

530-550W

High conversion efficiency



Module efficiency up to 21.0% achieved through advanced cell technology and manufacturing process

Excellent weak light performance



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

Extended mechanical performance



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

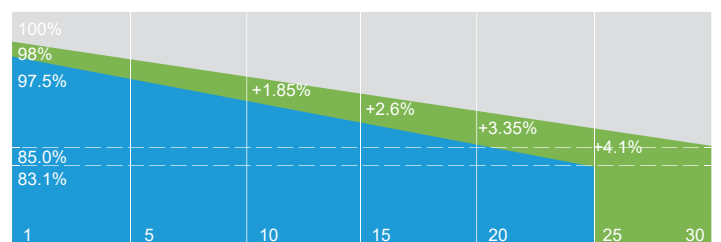
Quality guarantee



High module quality ensures long-term reliability

HY-DH144P8

144HALF-CELL BIFACIAL MODULE



■ Conventional power degradation

■ Hyperion power degradation



12 Years warranty for materials and processing



30 Years warranty for extra linear power output

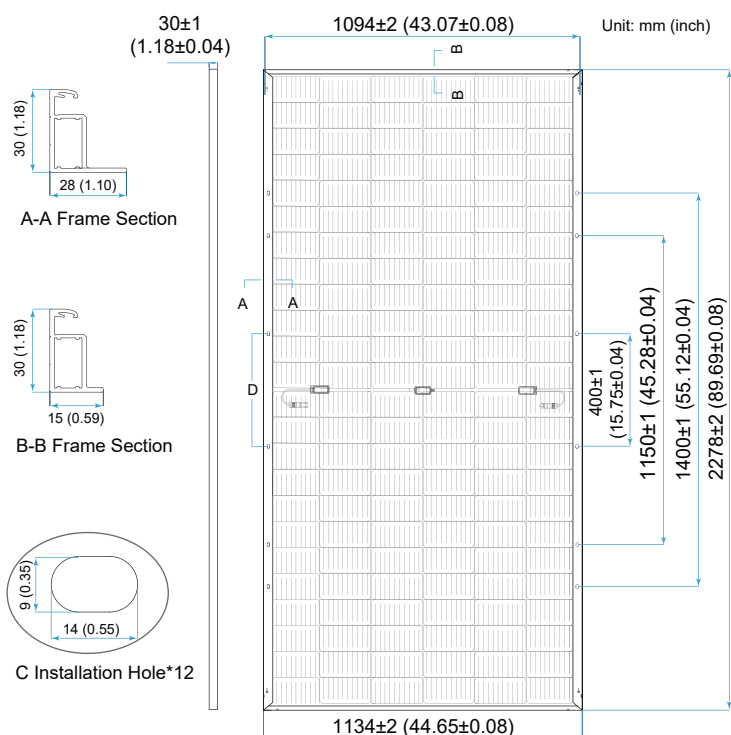


IEC61215 / IEC61730 / UL61730

IEC61701 / IEC62716

ISO9001: Quality Management System

HY-DH144P8-530/550



Mechanical Characteristics

Solar Cell	Mono PERC 182 mm
No. of Cells	144 (6 × 24)
Dimensions	2278 × 1134 × 30 mm (89.69 × 44.65 × 1.18in.)
Weight	31.6kg (69.67lbs) ±5%
Cable Cross Section Size	4mm ² (IEC), 12 AWG (UL)
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	(-/+)1200mm (47,24in.) or customized
Connector	EVO2 or customized
Front/Back Glass	2.0mm (0.079in.) +2.0mm (0.079in.)
Container	36 pcs/Pallet, 576 pcs/40' HC

Operating Parameters

Max. System Voltage	DC 1500V (IEC/UL)
Operating Temperature	-40°C ~ +85°C (-40°F ~ +185°F)
Max. Fuse Rated Current	30A
Front Static Load(snow,wind)	5400Pa (112lb/ft ²)
Back Static Load(wind)	2400Pa (50lb/ft ²)
Bifaciality	70%±10%
Fire Resistance	IEC Class A, UL Type 29

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

Different Rearside Power Gain (Reference to 540W Front)

Rearside Power Gain	5%	15%	25%
Maximum Power (Pmax/W)	567	621	675
Optimum Operating Voltage (Vmp/V)	41.8	41.8	41.9
Optimum Operating Current (Imp/A)	13.59	14.88	16.18
Open Circuit Voltage (Voc/V)	49.5	49.5	49.6
Short Circuit Current (Isc/A)	14.48	15.86	17.24
Module Efficiency	21.9%	24.0%	26.1%

Temperature Characteristics

Nominal Module Operating Temperature	42 ± 2 °C
Nominal Cell Operating Temperature	45 ± 2 °C
Temperature Coefficient of Pmax	-0.36%/°C
Temperature Coefficient of Voc	-0.304%/°C
Temperature Coefficient of Isc	0.050%/°C

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

