

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

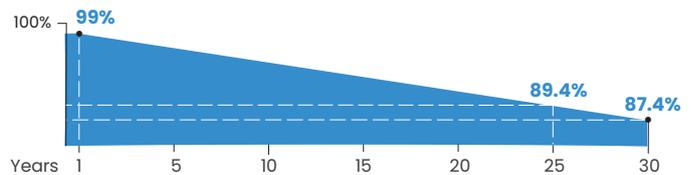
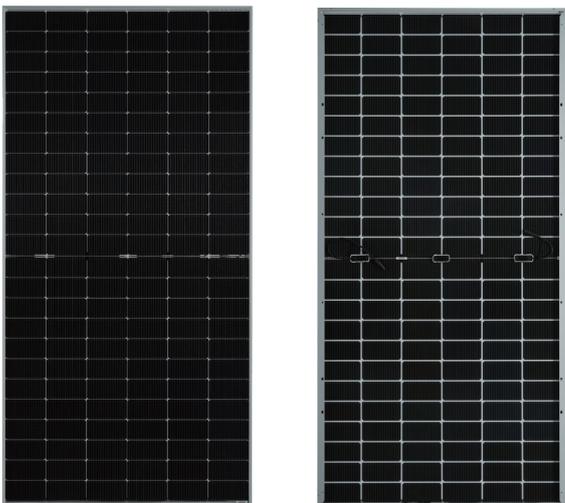
More power output in field operation due to better thermal behaviors, weak-light performance and bifaciality

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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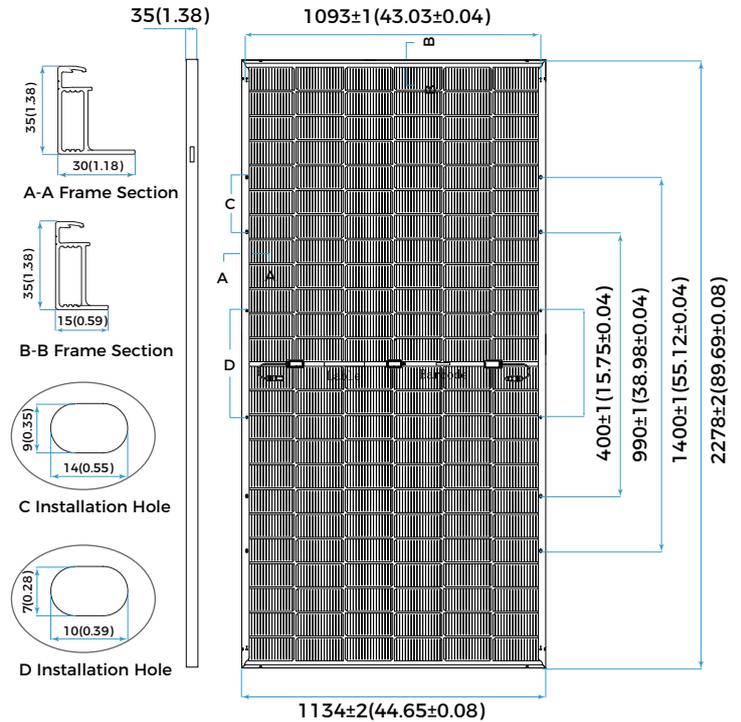
Unit: mm(inch)

Mechanical Parameters

Solar Cell	Mono N-Type 182mm
No. of Cells	144 (6 × 24)
Dimensions	2278 × 1134 × 35mm(89.69× 44.65 × 1.38in.)
Weight	32.7kg(72.09lbs)
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	31 pcs/Pallet, 558 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	UL Type 29



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.

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)

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

