

**585-610W**  
POWER RANGE

**Hounen Solar**

## HNM7-SHDB156 Series

Hounen Solar 10BB HALF-CELL Bifacial  
Monocrystalline P - TYPE Solar Module

### KEY FEATURES



#### Excellent Cells Efficiency

MBB technology reduce the distance between busbars and finger grid line which is benefit to power increase.



#### Anti PID

Ensured PID resistance through the quality control of cell manufacturing process and raw materials.



#### Bifacial Technology

Up to 25% additional power gain from back side depending on albedo.



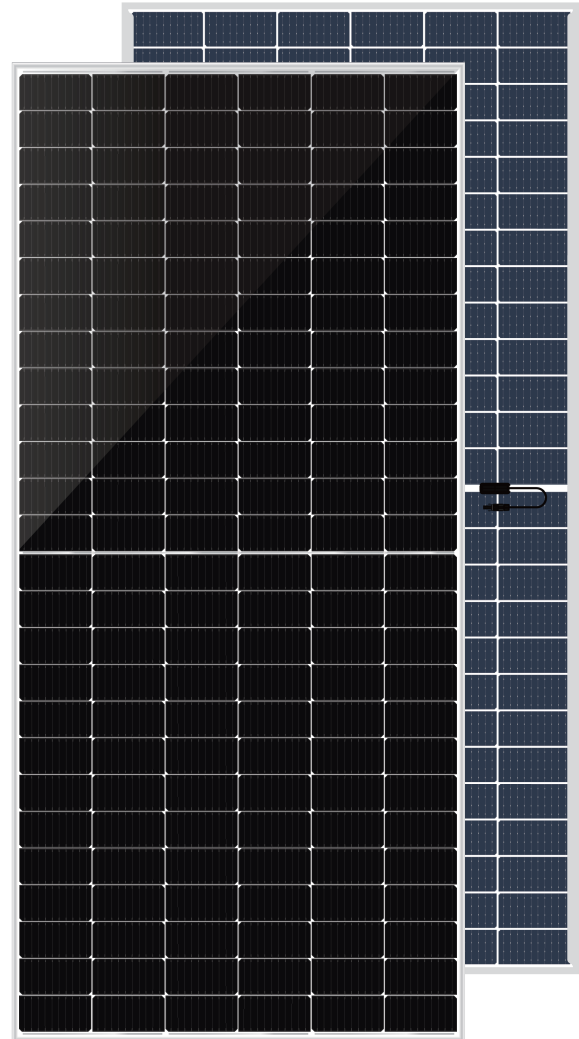
#### Better Weak Illumination Response

More power output in weak light condition, such as haze, cloudy, and early morning.



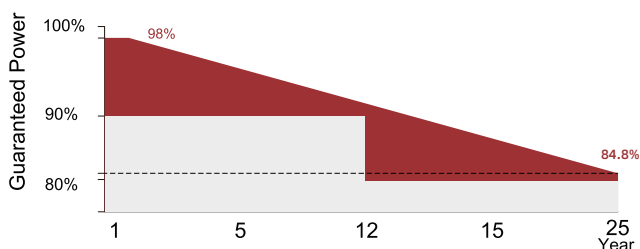
#### Adapt To Harsh Outdoor Environment

Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity environment.



IEC61730, UL61730  
ISO9001:2015: Quality Management System  
ISO14001:2015: Environment Management System  
ISO45001:2018 Occupational health and safety management systems

### LINEAR PERFORMANCE WARRANTY



**12 YEARS PRODUCT WARRANTY**



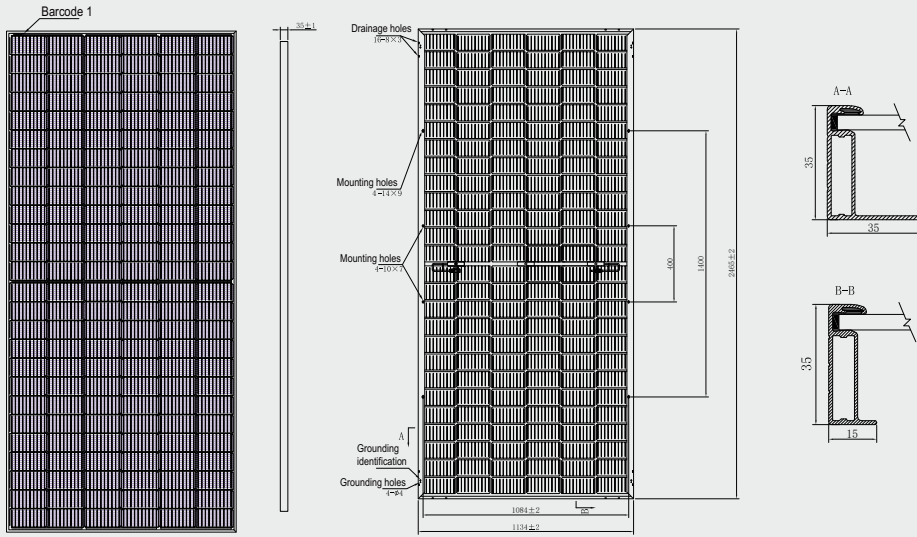
**25 YEARS OUTPUT GUARANTEE**

610W  
MAXIMUM POWER OUTPUT

21.82%  
MAXIMUM EFFICIENCY

70±5%  
BIFACIALITY

## DIMENSIONS OF PV MODULE(mm)



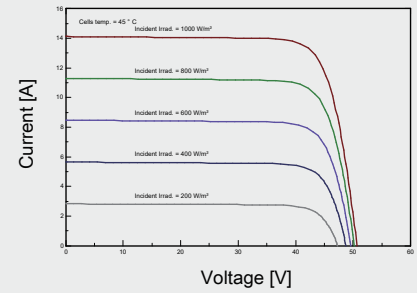
Front View

Side

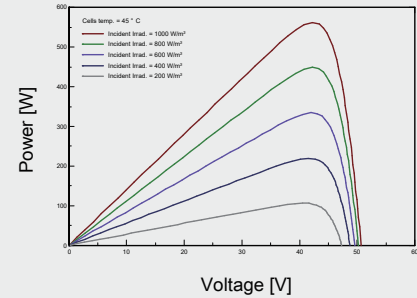
Back View

\*Remark: customized frame color and cable length available upon request.

## I-V CURVES OF PV MODULE(605W)



## P-V CURVES OF PV MODULE(605W)



## ELECTRICAL CHARACTERISTICS

Module Type	HNM7-SHDB156-585/M		HNM7-SHDB156-590/M		HNM7-SHDB156-595/M		HNM7-SHDB156-600/M		HNM7-SHDB156-605/M		HNM7-SHDB156-610/M	
STC/NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Nominal Power Watt Pmax(W)*	585	436.10	590	439.90	595	443.40	600	447.00	605	450.60	610	453.10
Maximum Power Voltage Vmp(V)	44.90	41.60	45.10	41.80	45.30	42.00	45.50	42.20	45.70	42.30	45.90	42.50
Maximum Power Current Imp(A)	13.03	10.48	13.09	10.52	13.14	10.56	13.19	10.60	13.24	10.64	13.29	10.66
Open Circuit Voltage Voc(V)	53.20	49.70	53.40	49.80	53.60	50.00	53.80	50.20	54.00	50.40	54.20	50.50
Short Circuit Current Isc(A)	13.78	11.13	13.83	11.17	13.88	11.21	13.93	11.25	13.98	11.29	14.03	11.33
Module Efficiency (%)	20.93		21.11		21.29		21.46		21.64		21.82	

\*STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25±2°C, AM 1.5.

\*NMOT: Irradiance 800W/m², Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s.

## BIFACIAL OUTPUT-REARSIDE POWER GAIN

Maximum Power (Pmax)	614Wp	620Wp	625Wp	630Wp	635Wp	641Wp
5%						
Maximum Efficiency STC (%)	21.97%	22.16%	22.35%	22.54%	22.73%	22.91%
Maximum Power (Pmax)	673Wp	679Wp	684Wp	690Wp	696Wp	702Wp
15%						
Maximum Efficiency STC (%)	24.07%	24.27%	24.48%	24.68%	24.89%	25.10%
Maximum Power (Pmax)	731Wp	738Wp	744Wp	750Wp	756Wp	763Wp
25%						
Maximum Efficiency STC (%)	26.16%	26.38%	26.61%	26.83%	27.05%	27.28%

## MECHANICAL DATA

Solar cells	Mono P-Type
Cells orientation	156(6x26)
Module dimension	2465x1134x35 (With Frame)
Weight	30±1Kg
Glass	3.2mm, High Transmission, AR Coated Tempered Glass
Junction Box	IP68, 3 diodes
Cables	4 mm², 400mm
Connectors	MC4 or MC4-compatible

\*Please refer to regional datasheet for specified connector.

## WORKING CONDITIONS

Maximum System Voltage	1500VDC
Operating Temperature	-40°C~+85°C
Maximum Fuse Rating	30A
Rear Side Mechanical Load	2400Pa
Front Side Mechanical Load	5400Pa
Safety Class	Class II

## TEMPERATURE RATINGS

Maximum System Voltage	1500VDC	Maximum System Voltage	1500VDC
Operating Temperature	-40°C~+85°C	Operating Temperature	-40°C~+85°C
Maximum Fuse Rating	30A	Maximum Fuse Rating	30A
Rear Side Mechanical Load	2400Pa	Rear Side Mechanical Load	2400Pa
Front Side Mechanical Load	5400Pa	Front Side Mechanical Load	5400Pa
Safety Class	Class II	Safety Class	Class II

## PACKAGING CONFIGURATION

Container	40'HQ
Piece/Box	31

Piece/Container 496  
\*Customized packaging is available upon request.

Revised in Sep 2023 1st Edition.  
Specifications included in this datasheet are subject to change without notice.  
Hounen Solar reserves the right of final interpretation.