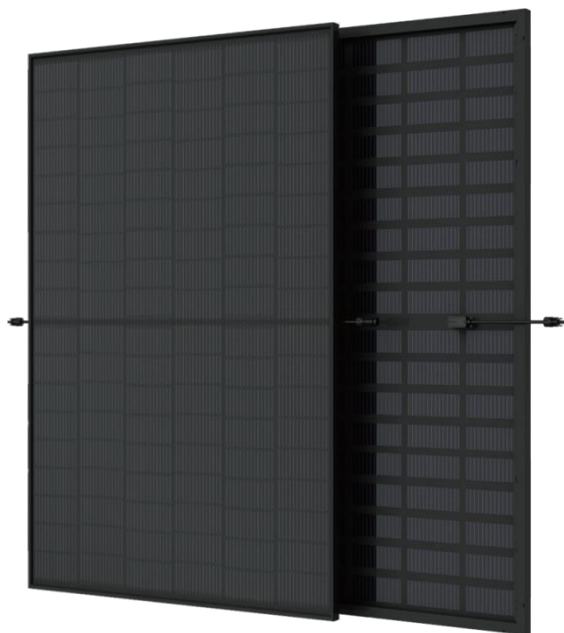


PWSOLAR

450W N Type Topcon

MONOCRYSTALLINE MODULE



ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 22.52% by using innovative Half-cell design and Multi-busbar (MBB) cell technology.
- Low temperature coefficient and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the module 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	PW450Wp-108M
Maximum Power (P_{max})	450W
Power Tolerance	$\pm 3\%$
Open Circuit Voltage (VOC)	39.78V
Short Circuit Current (ISC)	14.00A
Voltage at Nominal Power (V_{mp})	33.22V
Current at Nominal Power (I_{mp})	13.55A
Size of Module	1762 x 1134 x 30mm
Standard Test condition	Irradiance: 1000W/M ² Temp: 25°C , & AM : 1.5G spectrum
Maximum system voltage	1000VDC/1500VDC
Operating temperature	- 40°C to +85°C
Module Efficiency	22.52%

ELECTRICAL CHARACTERISTICS AT STC

NOCT	45 $\pm$ 2°C
Voltage temperature coefficient (V_{oc})	-0.330%/°C
Current temperature coefficient (I_{sc})	+0.058%/°C
Power temperature coefficient (P_{mpp})	-0.400%/°C
Minimum power tolerance	$\pm$ 10%
NOCT	45 $\pm$ 2°C



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MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline（182.2 x 94mm）
Number of cell	108pcs（2 x 54）
Size of Module	1762 x 1134 x 30mm
Weight	About 22.00kgs
Front Cover	3.2mm tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction Box	IP68, 3 diodes
Cable	4mm ² (0.006inches ²),300mm(11.81inches)
Connector	MC4 or MC4 compatible

MODULE WARRANTY

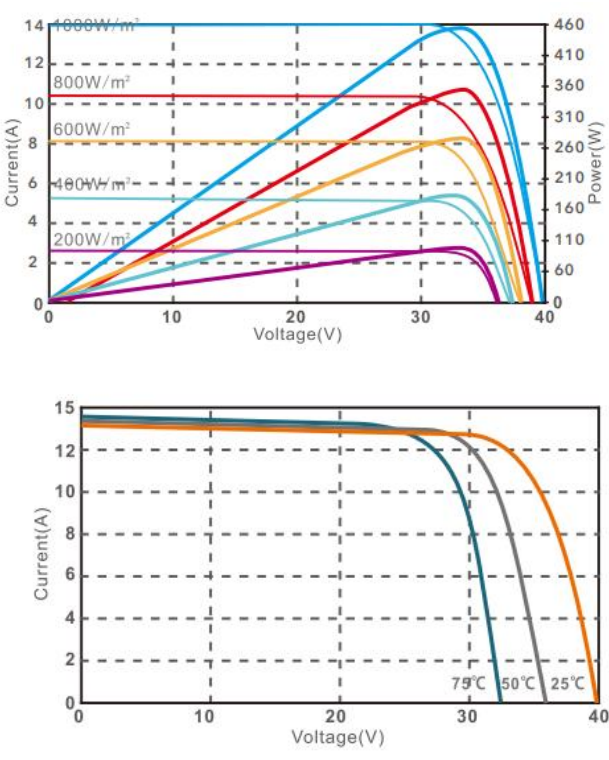
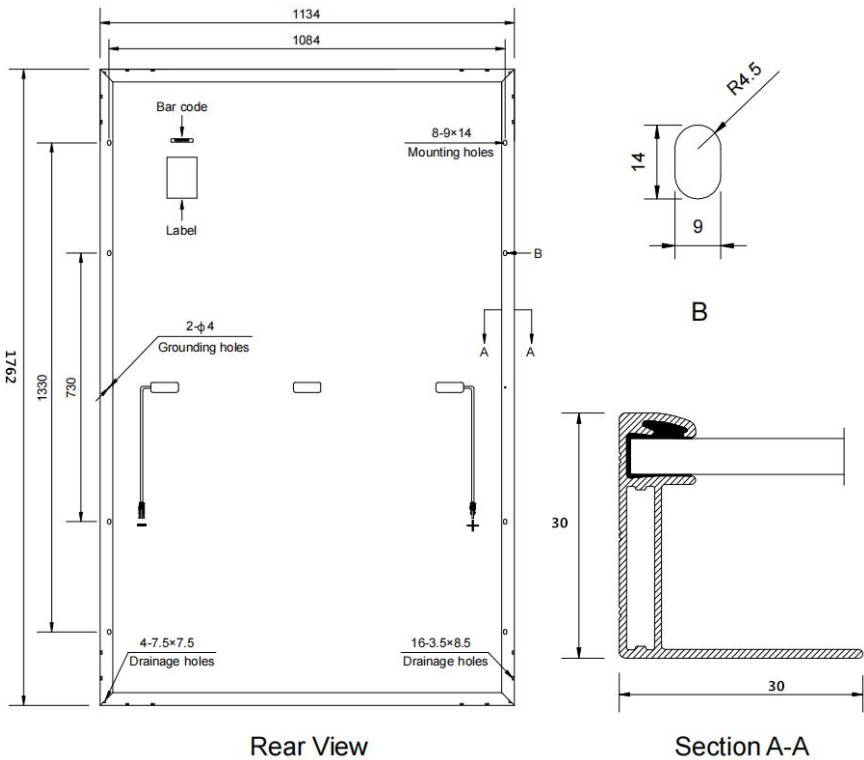
30-year limited warranty of 80% power output; 10-year limited warranty of 90% power output; 12-year limited warranty of materials and workmanship.

PACKING

Standard Packing: 36pcs/Pallet Module Quantity of 20' container: 360pcs Module Quantity of 40' container: 936pcs

ENGINEERING DRAWING

IV CURVES



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