

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.



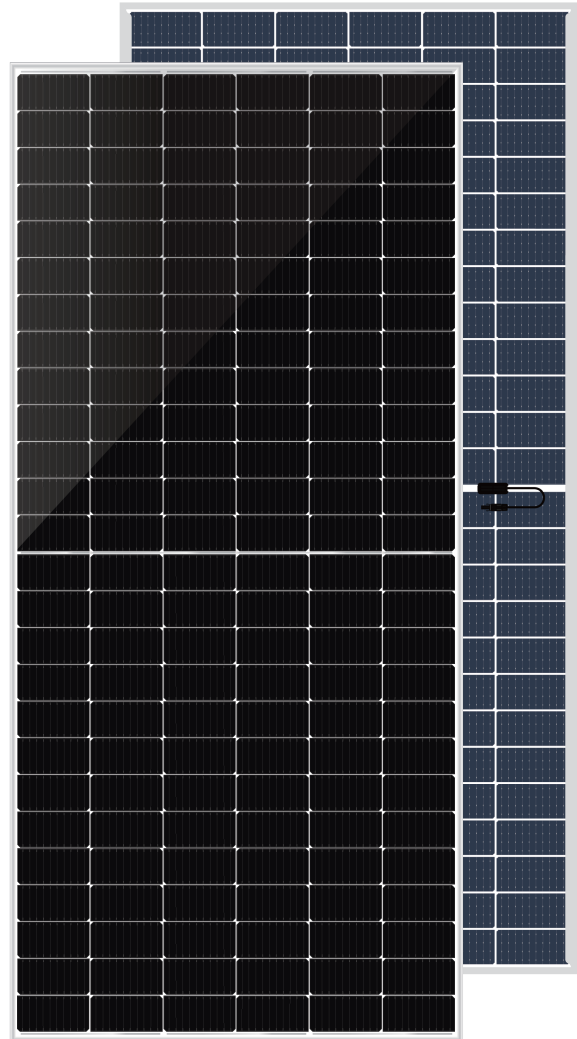
Better Weak Illumination Response

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



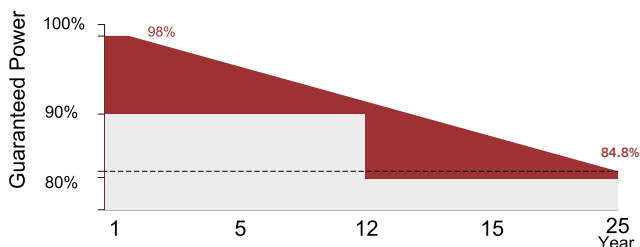
Adapt To Harsh Outdoor Environment

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

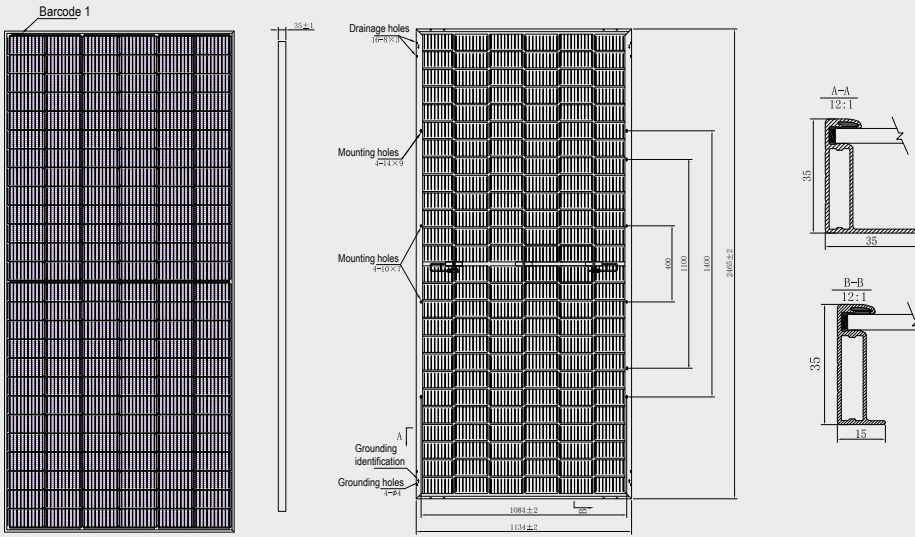
21.82%

MAXIMUM EFFICIENCY

70±5%

BIFACIALITY

DIMENSIONS OF PV MODULE(mm)



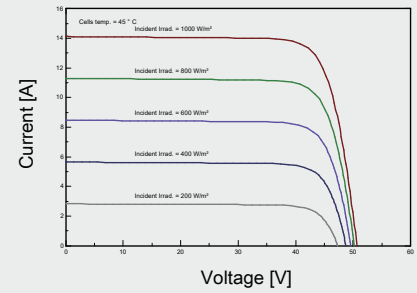
Front View

Side

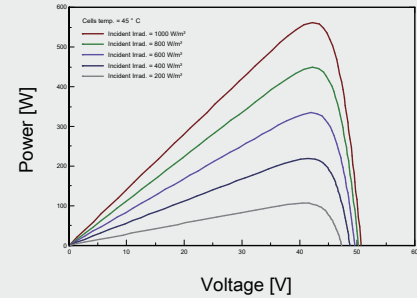
Back View

*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, 1200mm (With Connectors)
Connectors	MC4

*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

NMOT	44°C±2°C
Temperature coefficient of Pmax	-0.35%/°C
Temperature coefficient of Voc	-0.29%/°C
Temperature coefficient of Isc	0.05%/°C
Refer. Bifacial Factor	70±5%

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.