HYPERION SOLAR

MADE IN THAILAND

390-415W

HY-DH108P8
108 HALF-CELL BIFACIAL MODULE

High conversion efficiency

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

Excellent weak light performance

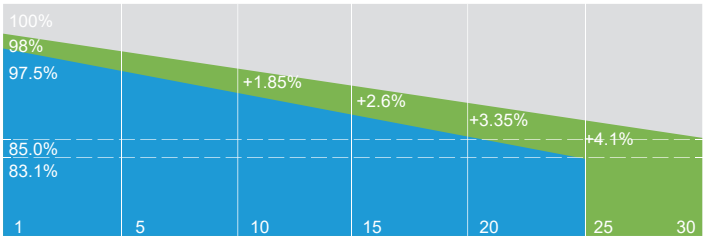
More power output in weak light condition, such as cloudy, morning and sunset

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



Convential power degradation Hyperion power degradation

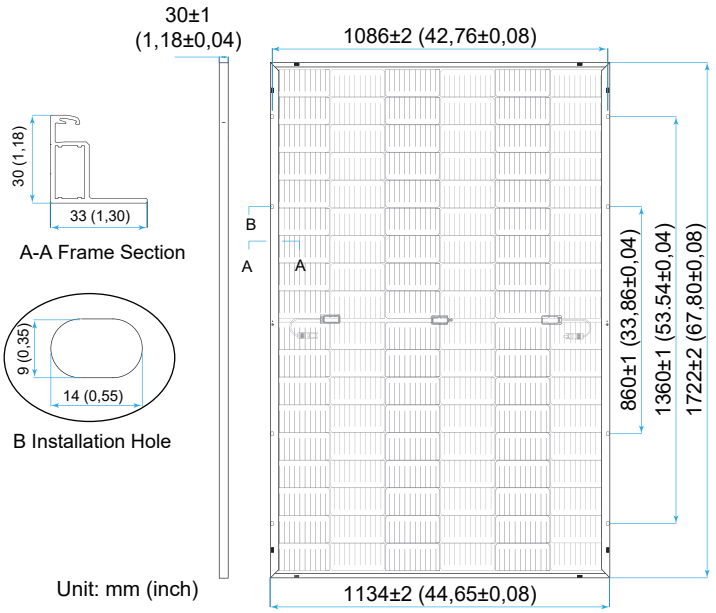
12 Years warranty for materials and processing

30 Years warranty for extra linear power output

IEC61215 / IEC61730 / UL61730
IEC61701 / IEC62716
ISO9001: Quality Management System

info@hyperion-usa.com
Producer Address: 7/559 Moo.6, Mapyangphon Subdistrict, Pluak Daeng District, Rayong Province, 21140.

HY-DH108P8-390/410B



Mechanical Characteristics

Solar Cell	Mono PERC 182 mm
No. of Cells	108 (6 × 18)
Dimensions	1722 × 1134 × 30mm (67,08 × 44,65 × 1,18in.)
Weight	23.8kg (52,47lbs) ±5%
Cable Cross Section Size	4mm²(IEC),12 AWG(UL)
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	(-)350mm (13,78in.) & (+)160 mm (6,30in.) in length or customized length
Front/Back Glass	2.0mm (0.079in.) AR Tempered glass 2.0mm (0.079in.) Semi-tempered glass
Container	36 pcs/Pallet, 792 pcs/40' HQ

Operating Parameters

Max. System Voltage	DC 1500V
Operating Temperature	-40℃ ~ +85℃
Max. Fuse Rated Current	30A
Front Static Load(snow,wind)	5400Pa(112lb/ft²)
Back Static Load(wind)	2400Pa(50lb/ft²)
Bifaciality	70%±10%
Fire Resistance	IEC Class A, UL Type 29

Electrical Characteristics - STC

Irradiance 1000 W/m², ambient temperature 25 °C, AM=1.5.

Maximum Power at STC (Pmax/W)	410	405	400	395	390
Power Tolerance (W)			0 ~ +5		
Optimum Operating Voltage (Vmp/V)	31.45	31.21	31.01	30.84	30.64
Optimum Operating Current (Imp/A)	13.04	12.98	12.90	12.81	12.73
Open Circuit Voltage (Voc/V)	37.32	37.23	37.07	36.98	36.85
Short Circuit Current (Isc/A)	13.95	13.87	13.79	13.70	13.61
Module Efficiency	21.0%	20.7%	20.5%	20.2%	20.0%

Electrical Characteristics - NMOT

Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.

Maximum Power at NMOT (Pmax/W)	310.2	306.4	302.5	298.8	295.0
Optimum Operating Voltage (Vmp/V)	29.82	29.60	29.41	29.25	29.15
Optimum Operating Current (Imp/A)	10.40	10.35	10.29	10.22	10.15
Open Circuit Voltage (Voc/V)	35.39	35.31	35.15	35.07	34.95
Short Circuit Current (Isc/A)	11.25	11.19	11.13	11.05	10.98

Different Rearside Power Gain (Reference to 405W Front)

Rearside Power Gain	5%	15%	25%
Maximum Power (Pmax/W)	425	466	506
Optimum Operating Voltage (Vmp/V)	31.41	31.41	31.40
Optimum Operating Current (Imp/A)	13.59	14.88	16.18
Open Circuit Voltage (Voc/V)	37.22	37.23	37.23
Short Circuit Current (Isc/A)	14.48	15.86	17.24
Module Efficiency	21.68%	23.74%	25.81%

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 (410W)