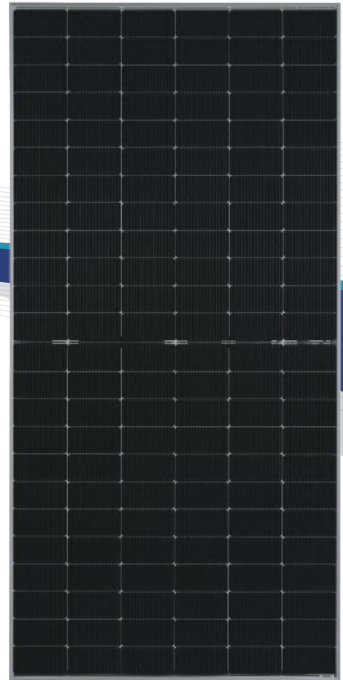


# HY-DH144N8

# 560-580W

144 Pieces | HALF-CELL | N-Type

**RUNERGY**  
MADE IN THAILAND/CHINA



**22.5%**  
Max. Efficiency  
**N-Type**  
Bifacial & Dual Glass



### High Conversion Efficiency

Module efficiency up to 22.5% 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 and less annual degradation due to special characteristics of N-Type



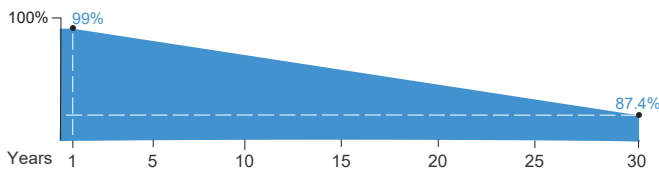
### Quality Guarantee

High module quality ensures long-term reliability



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

Evidence for IEC61701/62716/60068 is available on request.



Runergy N-Type Dual Glass Product Performance Warranty

**12** Years Product Warranty

**30** Years Linear Power Warranty

**1%** First Year Degradation

**0.4%** Annual Power Degradation

Jiangsu Runergy New Energy Technology Co., Ltd.  
58 Xiangjiang Road, Economic Development Zone,  
Yancheng City, Jiangsu Province, 224000, China

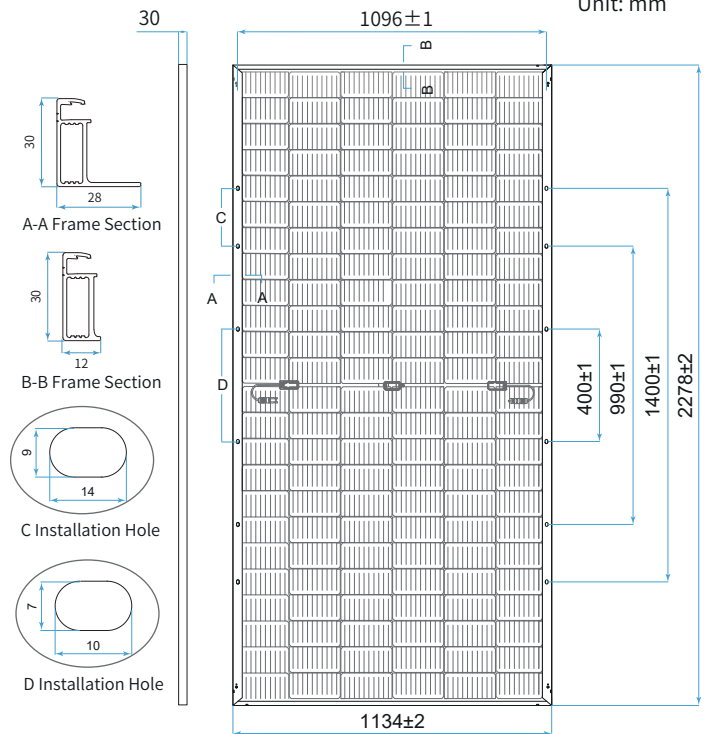
sales-inform@runergy.cn  
www.runergy-solar.com

## Mechanical Parameters

Solar Cell	Mono N-Type 182 mm
No. of Cells	144(6 × 24)
Dimensions	2278 × 1134 × 30mm
Weight	32.0kg
Junction Box	IP68 rated (3 bypass diodes)
Output Cable	4mm <sup>2</sup> (IEC), 12 AWG(UL) +400/-200mm or customized
Connector	RY01, QC4.10, GT4, PV-KST4-EVO 2/xy_UR, PV-KBT4-EVO 2/xy_UR
Front Cover	2.0mm semi-tempered AR glass
Back Cover	2.0mm semi-tempered glass
Container	36 pcs/Pallet, 720 pcs/40' HC

## Operating Parameters

Max. System Voltage	DC 1500V (IEC/UL)
Operating Temperature	-40°C ~ +85°C
Max. Fuse Rating	30A
Frontside Max. Loading	5400Pa
Backside Max. Loading	2400Pa
Bifaciality	80%±10% (Pmax) 98%±2%(Voc) 80%±10%(Isc)
Fire Resistance	IEC Class A



## Electrical Characteristics - STC

Irradiance 1000 W/m<sup>2</sup>, ambient temperature 25 °C, AM1.5, Test uncertainty for Pmax: ±3%

Maximum Power at STC (Pmax/W)	580	575	570
Power Tolerance (W)		0 ~ +5	
Optimum Operating Voltage (Vmp/V)	42.59	42.44	42.29
Optimum Operating Current (Imp/A)	13.62	13.55	13.48
Open Circuit Voltage (Voc/V)	51.47	51.27	51.07
Short Circuit Current (Isc/A)	14.37	14.31	14.25
Module Efficiency	22.5%	22.3%	22.1%

## Electrical Characteristics - BNPI

Maximum Power at NMOT (Pmax/W)	635	630	625
Optimum Operating Voltage (Vmp/V)	42.44	42.29	42.14
Optimum Operating Current (Imp/A)	15.00	14.92	14.84
Open Circuit Voltage (Voc/V)	51.40	51.20	50.99
Short Circuit Current (Isc/A)	15.87	15.80	15.73

## Rearside Power Gain (Reference to 580W Front)

Rearside Power Gain	5%	15%	25%
Maximum Power (Pmax/W)	609	667	725
Optimum Operating Voltage (Vmp/V)	42.59	42.69	42.69
Optimum Operating Current (Imp/A)	14.30	15.62	16.98
Open Circuit Voltage (Voc/V)	51.47	51.57	51.57
Short Circuit Current (Isc/A)	15.09	16.49	17.93
Module Efficiency	23.6%	25.8%	28.1%

## Temperature Characteristics

Nominal Module Operating Temperature	42 ± 2 °C
Nominal Cell Operating Temperature	45 ± 2 °C
Temperature Coefficient of Pmax	-0.31%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	0.05%/°C

