



# GPNE-S144/FNH 390-410W

144-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE



## Product Advantages



### High Efficiency

Module efficiency leading in industry, up to 20.4%



### High Reliability

Passed 3\*IEC standard 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, 5BB PERC Technology

More reliable soldering technology, reduce possibility of hot spot

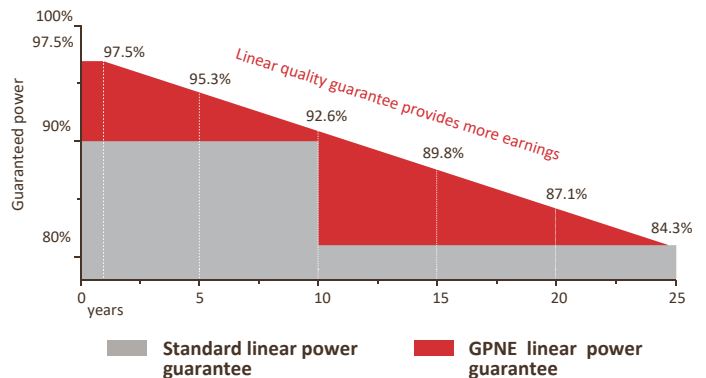
20.4%

Module efficiency

410W

Highest power output

## Product Guarantee



-2.50%

First year power degradation

-0.55%

Annual degradation

12  
Years

Materials and workmanship warranty

25  
Years

Linear power warranty

## Product Certification



# GPNE-S144/FNH

## Electrical Characteristics

STC	390	395	400	405	410
Maximum Power at STC (Pmax)*	390 W	395 W	400 W	405 W	410 W
Optimum Operating Voltage (Vmp)	41.4 V	41.6 V	41.8 V	42.0 V	42.2 V
Optimum Operating Current (Imp)	9.43 A	9.50 A	9.57 A	9.65 A	9.72 A
Open Circuit Voltage (Voc)	48.6 V	48.8 V	49.0 V	49.2 V	49.4 V
Short Circuit Voltage (Isc)	10.03 A	10.10 A	10.17 A	10.24 A	10.31 A
Module Efficiency	19.4%	19.6%	19.9%	20.1%	20.4%
Operating Module Temperature	-40°C to +85°C				
Maximum System Voltage	1500 V DC (IEC)				
Maximum Series Fuse Rating	20 A				
Power Tolerance	0~+5W				

STC:Irradiance 1000W/m<sup>2</sup>,module temperature 25°C,AM=1.5,\*Measuring tolerance:±3%

NMOT	390	395	400	405	410
Maximum Power at NMOT (Pmax)	293.8 W	297.3 W	300.8 W	304.6 W	308.1 W
Optimum Operating Voltage (Vmp)	38.1 V	38.3 V	38.5 V	38.7 V	38.8 V
Optimum Operating Current (Imp)	7.71 A	7.76 A	7.82 A	7.88 A	7.93 A
Open Circuit Voltage (Voc)	45.5 V	45.7 V	45.9 V	46.1 V	46.3 V
Short Circuit Voltage (Isc)	8.10 A	8.16 A	8.21 A	8.27 A	8.33 A

NMOT:Irradiance 800W/m<sup>2</sup>,ambient temperature 20°C,AM=1.5,wind speed 1m/s

## Temperature Characteristics

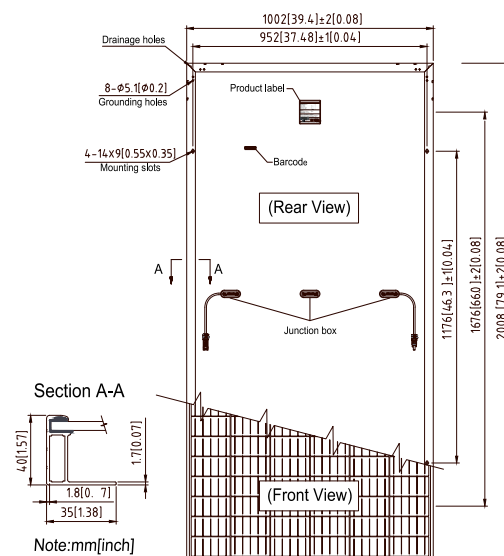
Nominal Module Operating Temperature(NMOT)	42±2°C
Temperature Coefficient of Pmax	-0.34 %/°C
Temperature Coefficient of Voc	-0.25 %/°C
Temperature Coefficient of Isc	0.040 %/°C

## Mechanical Characteristics

Solar Cell	Monocrystalline 158.75mm
No. of Cells	144 (6 × 24)
Dimensions	2008 × 1002 × 40mm
Weight	23 kgs
Front Glass	3.2 mm tempered glass with AR coating
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm <sup>2</sup> , cable length 350mm or customized length
Connectors	MC4 compatible

## Packing Configuration

Container	20'GP	40'HC
Pieces per pallet	26	27+27+5
Pallets per container	10	11
Pieces per container	260	649



Current-Voltage & Power-Voltage Curve (410)

