



Full Black Series GPNE-S60/FNHB

340-320w

120-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

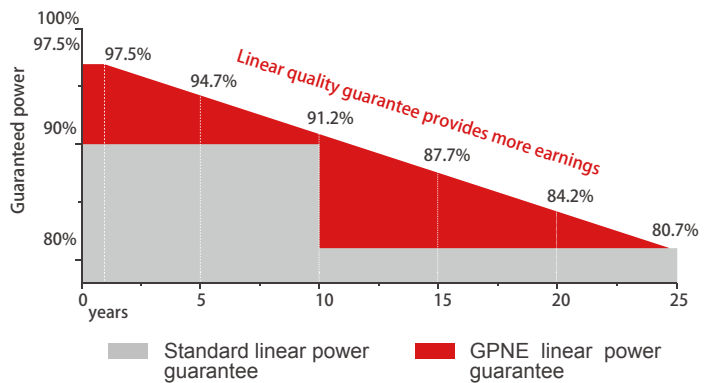


Half Cell, MBB Technology
Series-then-parallel cell connection design, more reliable soldering technology

20.1%
Module efficiency

340W
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-S60/FNHB

Electrical Characteristics

STC	340	335	330	325	320
Maximum Power at STC (Pmax)	340 W	335 W	330 W	325 W	320 W
Optimum Operating Voltage (Vmp)	35.1 V	34.9 V	34.7 V	34.5 V	34.3 V
Optimum Operating Current (Imp)	9.68 A	9.60 A	9.52 A	9.43 A	9.33 A
Open Circuit Voltage (Voc)	41.1 V	40.9 V	40.7 V	40.5 V	40.3 V
Short Circuit Current (Isc)	10.29 A	10.21 A	10.13 A	10.04 A	9.93 A
Module Efficiency	20.1%	19.8%	19.5%	19.2%	19.0%
Operating Module Temperature	-40 °C to +85 °C				
Maximum System Voltage	1000V 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	340	335	330	325	320
Maximum Power at NMOT (Pmax)	255.5 W	252.1 W	248.6 W	244.9 W	240.9 W
Optimum Operating Voltage (Vmp)	32.3 V	32.1 V	31.9 V	31.7 V	31.5 V
Optimum Operating Current (Imp)	7.92 A	7.85 A	7.79 A	7.72 A	7.64 A
Open Circuit Voltage (Voc)	38.5 V	38.3 V	38.1 V <td 37.9 V	37.8 V	
Short Circuit Current (Isc)	8.31 A	8.24 A	8.18 A	8.11 A	8.02 A

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

Temperature Characteristics

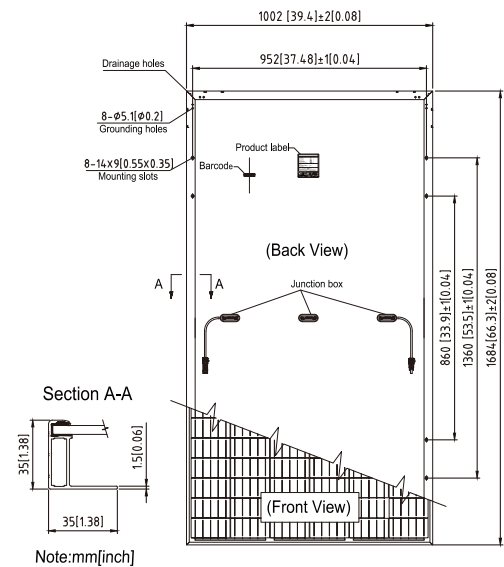
Nominal Module Operating Temperature(NMOT)	42±2°C
Temperature Coefficient of Pmax	-0.37 %/°C
Temperature Coefficient of Voc	-0.304 %/°C
Temperature Coefficient of Isc	0.050 %/°C

Mechanical Characteristics

Solar Cell	Monocrystalline 158.75mm
No. of Cells	120 (6 × 20)
Dimensions	1684 × 1002 × 35mm
Weight	19.0 kgs
Front Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm ² , symmetrical lengths (-) 1200mm and (+) 1200 mm
Connectors	MC4 compatible

Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	30	32
Pallets per container	12	26
Pieces per container	360	832



Current-Voltage & Power-Voltage Curve (340S)

