

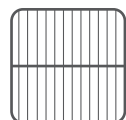
PNGNH72-BX(210)

445-460 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 23.0%

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;

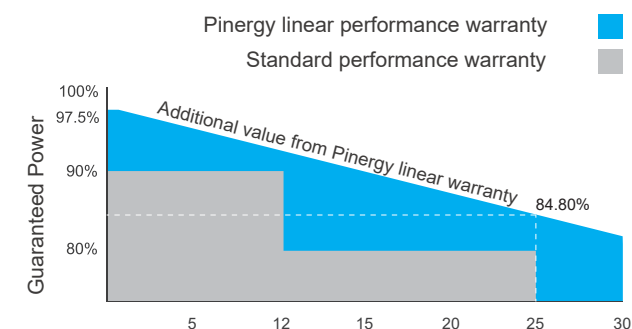


Strength and Durability

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

Linear Performance Warranty

25 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: PNGNH72-BX-xxx , (xxx=Pmax)

Module Type	PNGNH72-445	PNGNH72-50	PNGNH72-455	PNGNH72-460
Testing Condition	STC	STC	STC	STC
Max. Power (Pmax/W)	445	450	455	460
Voltage at Max. Power (Vmp/V)	44.3	44.6	45.0	45.3
Current at Max. Power (Imp/A)	10.05	10.09	10.11	10.15
Open circuit voltage (Voc/V)	52.6	52.9	53.4	53.7
Short circuit current (Isc/A)	10.71	10.74	10.77	10.84
Module efficiency (%)	22.3%	22.5%	22.8%	23.0%
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

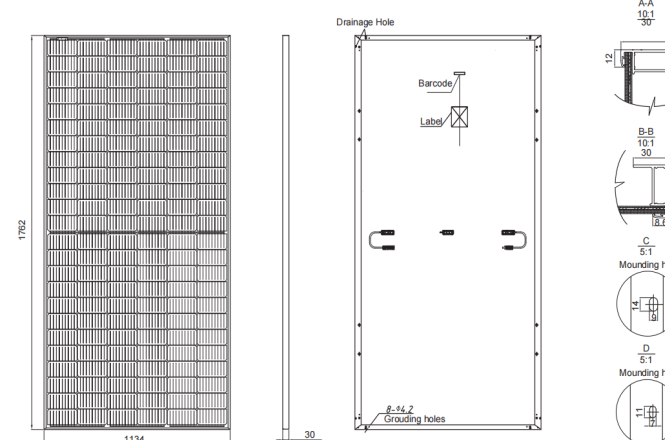
Mechanical Specifications

Cell Type	Mono 210R*70
No. of Cells	144 (6×24)
Dimension	1762x1134x30mm
Weight	20kg
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)	-0.29%/ °C
Temperature Coefficient (Isc)	0.06%/ °C

Maximum Ratings

Maximum system voltage (IEC)	1000/1500V DC
Snow / Wind	5400Pa / 2400Pa
Operating Temperature	-40 °C ~ +85 °C
Maximum series fuse rating	25A

Curve & Temperature Dependence

