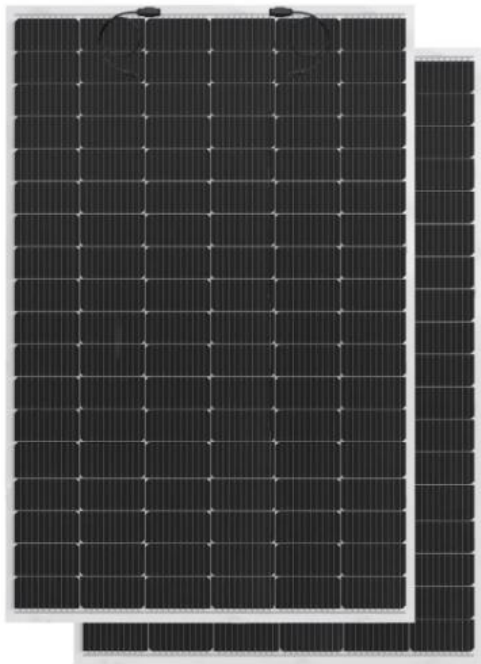


PWSOLAR

450W Flexible

MONOCRYSTALLINE MODULE



ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 19.64% by using innovative Half-cell design and Multi-bus bar(MBB) cell technology.
- Low temperature coefficient and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- High reliability against extreme environmental conditions (passing salt mist, ammonia and hail tests).
- Potential induced degradation(PID) resistance.
- Power tolerance of $\pm 3\%$.

ELECTRICAL CHARACTERISTICS AT STC

Model	PWFSP450Wp-120M
Maximum Power (P_{max})	450W
Power Tolerance	$\pm 3\%$
Open Circuit Voltage(VOC)	41.20V
Short Circuit Current(ISC)	11.57A
Voltage at Nominal Power (V_{mp})	34.20V
Current at Nominal Power (I_{mp})	13.16A
Size of Module	2246 x 1020 x 2.5mm
Standard Test condition	Irradiance:1000W/M2 Temp: 25°C , & AM :1.5G spectrum
Maximum system voltage	1000VDC/1500VDC
Operating temperature	- 40°C to +85°C
Module Efficiency	19.64%

ELECTRICAL CHARACTERISTICS AT STC

NOCT	45 $\pm$ 2°C
Voltage temperature coefficient(Voc)	-0.330%/°C
Current temperature coefficient I sc)	+0.058%/°C
Power temperature coefficient(Pmpp)	-0.400%/°C
Minimum power tolerance	+/-10%
NOCT	45 $\pm$ 2°C



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MECHANICAL CHARACTERISTICS

Cell Type	Mono
Number of cell	120pcs (12 x 10)
Size of Module	2246 x 1020 x 2.5mm
Weight	About 6.90kgs
Front Cover	Lightweight high transparent polymer materials
Back Board Color	White
Junction Box	IP67, 3 diodes
Cable	4mm ² (0.006inches ²), 400mm or customized
Connector	MC4 or MC4 compatible

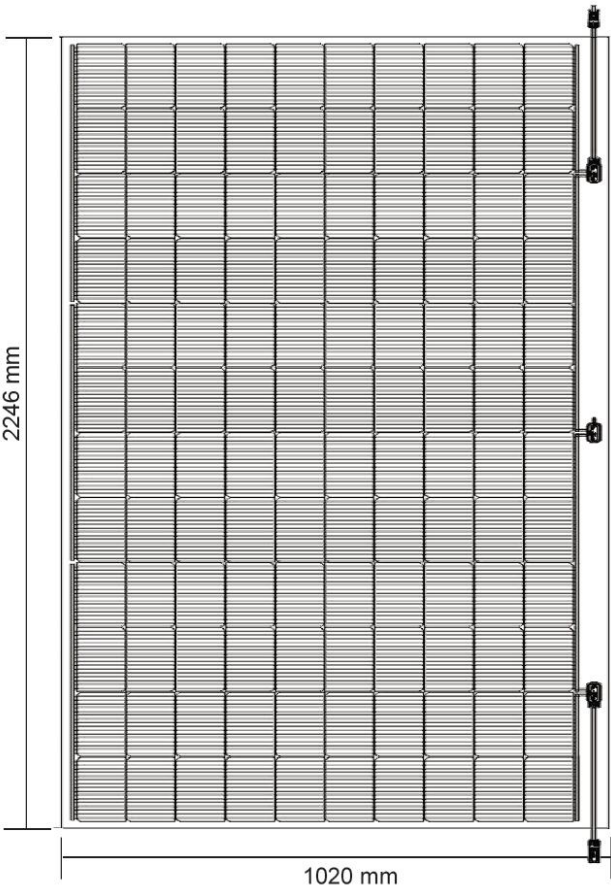
MODULE WARRANTY

12 year limited product; limited linear power warranty: 12 year 91.20% of nominal power output, 30 year 80.60% of nominal power output.
20 years product warranty; 30 years linear power output

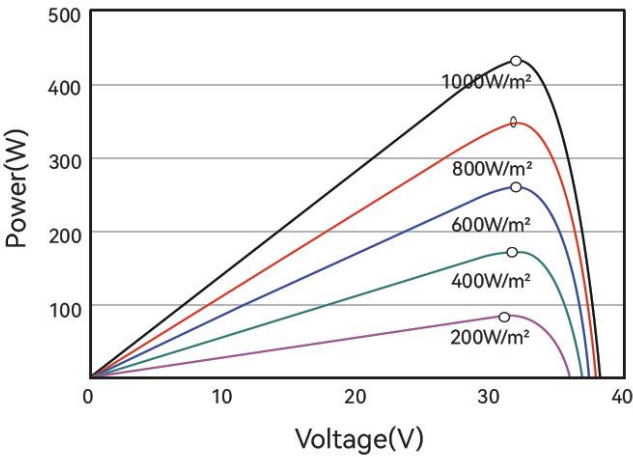
PACKING

Standard Packing: 70pcs/Pallet Module Quantity of 20' container: 490pcs Module Quantity of 40' container: 1400pcs

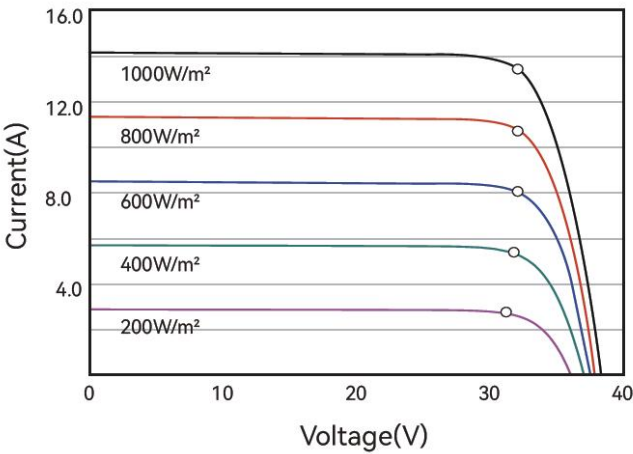
ENGINEERING DRAWING



IV CURVES



I-V Curves of PV Module (440W)



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