

RUNERGY

TIER1 HY-DH144N8 570-595W

23.0%

Max. Efficiency

N-Type

Bifacial & Dual Glass

144 Pieces

Half-Cell



High Conversion Efficiency

Module efficiency up to 23.0% 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



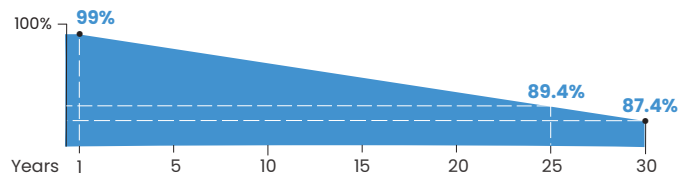
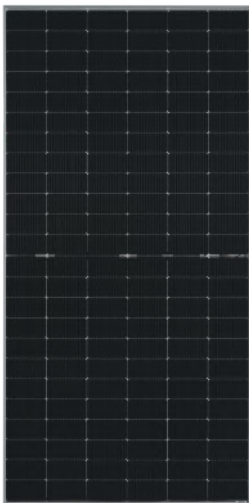
Outstanding Anti-degradation

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



Extended mechanical performance

Module certified to withstand extreme wind(2400Pa) and snow loads(5400Pa)



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

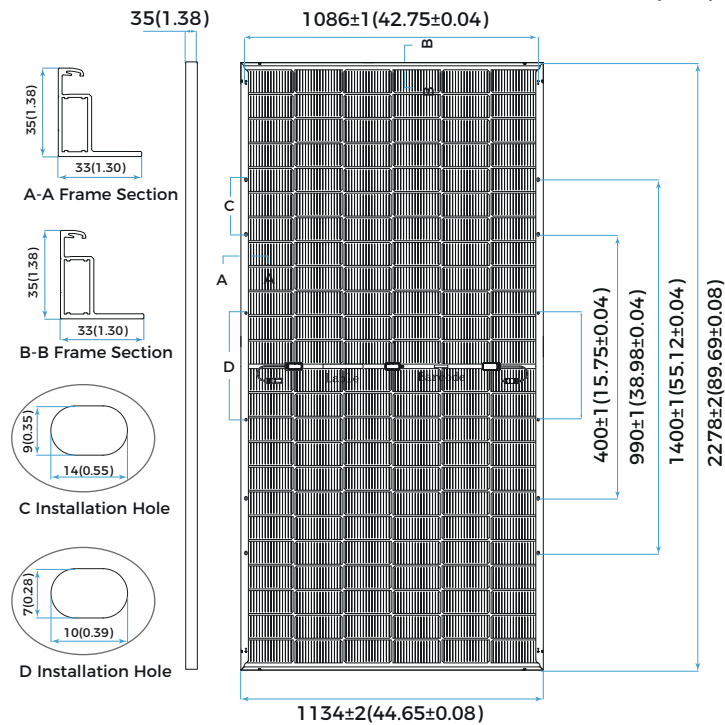


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Unit: mm(inch)

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	40.5kg(89.28lbs)
Junction Box	IP68 rated (3 bypass diodes)
Output Cable	4mm² (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	Aluminum, silver anodized
Container	31 pcs/Pallet, 465 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	7200Pa(150.4lb/ft²)
Backside Max. Loading	3600Pa(75.2lb/ft²)
Bifaciality	80±10%
Fire Resistance	IEC Class A/ UL Type 29



Electrical Characteristics - STC	Irradiance 1000 W/m², cell temperature 25 °C, AM1.5, Test uncertainty for Pmax: ±3%					
Maximum Power at STC (Pmax/W)	595	590	585	580	575	570
Power Tolerance (W)	0 ~ +5					
Optimum Operating Voltage (Vmp/V)	44.64	44.43	44.22	44.04	43.83	43.62
Optimum Operating Current (Imp/A)	13.33	13.28	13.23	13.17	13.12	13.07
Open Circuit Voltage (Voc/V)	52.58	52.37	52.16	51.97	51.74	51.52
Short Circuit Current (Isc/A)	13.93	13.89	13.85	13.80	13.75	13.70
Module Efficiency	23.0%	22.8%	22.6%	22.5%	22.3%	22.1%

Electrical Characteristics - NMOT	Irradiance 800 W/m², ambient temperature 20 °C, AM1.5, wind speed 1 m/s.					
Maximum Power at NMOT (Pmax/W)	455.7	451.9	448.1	444.2	440.4	436.6
Optimum Operating Voltage (Vmp/V)	42.74	42.54	42.34	42.17	41.97	41.77
Optimum Operating Current (Imp/A)	10.66	10.62	10.58	10.53	10.49	10.45
Open Circuit Voltage (Voc/V)	50.35	50.14	49.94	49.76	49.54	49.33
Short Circuit Current (Isc/A)	11.23	11.20	11.16	11.12	11.08	11.04

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

