

RUNERGY

HY-DH132N11 Plus 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

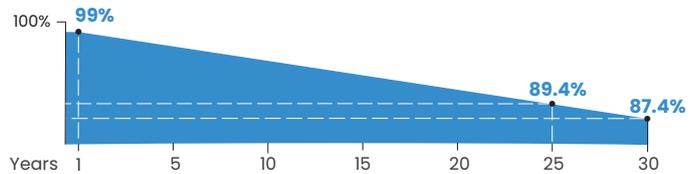
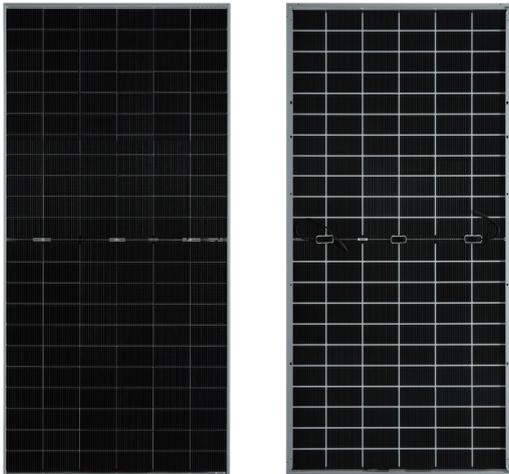
Bifacial higher power output, lower temperature coefficient and better low light performance; Significantly enhanced power output and lower LCOE

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 12-year product warranty

30 30-year linear power warranty

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



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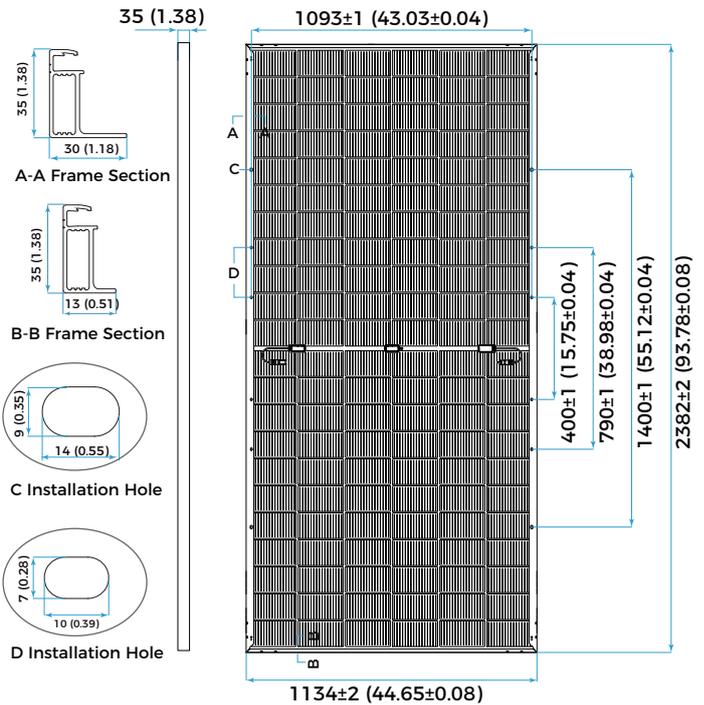
Unit: mm (inch)

Mechanical Parameters

| | |
|--------------|---|
| Solar Cell | Mono N-Type 182*210 mm |
| No. of Cells | 132 (6 × 22) |
| Dimensions | 2382 × 1134 × 35mm (93.78 × 44.65 × 1.38in.) |
| Weight | 33.0kg (72.75lbs) |
| Junction Box | IP68 rated (3 bypass diodes) |
| Output Cable | 4mm ² (IEC), 12 AWG(UL) +400/-200mm (+15.75/-7.87in.) 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 | 31 pcs/pallet, 620pcs/40' HQ (Global) 558 pcs/40' HQ (US) |

Operating Parameters

| | |
|-------------------------|--|
| Max. System Voltage | DC 1500V (IEC/UL) |
| Operating Temperature | -40°C ~ +85°C (-40°F ~ +185°F) |
| Max. Fuse Rating | 35A |
| Front/Back Max. Loading | 5400Pa (112lb/ft ²)/2400Pa (50lb/ft ²) |
| Bifaciality | 80%±5% |
| Hail Test | 35mm, 27.2 m/s. |
| Fire Resistance | IEC Class A/ UL Type 29 |



Electrical Characteristics - STC

Irradiance 1000 W/m², cell temperature 25 °C, AM-1.5, Test uncertainty for Pmax: ±3%

| | 630 | 625 | 620 | 615 | 610 | 605 | 600 |
|-----------------------------------|--------|-------|-------|-------|-------|-------|-------|
| 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/m², rear 135W/m², Cell temperature 25 °C, AM-1.5.

| | 693 | 688 | 683 | 677 | 671 | 666 | 660 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|
| 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)

| | 5% | 15% | 25% |
|-----------------------------------|-------|-------|-------|
| 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 |

