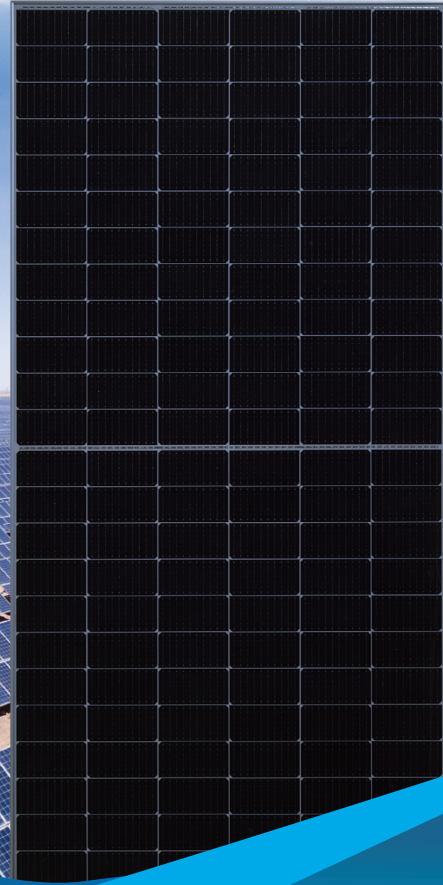




MADE IN THAILAND



# 530-550W

### High Conversion Efficiency



Module efficiency up to 21.3% 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



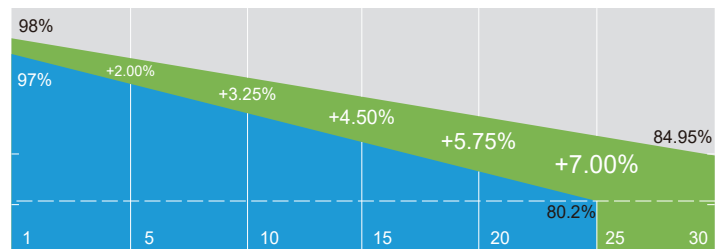
Module certified to withstand extreme wind (2400 Pa) and snow loading (5400 Pa)

### Quality Guarantee



High module quality ensures long-term reliability

## HY-DH144P8 144 HALF-CELL BIFACIAL MODULE



■ Conventional Module

■ Hyperion Performance



warranty for materials and workmanship



warranty for extra linear power output



IEC61215 / IEC61730 / UL61730  
IEC61701 / IEC62716  
ISO9001

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HY-DH144P8-US-V1.5

# HY-DH144P8-530/550

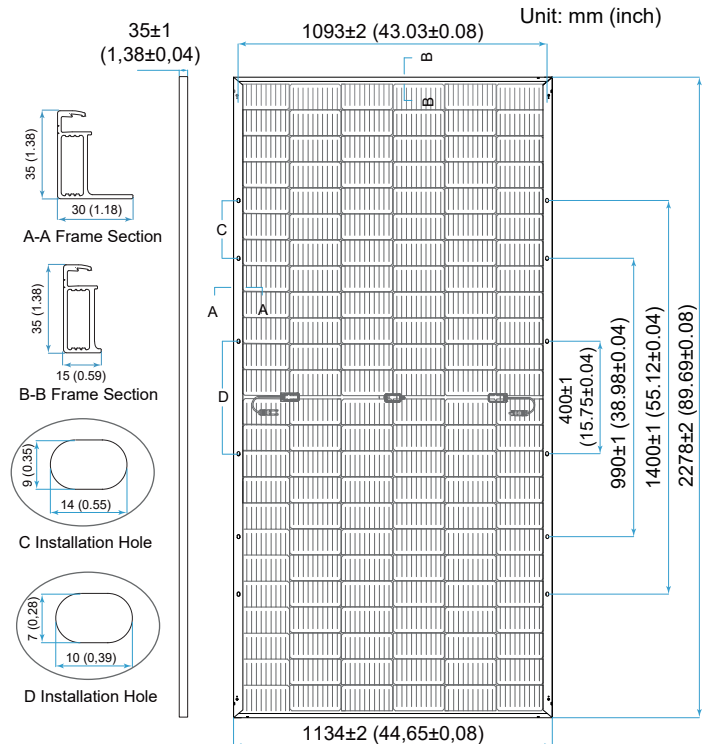
## Mechanical Parameters

Solar Cell	Mono PERC 182 mm
No. of Cells	144 (6 × 24)
Dimensions	2278 × 1134 × 35 mm (89.69 × 44.65 × 1.38in.)
Weight	33.2kg (73.19lbs)
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4mm <sup>2</sup> (IEC), 12AWG(UL) -525/+125mm (-20.67/+4.92in.) or customized
Connector	QC4.10 plus
Front Cover	2.0mm ( 0.079in.) semi-tempered AR glass
Back Cover	2.0mm ( 0.079in.) semi-tempered glass
Container	31 pcs/Pallet, 558 pcs/40' HC

## 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	5400Pa (112lb/ft <sup>2</sup> )
Backside Max. Loading	2400Pa (50lb/ft <sup>2</sup> )
Bifaciality	70%±10%
Fire Resistance	IEC Class A, UL Type 29

## Engineering Drawing



## Electrical Characteristics - STC

Irradiance 1000 W/m<sup>2</sup>, ambient temperature 25 °C, AM1.5.

Parameter	550	545	540	535	530
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/m<sup>2</sup>, 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)

Parameter	5%	15%	25%
Rearside Power Gain	5%	15%	25%
Maximum Power (Pmax/W)	579	634	691
Optimum Operating Voltage (Vmp/V)	42.12	42.12	42.12
Optimum Operating Current (Imp/A)	13.74	15.04	16.36
Open Circuit Voltage (Voc/V)	50.09	50.09	50.09
Short Circuit Current (Isc/A)	14.63	16.02	17.41
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)

