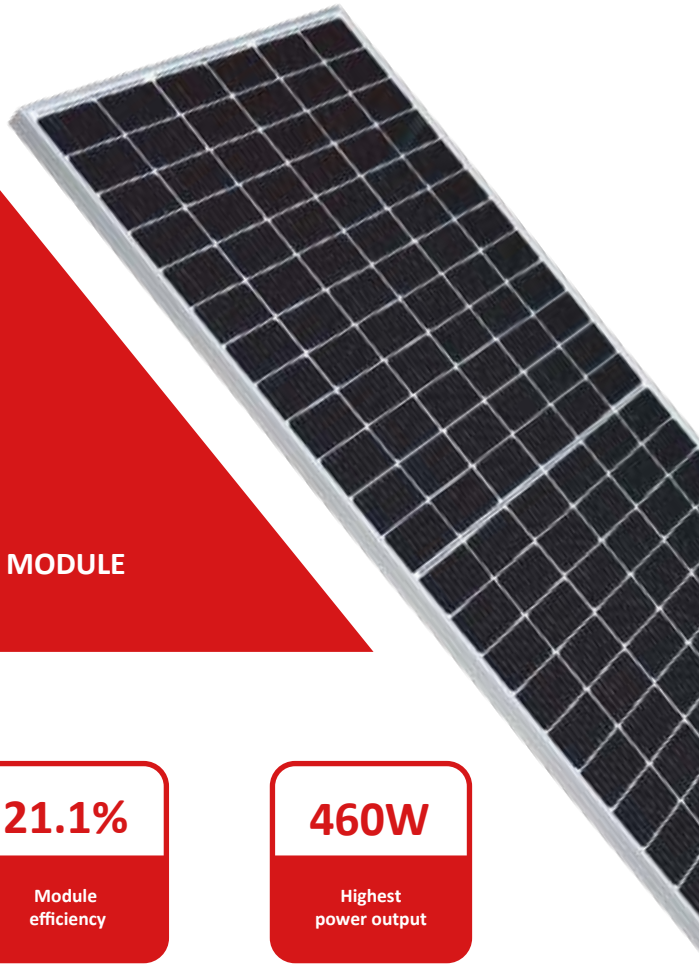
GPNE-S144/M6H
166 Half Cell Series
435-460W
144-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE



Product Advantages

High Power Output
Compared to 158.75mm module, the power output can increase 25W-30W

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

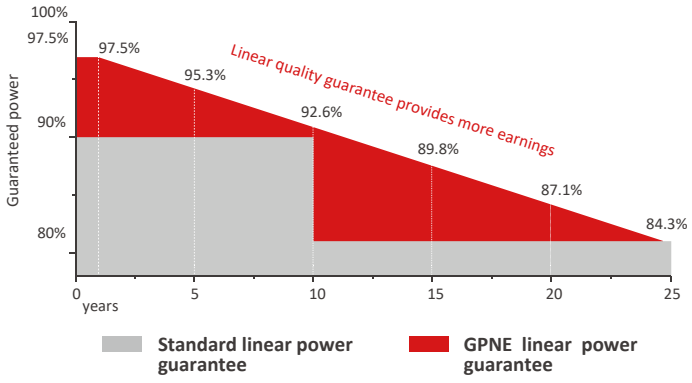
Low NMOT
As low as 43°C,improving the power generation efficiency

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

21.1%
Module efficiency

460W
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/M6H

Electrical Characteristics

STC	435	440	445	450	455	460
Maximum Power at STC (Pmax)	435W	440W	445W	450W	455W	460W
Optimum Operating Voltage (Vmp)	40.8V	41.0V	41.2V	41.4V	41.6V	41.8V
Optimum Operating Current (Imp)	10.67A	10.74A	10.81A	10.87A	10.94A	11.01A
Open Circuit Voltage (Voc)	48.6V	48.8V	49.0V	49.2V	49.4V	49.6V
Short Circuit Current (Isc)	11.4A	11.47A	11.54A	11.61A	11.68A	11.25A
Module Efficiency	20.0%	20.2%	20.5%	20.7%	20.9%	21.1%
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 1000 W/m², module temperature 25 °C, AM=1.5; Measuring tolerance: ± 3%.

NMOT	435	440	445	450	455	460
Maximum Power at NMOT (Pmax)	334.9W	339.0W	343.1W	348.1W	352.2W	356.8W
Optimum Operating Voltage (Vmp)	38.5V	38.7V	38.9V	39.2V	39.4V	39.6V
Optimum Operating Current (Imp)	8.70A	8.76A	8.82A	8.88A	8.94A	9.01A
Open Circuit Voltage (Voc)	46.80V	47.0V	47.2V	47.4V	47.6V	47.8V
Short Circuit Current (Isc)	9.19A	9.24A	9.30A	9.36A	9.42A	9.48A

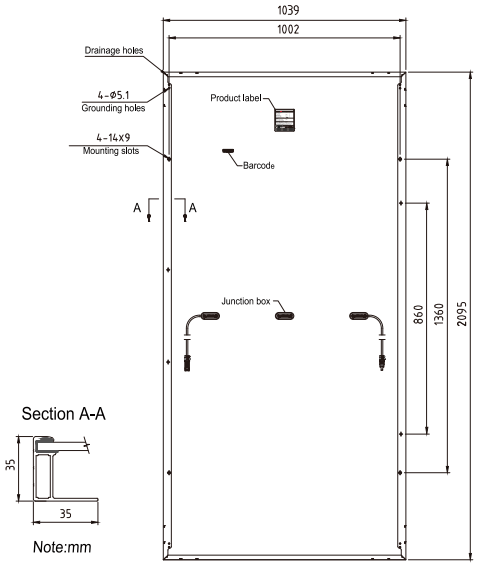
NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s;

Temperature Characteristics

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

Mechanical Characteristics

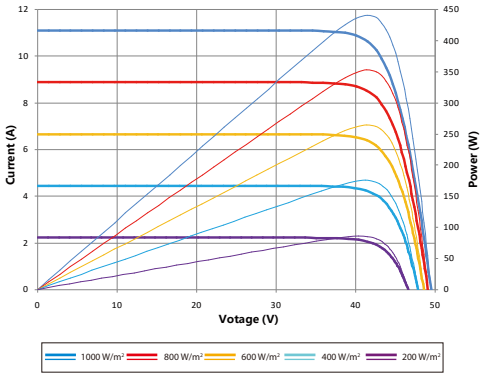
Solar Cell	Monocrystalline silicon 166 mm (9BB)
No. of Cells	144 (6 × 24)
Dimensions	2095 × 1039 × 35 mm
Weight	23.8 kgs
Front Glass	3.2 mm tempered glass with AR coating
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm² , cable length 350mm or customized length



Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	31	31+2
Pallets per container	5	22
Pieces per container	155	726

Current-Voltage & Power-Voltage Curve (445)



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