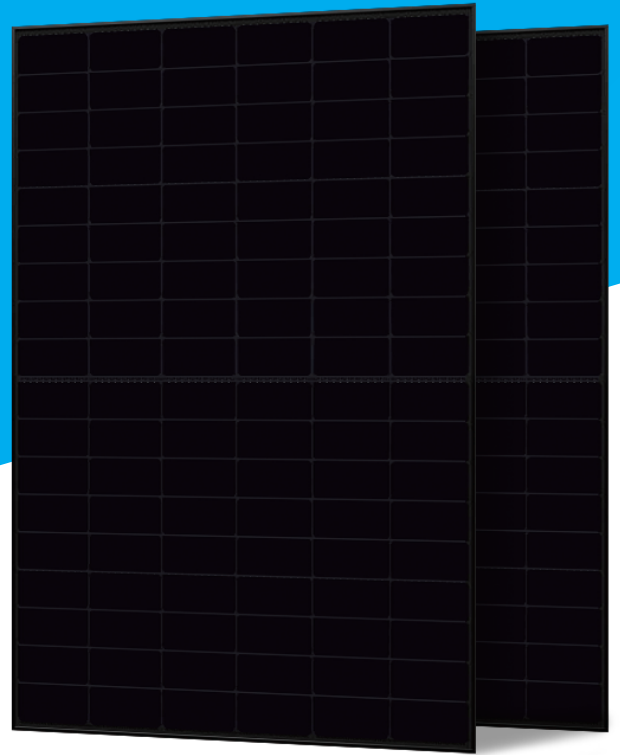




PNGBH54-B8(182)

410-430 Watt (FB)

HPBC



Key Features



No 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 22.0%

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;

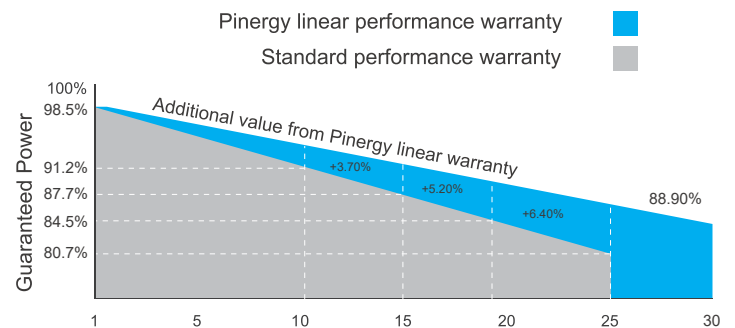


Strength and Durability

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

Linear Performance Warranty

15 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: PNGBH54-B8-xxx , (xxx=Pmax)

Module Type	410		415		420		425		430	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max. Power (Pmax/W)	410	306	415	310	420	314	425	318	430	321
Voltage at Max. Power (Vmp/V)	32.36	29.53	32.56	29.71	32.76	29.89	32.96	30.08	33.16	30.26
Current at Max. Power (Imp/A)	12.67	10.37	12.75	10.44	12.83	10.50	12.90	10.56	12.97	10.62
Open circuit voltage (Voc/V)	38.63	36.27	38.83	36.46	39.03	36.65	39.23	36.83	39.43	37.02
Short circuit current (Isc/A)	13.70	11.07	13.78	11.13	13.85	11.19	13.93	11.25	14.00	11.31
Module efficiency (%)	21.0%		21.3%		21.5%		21.8%		22.0%	
Power Tolerance (W)	0~+3									

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

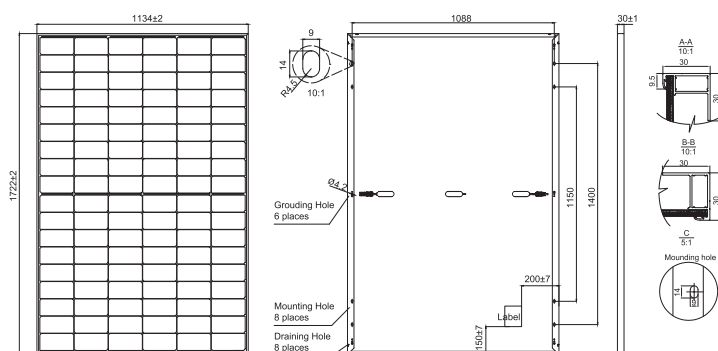
Mechanical Specifications

Cell Type	182×91mm
No. of Cells	108 (6×18)
Dimension	1722x1134x30mm
Weight	20.8kg
Glass	Single glass,3.2mm coated tempered glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 diodes
Output Cables	4mm ² , Length ±1200mm or customized
Connector type	MC4 compatible

Packaging Configurations

Per Pallet	36 pcs
Per 40' HQ Container	936 pcs

Engineering Drawings



Temperature Characteristics

NOCT Temperature	45°C ± 2°C
Temperature Coefficient (Pmax)	-0.29%/°C
Temperature Coefficient (Voc)	-0.23%/°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	25A

Curve & Temperature Dependence

