
### Long-term Reliability

Unsusceptible to LID, LeTID and lower PID degradation; 5400Pa snow load, 2400Pa wind load, and 35mm hail-resistant with 27.2m/s strike



### Stringent Quality Control

Durable product structure; Stringent quality control system; Guaranteed after-sales service to ensure long-term reliability



Runergy N-Type Dual Glass Product Performance Warranty

• 1st year degradation <1%, annual degradation <0.4%



12-year product warranty



30-year linear power warranty

IEC61215 / IEC61730 / UL61730 / IEC61701 / IEC62716 / IEC60068 / ISO9001 / ISO14001 / ISO45001



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| Mechanical Parameters |                                                                 |
|-----------------------|-----------------------------------------------------------------|
| Solar Cell            | Mono N-Type 182*210 mm                                          |
| No. of Cells          | 132 (6 × 22)                                                    |
| Dimensions            | 2382 × 1134 × 30mm                                              |
| Weight                | 32.4kg                                                          |
| Junction Box          | IP68 rated (3 bypass diodes)                                    |
| Output Cable          | 4mm <sup>2</sup> (IEC), 12 AWG(UL)<br>+400/-200mm or customized |
| Connector             | RY01 or similar                                                 |
| Front Cover           | 2.0mm AR coated heat-strengthened glass                         |
| Back Cover            | 2.0mm heat-strengthened glass                                   |
| Frame                 | Silver-anodized aluminum                                        |
| Container             | 36 pcs/pallet,<br>720 pcs/40' HQ (Global)                       |

| Operating Parameters    |                         |
|-------------------------|-------------------------|
| Max. System Voltage     | DC 1500V (IEC/UL)       |
| Operating Temperature   | -40℃ ~ +85℃             |
| Max. Fuse Rating        | 35A                     |
| Front/Back Max. Loading | 5400Pa/2400Pa           |
| Bifaciality             | 80%±5%                  |
| Hail Test               | 35mm, 27.2 m/s.         |
| Fire Resistance         | IEC Class A/ UL Type 29 |

| Electrical Characteristics - STC  | Irradiance 1000 W/m <sup>2</sup> , cell temperature 25 °C, AM-1.5, Test uncertainty for Pmax: ±3% |       |       |       |       |       |       |
|-----------------------------------|---------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|
| Maximum Power at STC (Pmax/W)     | 630                                                                                               | 625   | 620   | 615   | 610   | 605   | 600   |
| Power Tolerance (W)               | 0 ~ +5                                                                                            |       |       |       |       |       |       |
| Optimum Operating Voltage (Vmp/V) | 41.89                                                                                             | 41.62 | 41.34 | 41.06 | 40.78 | 40.50 | 40.22 |
| Optimum Operating Current (Imp/A) | 15.04                                                                                             | 15.02 | 15.00 | 14.98 | 14.96 | 14.94 | 14.92 |
| Open Circuit Voltage (Voc/V)      | 49.31                                                                                             | 49.11 | 48.91 | 48.71 | 48.51 | 48.31 | 48.11 |
| Short Circuit Current (Isc/A)     | 15.96                                                                                             | 15.93 | 15.90 | 15.87 | 15.84 | 15.81 | 15.78 |
| Module Efficiency                 | 23.3%                                                                                             | 23.1% | 23.0% | 22.8% | 22.6% | 22.4% | 22.2% |

| Electrical Characteristics - BNPI | Irradiance: front 1000W/m <sup>2</sup> , rear 135W/m <sup>2</sup> , Cell temperature 25 °C, AM-1.5. |       |       |       |       |       |       |
|-----------------------------------|-----------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|
| Maximum Power at BNPI (Pmax/W)    | 693                                                                                                 | 688   | 683   | 677   | 671   | 666   | 660   |
| Optimum Operating Voltage (Vmp/V) | 41.89                                                                                               | 41.62 | 41.34 | 41.06 | 40.78 | 40.50 | 40.22 |
| Optimum Operating Current (Imp/A) | 16.55                                                                                               | 16.53 | 16.51 | 16.49 | 16.46 | 16.44 | 16.42 |
| Open Circuit Voltage (Voc/V)      | 49.43                                                                                               | 49.23 | 49.03 | 48.83 | 48.63 | 48.43 | 48.23 |
| Short Circuit Current (Isc/A)     | 17.59                                                                                               | 17.56 | 17.53 | 17.49 | 17.46 | 17.43 | 17.40 |

| Rearside Power Gain               | (Reference to 615W Front) |       |       |
|-----------------------------------|---------------------------|-------|-------|
| Rearside Power Gain               | 5%                        | 15%   | 25%   |
| Maximum Power (Pmax/W)            | 646                       | 707   | 769   |
| Optimum Operating Voltage (Vmp/V) | 41.06                     | 41.16 | 41.16 |
| Optimum Operating Current (Imp/A) | 15.73                     | 17.18 | 18.68 |
| Open Circuit Voltage (Voc/V)      | 48.71                     | 48.81 | 48.81 |
| Short Circuit Current (Isc/A)     | 16.66                     | 18.21 | 19.79 |
| Module Efficiency                 | 23.9%                     | 26.2% | 28.5% |

| Temperature Characteristics          |           |
|--------------------------------------|-----------|
| Nominal Module Operating Temperature | 42 ± 2 °C |
| Nominal Cell Operating Temperature   | 45 ± 2 °C |
| Temperature Coefficient of Pmax      | -0.29%/°C |
| Temperature Coefficient of Voc       | -0.25%/°C |
| Temperature Coefficient of Isc       | 0.045%/°C |

