



PNGMH54-B8(182) 400-420 Watt

HALF-CELL MBB MONO PERC



Key Features



Multi Busbar Solar Cell

Stronger current collection ability, Special circuit design with much lower hot spot temperature;



PID Resistant

Excellent PID resistance at 96 hours (85°C/85%) test, and also can be improved to meet higher standards for the particularly harsh environment;



Anti-Crack

Excellent anti-microcracking performance with more balanced interior stress;



Module efficiency up to 21.53%

Half cell structure brings low resistance characteristic, higher lifetime generating capacity, simultaneously lower annual power attenuation;



Low-Light Performance

Excellent power generation performance under Low-Light condition due to multi busbar; better shading response benefit from half cell module;

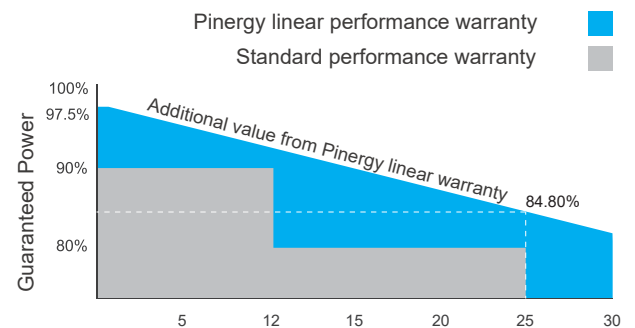


Strength and Durability

Certified for 5400Pa snow and 2400Pa Wind loads test;

Linear Performance Warranty

12 Years Product Warranty · 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730, CE, CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



Electrical Specifications

Module Type: PNGMH54-B8-xxx , (xxx=Pmax)

Module Type	400		405		410		415		420	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max. Power (Pmax/W)	400	301	405	305	410	309	415	313	420	317
Voltage at Max. Power (Vmp/V)	31.1	29.2	31.2	29.4	31.4	29.6	31.6	29.8	31.8	30.0
Current at Max. Power (Imp/A)	12.88	10.31	12.97	10.38	13.05	10.45	13.12	10.52	13.19	10.59
Open circuit voltage (Voc/V)	37.1	34.9	37.2	35.1	37.4	35.3	37.6	35.5	37.8	35.7
Short circuit current (Isc/A)	13.77	11.01	13.86	11.10	13.95	11.17	14.04	11.26	14.13	11.34
Module efficiency (%)	20.50%		20.76%		21.01%		21.27%		21.53%	
Power Tolerance (W)	0~+5									

Standard Test Condition (STC): Irradiance 1000W/m², Cell Temperature 25°C, AM1.5

Nominal Module Operating Temperature (NOCT): Irradiance 800W/m², Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s

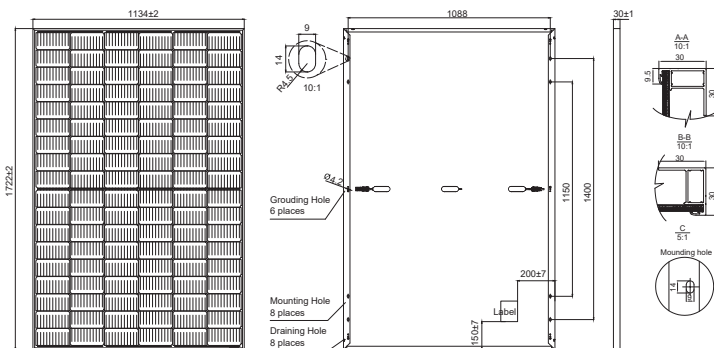
Mechanical Specifications

Cell Type	MBB MONO 182×91mm
No. of Cells	108 (6×18)
Dimension	1722x1134x30mm
Weight	21.5kg
Glass	3.2mm, Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 diodes
Output Cables	4mm ² , Length 300mm or customized
Connector type	MC4 compatible

Packaging Configurations

Per Pallet	36 pcs
Per 40' HQ Container	936 pcs

Engineering Drawings



Temperature Characteristics

NOCT Temperature	44°C ±2°C
Temperature Coefficient (Pmax)	-0.36%/°C
Temperature Coefficient (Voc)	-0.28%/°C
Temperature Coefficient (Isc)	0.05%/°C

Maximum Ratings

Maximum system voltage (IEC)	1500V DC
Snow / Wind	5400Pa / 2400Pa
Operating Temperature	-40°C ~ +85°C
Maximum series fuse rating	20A

Curve & Temperature Dependence

