

RUNERGY

HY-DH144N8 **Pro**

580-600W

23.2%

Max. Efficiency

N-Type

Bifacial & Dual Glass

144 Pieces

Half-Cell



Leading Technology

Based on n-type cell and 182 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



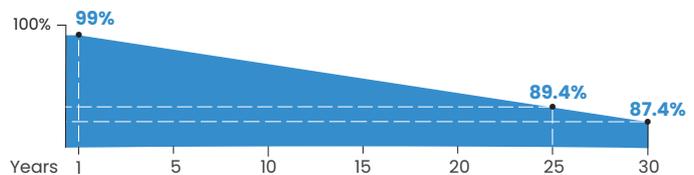
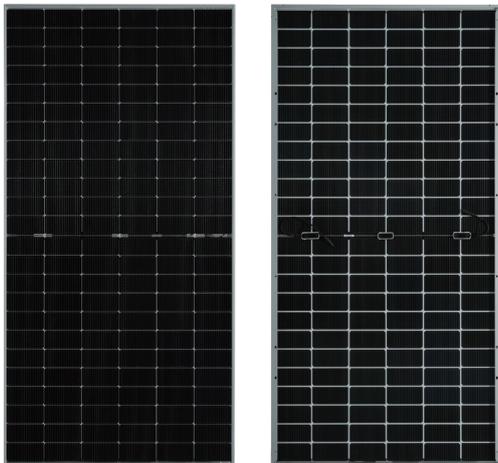
Enhanced Hail-resistance

Thickened fully tempered front glass to be resistant to 55mm hails with 33.9m/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



www.runergy.com
sales-inform@runergy.com

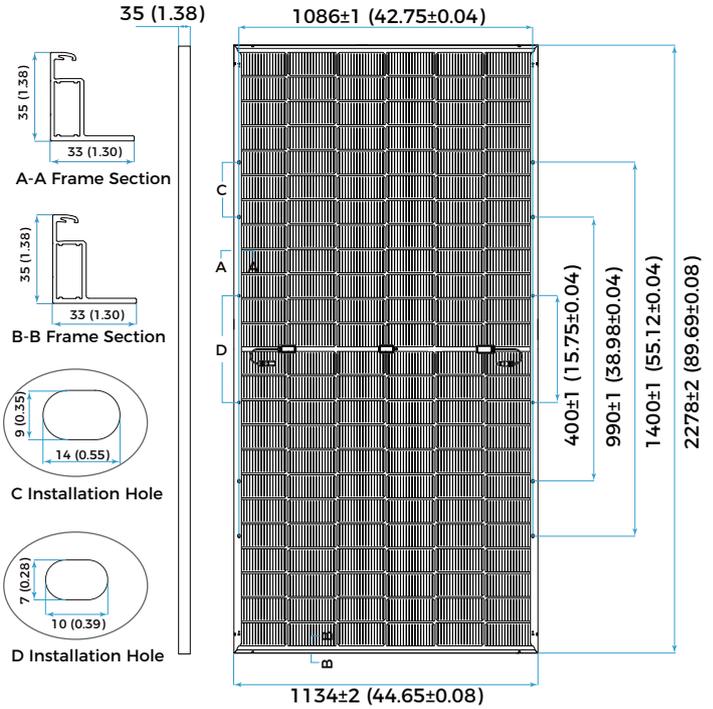
Unit: mm (inch)

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	40.5kg(89.28lbs)
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	3.2mm AR coated tempered glass
Back Cover	2.0mm heat-strengthened glass
Frame	Silver-anodized aluminum
Container	31 pcs/Pallet, 589 pcs/40' HQ (Global) ,465 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	30A
Front/Back Max. Loading	6000Pa (112lb/ft ²)/3600Pa (50lb/ft ²)
Bifaciality	80%±5%
Hail Test	55mm, 33.9 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%

Maximum Power at STC (Pmax/W)	600	595	590	585	580
Power Tolerance (W)			0 ~ +5		
Optimum Operating Voltage (Vmp/V)	44.85	44.64	44.43	44.22	44.04
Optimum Operating Current (Imp/A)	13.38	13.33	13.28	13.23	13.17
Open Circuit Voltage (Voc/V)	52.79	52.58	52.37	52.16	51.97
Short Circuit Current (Isc/A)	13.97	13.93	13.89	13.85	13.80
Module Efficiency	23.2%	23.0%	22.8%	22.6%	22.5%

Electrical Characteristics - BNPI

Irradiance: front 1000W/m², rear 135W/m², Cell temperature 25 °C, AM-1.5.

Maximum Power at BNPI (Pmax/W)	661	655	650	644	638
Optimum Operating Voltage (Vmp/V)	44.85	44.64	44.43	44.22	44.04
Optimum Operating Current (Imp/A)	14.73	14.67	14.62	14.56	14.49
Open Circuit Voltage (Voc/V)	52.92	52.71	52.50	52.29	52.10
Short Circuit Current (Isc/A)	15.40	15.36	15.31	15.27	15.21

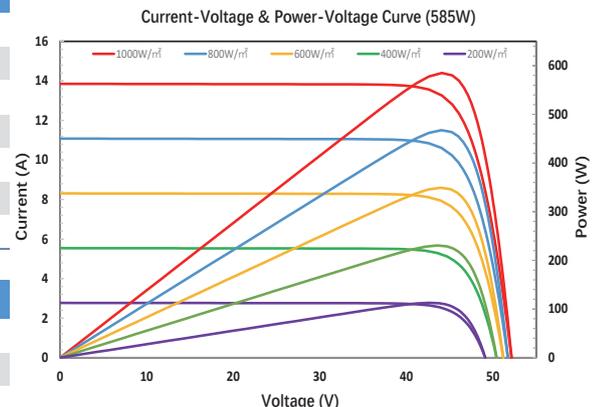
Rearside Power Gain

(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



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