# **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 modules to withstand wind loads up to 2400Pa and snow loads up to 5400Pa.

- 40°C to +85°C

22.52%

- High reliability against extreme environmental conditions (passing salt mist, ammonia and hail tests).
- Potential induced degradation(PID) resistance.
- Power tolerance of ±3%.

Model	PWDG450Wp-96M
Maximum Power (P <sub>max</sub> )	450W
Power Tolerance	±3%
Open Circuit Voltage(VOC)	37.22V
Short Circuit Current(ISC)	15.36A
Voltage at Nominal Power (Vmp)	30.88V
Current at Nominal Power (Imp)	14.60A
Size of Module	1762 x 1134 x 30mm
Standard Test condition	Irradiance:1000W/M2 Temp: 25°C , & AM :1.5G spectrum
Maximum system voltage	1000VDC/1500VDC

#### ELECTRICAL CHARACTERISTICS AT STC 45 +/·2°C NOCT -0.330%/°C Voltage temperature coefficient(Voc) Current temperature coefficient (Isc) +0.058%/°C Power temperature coefficient(Pmpp) -0.400%/°C Minimum power tolerance +/-10% NOCT 45 +/·2°C







Operating temperature

Module Efficiency





# MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline (182 x 105mm)
Number of cell	96pcs ( 2 x 48)
Size of Module	1762 x 1134 x 30mm
Weight	About 21.50kgs
Front Cover	3.2mm tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction Box	IP68, 3 diodes
Cable	4mm <sup>2</sup> (0.006inches <sup>2</sup> ),300mm(11.81inches)/Customized
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**

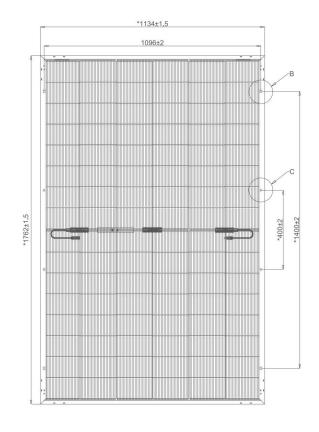
Standard Packing: 36pcs/Pallet

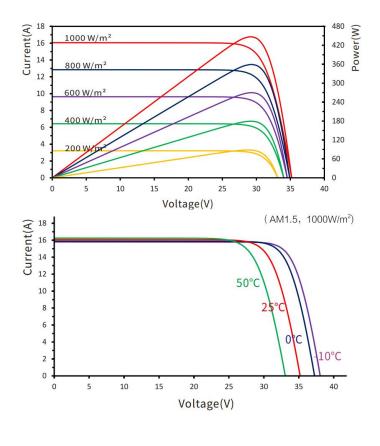
Module Quantity of 20' container: 216cs

Module Quantity of 40' container: 936pcs

## **ENGINEERING DRAWING**

# **IV CURVES**













Room 101, No. 5 Building, No. 9 Haikou Road, Shinan District, Qingdao, China 266000 0086 532 85872070 0086 155 6392 6558 0086 138 6421 6496 sales@pwsolarpower.com info@pwsolarpower.com