

RUNERGY

TIER 1 HY-DH144N8 565-585W

22.6%

Max. Efficiency

N-Type

Bifacial & Dual Glass

144 Pieces

Half-Cell



High Conversion Efficiency

Module efficiency up to 22.6% based on N-Type wafer and advanced N-Type cell technology



Excellent Energy Yield

More power output in field operation due to better thermal behaviors, weak-light performance and bifaciality



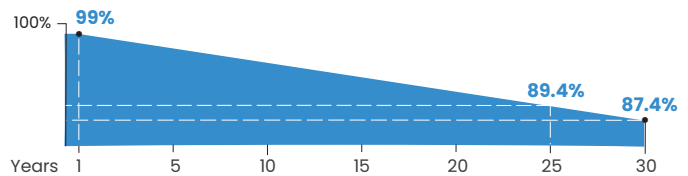
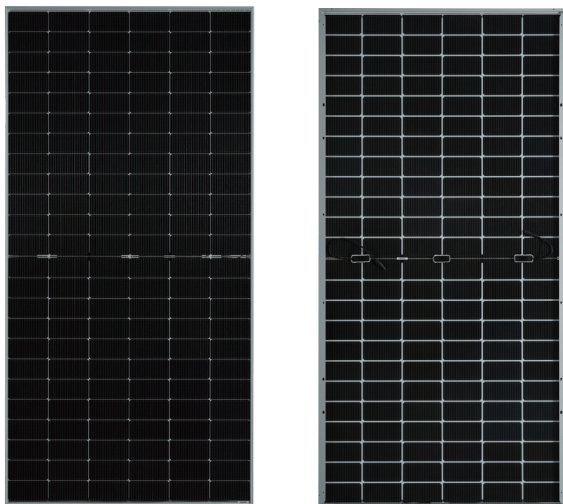
Outstanding Anti-degradation

Unsusceptible to LID, LeTID and less annual degradation due to special characteristics of N-Type



Quality Guarantee

High module quality ensures long-term reliability



Runergy N-Type Dual Glass Product Performance Warranty

- **12 Years** warranty for materials and workmanship
- **30 Years** warranty for extra linear power output
- 1st year < **1%**, annual degradation < **0.4%**

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



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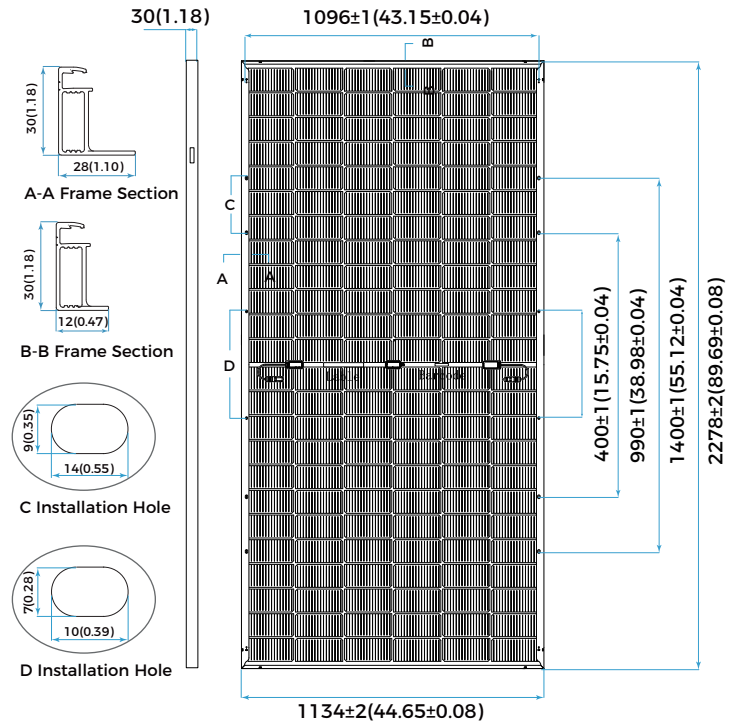
Unit: mm(inch)

Mechanical Parameters

| | |
|--------------|---|
| Solar Cell | Mono N-Type 182mm |
| No. of Cells | 144 (6 × 24) |
| Dimensions | 2278 × 1134 × 30mm(89.69× 44.65 × 1.18in.) |
| Weight | 32kg(70.55lbs) |
| 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 (0.079in.)semi-tempered AR glass |
| Back Cover | 2.0mm (0.079in.)semi-tempered glass |
| Container | 36 pcs/Pallet, 720 pcs/40' HQ |

Operating Parameters

| | |
|------------------------|--------------------------------|
| Max. System Voltage | DC 1500V (IEC/UL) |
| Operating Temperature | -40°C ~ +85°C(-40°F ~ +185°F) |
| Max. Fuse Rating | 30A |
| Frontside Max. Loading | 5400Pa(112lb/ft ²) |
| Backside Max. Loading | 2400Pa(50lb/ft ²) |
| Bifaciality | 80%±10% |
| Fire Resistance | IEC Class A |



Electrical Characteristics - STC

Irradiance 1000 W/m², cell temperature 25 °C, AM1.5, Test uncertainty for Pmax: ±3%

| | 585 | 580 | 575 | 570 | 565 |
|-----------------------------------|-------|-------|--------|-------|-------|
| Maximum Power at STC (Pmax/W) | 585 | 580 | 575 | 570 | 565 |
| Power Tolerance (W) | | | 0 ~ +5 | | |
| Optimum Operating Voltage (Vmp/V) | 44.22 | 44.04 | 43.83 | 43.62 | 43.43 |
| Optimum Operating Current (Imp/A) | 13.23 | 13.17 | 13.12 | 13.07 | 13.01 |
| Open Circuit Voltage (Voc/V) | 52.16 | 51.97 | 51.74 | 51.52 | 51.31 |
| Short Circuit Current (Isc/A) | 13.85 | 13.80 | 13.75 | 13.70 | 13.65 |
| Module Efficiency | 22.6% | 22.5% | 22.3% | 22.1% | 21.9% |

Electrical Characteristics - NMOT

Irradiance 800 W/m², ambient temperature 20 °C, AM1.5, wind speed 1 m/s.

| | 448.1 | 444.2 | 440.4 | 436.6 | 432.7 |
|-----------------------------------|-------|-------|-------|-------|-------|
| Maximum Power at NMOT (Pmax/W) | 448.1 | 444.2 | 440.4 | 436.6 | 432.7 |
| Optimum Operating Voltage (Vmp/V) | 42.34 | 42.17 | 41.97 | 41.77 | 41.58 |
| Optimum Operating Current (Imp/A) | 10.58 | 10.53 | 10.49 | 10.45 | 10.41 |
| Open Circuit Voltage (Voc/V) | 49.94 | 49.76 | 49.54 | 49.33 | 49.13 |
| Short Circuit Current (Isc/A) | 11.16 | 11.12 | 11.08 | 11.04 | 11.00 |

Rearside Power Gain (Reference to 585W Front)

| | 5% | 15% | 25% |
|-----------------------------------|-------|-------|-------|
| Rearside Power Gain | 5% | 15% | 25% |
| Maximum Power (Pmax/W) | 614 | 673 | 731 |
| Optimum Operating Voltage (Vmp/V) | 44.22 | 44.32 | 44.32 |
| Optimum Operating Current (Imp/A) | 13.89 | 15.18 | 16.50 |
| Open Circuit Voltage (Voc/V) | 52.16 | 52.26 | 52.26 |
| Short Circuit Current (Isc/A) | 14.54 | 15.90 | 17.28 |
| Module Efficiency | 23.8% | 26.1% | 28.3% |

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 |

