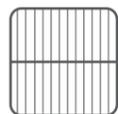


# PNGNH54-B8(182)

## 415-440 Watt (FB)

N-type Mono TOPCon

### 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 22.53%

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;

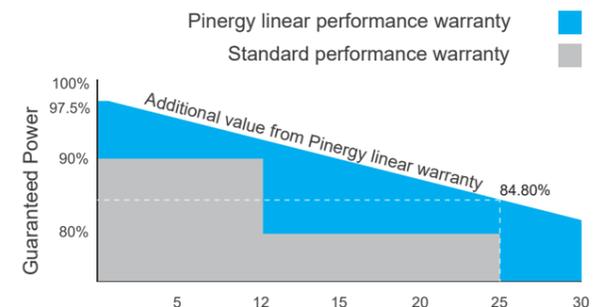


#### Strength and Durability

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: PNGNH54-B8-xxx , (xxx=Pmax)

Module Type	415		420		425		430		435		440	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max. Power (Pmax/W)	415	314	420	318	425	322	430	326	435	330	440	334
Voltage at Max. Power (Vmp/V)	31.75	29.72	31.95	29.92	32.15	30.12	32.34	30.32	32.54	30.52	32.74	30.72
Current at Max. Power (Imp/A)	13.07	10.57	13.15	10.63	13.22	10.69	13.3	10.75	13.37	10.81	13.44	10.87
Open circuit voltage (Voc/V)	38.31	35.98	38.51	36.18	38.71	36.38	38.91	36.58	39.11	36.78	39.31	36.98
Short circuit current (Isc/A)	13.69	11.13	13.75	11.2	13.81	11.26	13.88	11.32	13.95	11.38	14.02	11.45
Module efficiency (%)	21.25%		21.51%		21.76%		22.02%		22.28%		22.53%	
Power Tolerance (W)	0~+5											

Standard Test Condition (STC): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM1.5

Nominal Module Operating Temperature (NOCT): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s

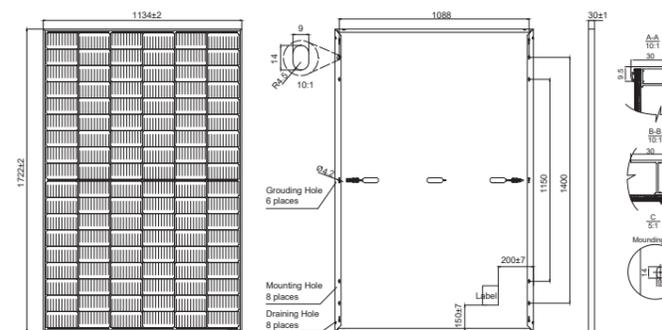
### Mechanical Specifications

Cell Type	N-Type 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 <sup>2</sup> , 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	25A

### Curve & Temperature Dependence

