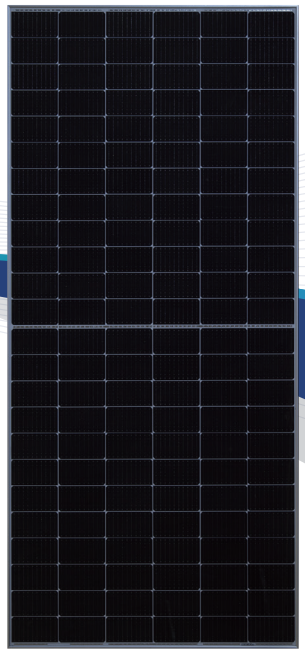
RUNERGY

HY-DH144P8

530-550W

144 Pieces | HALF-CELL | P-Type



21.3%
Max.Efficiency

P-Type
Bifacial & Dual Glass

High Conversion Efficiency

Module efficiency up to 21.3% achieved through advanced cell technology and manufacturing process

Excellent weak light performance

More power output in weak light condition, such as cloudy days, morning and sunset

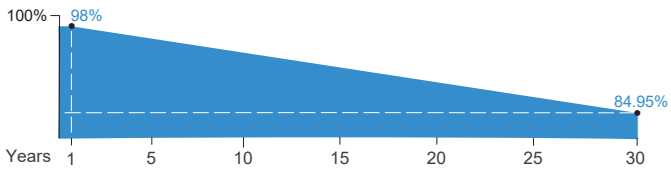
Extended mechanical performance

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

Quality Guarantee

High module quality ensures long-term reliability

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



Runergy P-Type Dual Glass Product Performance Warranty

12 Years Product Warranty

30 Years Linear Power Warranty

2% First Year Degradation

0.45% Annual Power Degradation

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RUNERGY

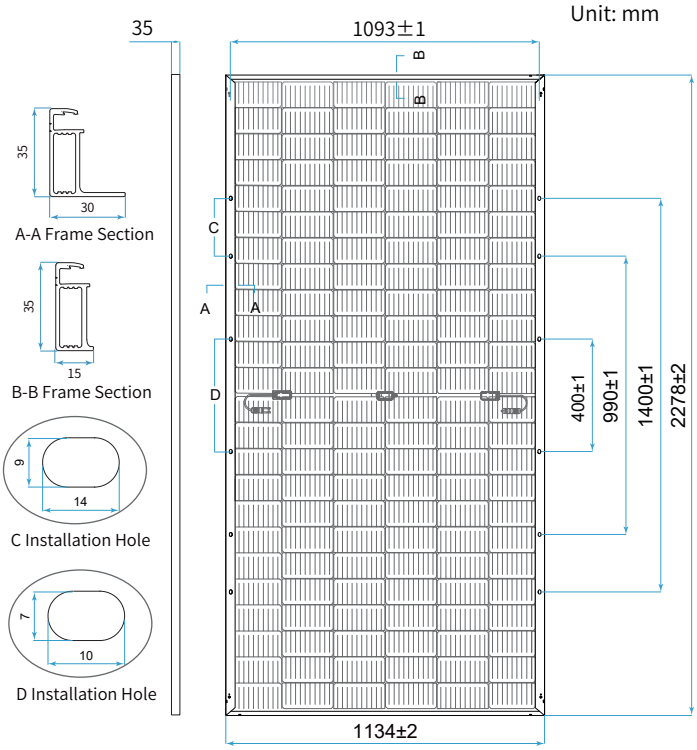
HY-DH144P8-530/550

Mechanical Parameters

Solar Cell	Mono PERC 182 mm
No. of Cells	144(6 × 24)
Dimensions	2278 × 1134 × 35mm
Weight	32.7kg
Junction Box	IP68 rated (3 bypass diodes)
Output Cable	4mm² (IEC), 12 AWG(UL) +400/-200mm or customized
Connector	RY01 or similar
Front Cover	2.0mm semi-tempered AR glass
Back Cover	2.0mm semi-tempered glass
Container	31 pcs/Pallet, 620 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	70%±10%
Fire Resistance	IEC Class A



Electrical Characteristics - STC

Irradiance 1000 W/m², ambient temperature 25 °C, AM1.5.

Maximum Power at STC (Pmax/W)	550	545	540	535	530
Power Tolerance (W)			0 ~ +5		
Optimum Operating Voltage (Vmp/V)	41.96	41.80	41.64	41.47	41.31
Optimum Operating Current (Imp/A)	13.11	13.04	12.97	12.90	12.83
Open Circuit Voltage (Voc/V)	49.90	49.75	49.60	49.45	49.30
Short Circuit Current (Isc/A)	14.00	13.93	13.86	13.79	13.72
Module Efficiency	21.3%	21.1%	20.9%	20.7%	20.5%

Electrical Characteristics - NMOT

Irradiance 800 W/m², ambient temperature 20 °C, AM1.5, wind speed 1 m/s.

Maximum Power at NMOT (Pmax/W)	416.0	412.2	408.5	404.6	400.8
Optimum Operating Voltage (Vmp/V)	39.79	39.64	39.49	39.33	39.18
Optimum Operating Current (Imp/A)	10.46	10.40	10.34	10.29	10.23
Open Circuit Voltage (Voc/V)	47.32	47.18	47.04	46.89	46.75
Short Circuit Current (Isc/A)	11.30	11.24	11.18	11.13	11.07

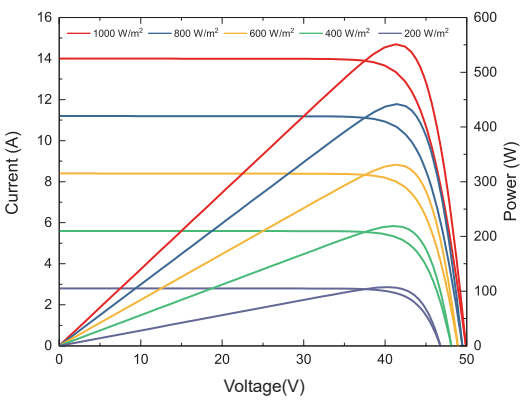
Rearside Power Gain (Reference to 550W Front)

Rearside Power Gain	5%	15%	25%
Maximum Power (Pmax/W)	578	633	688
Optimum Operating Voltage (Vmp/V)	41.96	42.06	42.06
Optimum Operating Current (Imp/A)	13.76	15.04	16.35
Open Circuit Voltage (Voc/V)	49.90	50.00	50.00
Short Circuit Current (Isc/A)	14.70	16.07	17.47
Module Efficiency	22.4%	24.5%	26.7%

Temperature Characteristics

Nominal Module Operating Temperature	42 ± 2 °C
Nominal Cell Operating Temperature	45 ± 2 °C
Temperature Coefficient of Pmax	-0.35%/°C
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	0.05%/ °C

Current-Voltage & Power-Voltage Curve (550W)



Specifications included in this datasheet are subject to change without notice.