



Bifacial Series GPNE-S72/FNH/BF

410-390w

144-CELL HALF CUT MONOCRYSTALLINE SOLAR MOUDLE

Product Advantages



High Efficiency
Module efficiency leading in industry, up to 20.2%



High Reliability
Passed 3*IECstandard test



Low Hot-spot Risk
1/2 current, reducing the hot spot temperature



Excellent loading capability
2400Pa wind loads, 5400Pa snow loads , 8000Pa extra support



Low NMOT
As low as 43°C , improving the power generation efficiency

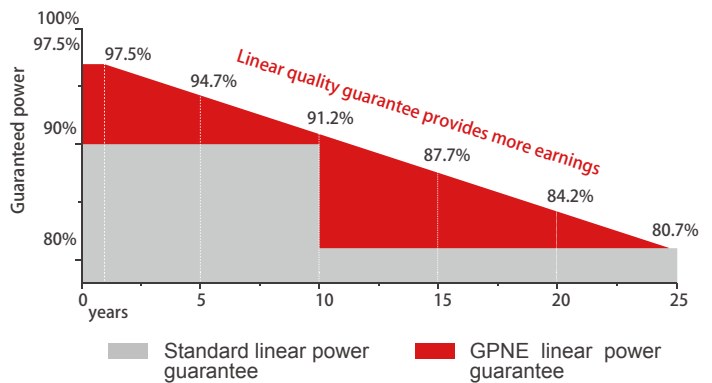


Half Cell, MBB Technology
Series-then-parallel cell connection design, more reliable soldering technology

20.2%
Module efficiency

410W
Highest power output

Product Guarantee



-2.50%
First year power degradation

-0.50%
Annual degradation

12
Years
Materials and workmanship warranty

25
Years
Linear power warranty

Product Certification



GPNE-S72/FNH/BF

Electrical Characteristics

STC	410	405	400	395	390
Maximum Power at STC (Pmax)	410 W	405 W	400 W	395 W	390 W
Optimum Operating Voltage (Vmp)	41.1V	40.9V	40.7V	40.5V	40.3V
Optimum Operating Current (Imp)	9.98A	9.91A	9.83A	9.76A	9.68A
Open Circuit Voltage (Voc)	48.9V	48.7V	48.5V	48.3V	48.1V
Short Circuit Current (Isc)	10.49A	10.42A	10.34A	10.27A	10.20A
Module Efficiency	20.2%	30.0%	19.7%	19.4%	19.2%
Operating Module Temperature	-40 °C to +85 °C				
Maximum System Voltage	1000/1500 V DC (IEC)				
Maximum Series Fuse Rating	20 A				
Power Tolerance	0/+5W				

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; Tolerances of Pmax, Voc and Isc are all within +/- 5%.

NMOT	410	405	400	395	390
Maximum Power at NMOT (Pmax)	308.2W	304.6W	300.6W	297.0W	293.2W
Optimum Operating Voltage (Vmp)	38.2V	38.1V	37.8V	37.6V	37.4V
Optimum Operating Current (Imp)	8.06A	8.00A	7.95A	7.89A	7.84A
Open Circuit Voltage (Voc)	45.9V	45.7V	45.4V	45.3V	45.1V
Short Circuit Current (Isc)	8.46A	8.41A	8.34A	8.30A	8.24A

NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s;

Temperature Characteristics

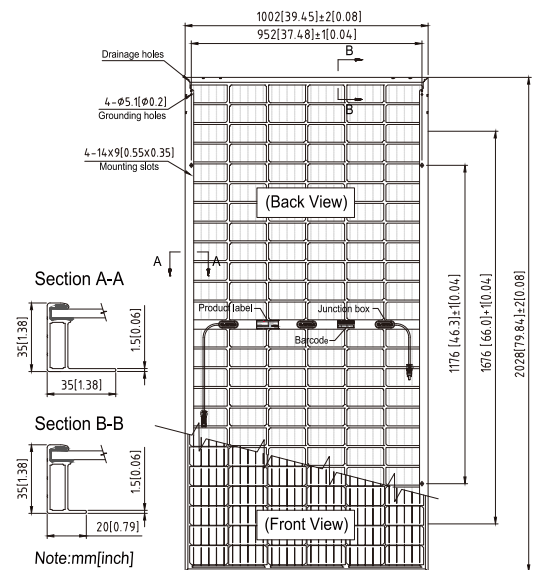
Nominal Module Operating Temperature(NMOT)	42±2°C
Temperature Coefficient of Pmax	-0.37 %/°C
Temperature Coefficient of Voc	-0.304%/°C
Temperature Coefficient of Isc	0.050 %/°C

Mechanical Characteristics

Solar Cell	Monocrystalline silicon 158.75 mm
No. of Cells	144 (6 × 24)
Dimensions	2028 × 1002 × 35 mm
Weight	27.0 kgs
Front Glass	2.0 mm semi-tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated
Output Cables	4.0 mm ² , symmetrical lengths (-) 1400 mm and (+) 1400 mm
Connectors	MC4 compatible
Refer. Bifaciality Factor	(70 ± 5)%

Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	30	30
Pallets per container	10	22
Pieces per container	300	660



Current-Voltage & Power-Voltage Curve (410S)

