

# RUNERGY

## HY-DH144N8 **Plus** 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**

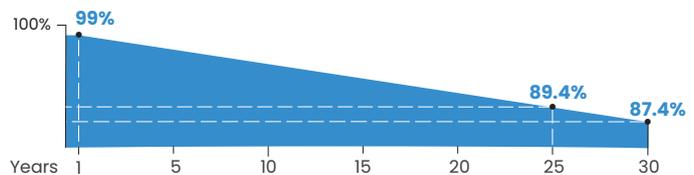
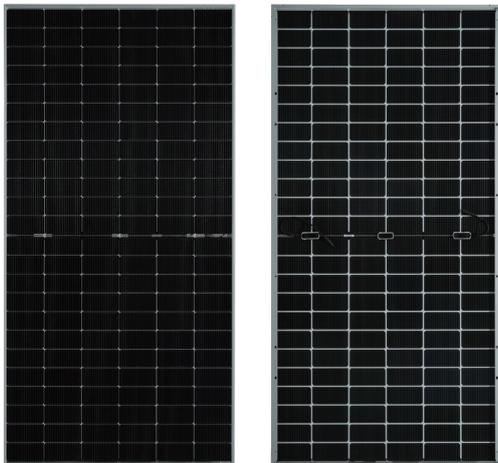
Bifacial higher power output, lower temperature coefficient and better low light performance; Significantly enhanced power output and lower LCOE

### **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

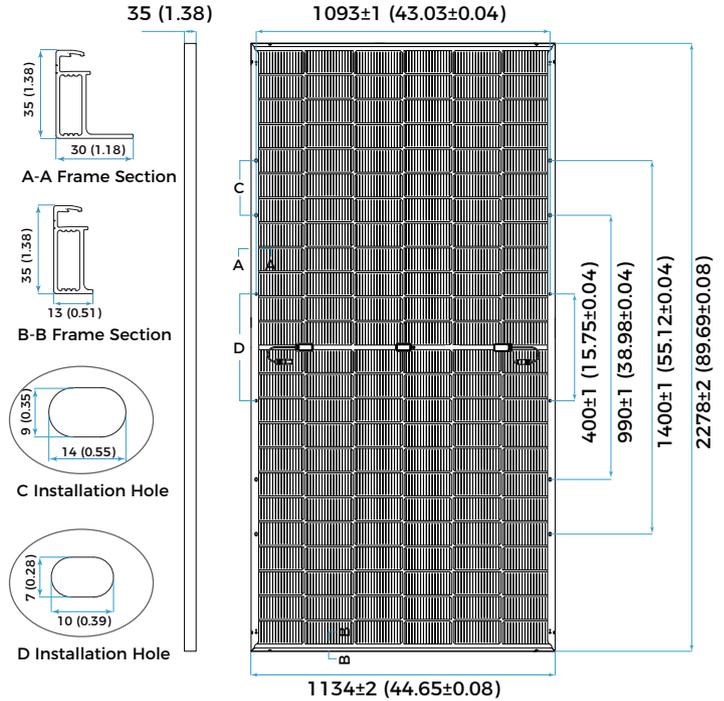


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Unit: mm (inch)

## 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 <sup>2</sup> (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, 620 pcs/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	30A
Front/Back Max. Loading	5400Pa (112lb/ft <sup>2</sup> )/2400Pa (50lb/ft <sup>2</sup> )
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)	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/m<sup>2</sup>, rear 135W/m<sup>2</sup>, 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

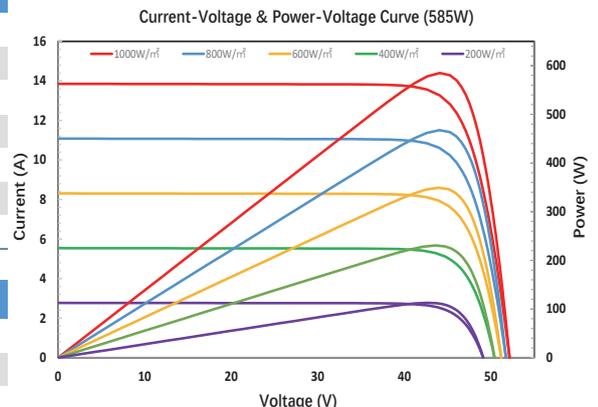
## Rearside Power Gain

(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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