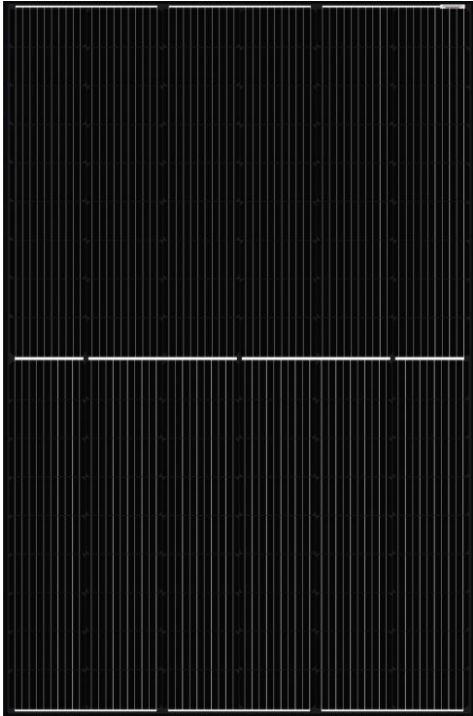


# PWSOLAR

## 415W Full Black

### MONOCRYSTALLINE MODULE



#### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- ◆ High module conversion efficiency up to 21.25% 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.
- ◆ High reliability against extreme environmental conditions (passing salt mist, ammonia and hail tests).
- ◆ Potential induced degradation (PID) resistance.
- ◆ Power tolerance of  $\pm 5\%$ .

#### ELECTRICAL CHARACTERISTICS AT STC

Model	PW415Wp-108MFB
Maximum Power ( $P_{max}$ )	415W
Power Tolerance	$\pm 5\%$
Open Circuit Voltage (VOC)	37.50V
Short Circuit Current (ISC)	14.24A
Voltage at Nominal Power ( $V_{mp}$ )	31.30V
Current at Nominal Power ( $I_{mp}$ )	13.26A
Size of Module	1722 x 1134 x 35mm
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	21.25%

#### ELECTRICAL CHARACTERISTICS AT STC

NOCT	45 $\pm$ 2°C
Voltage temperature coefficient( $V_{oc}$ )	-0.33%/°C
Current temperature coefficient ( $I_{sc}$ )	+0.058%/°C
Power temperature coefficient( $P_{mpp}$ )	-0.400%/°C
Minimum power tolerance	+/-10%
NOCT	45 $\pm$ 2°C



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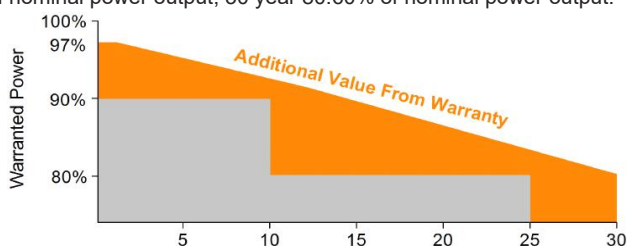
# MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline PERC (182*91mm)
Number of cell	108pcs (6 x 18)
Size of Module	1722 x 1134 x 35mm
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> ), Portrait: 300mm (11.81inches); Lanscape: 1200mm
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 warranty

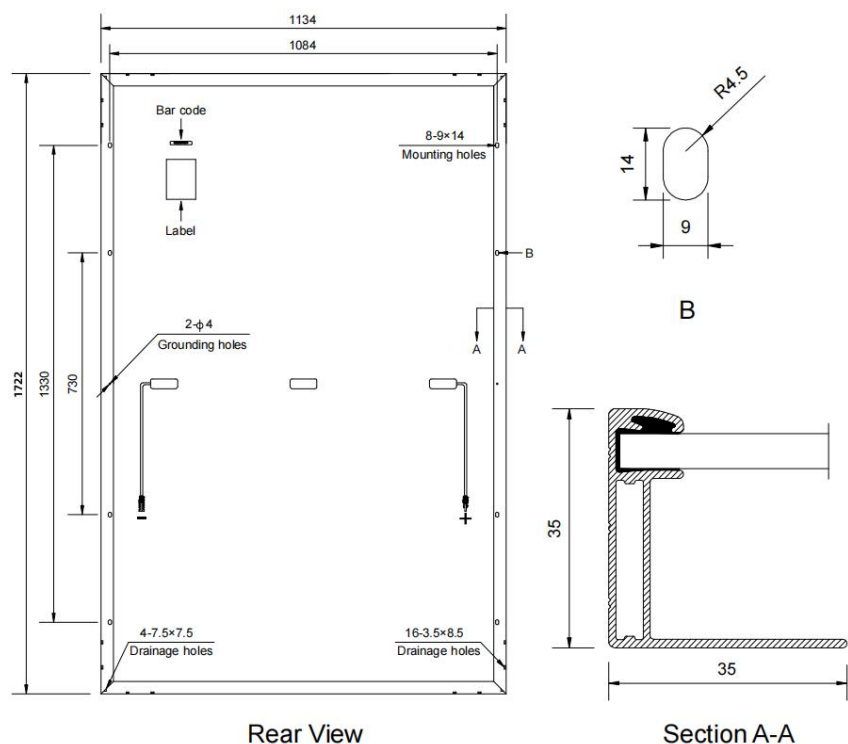
- Linear performance warranty from PWSOLAR
- Standard performance warranty



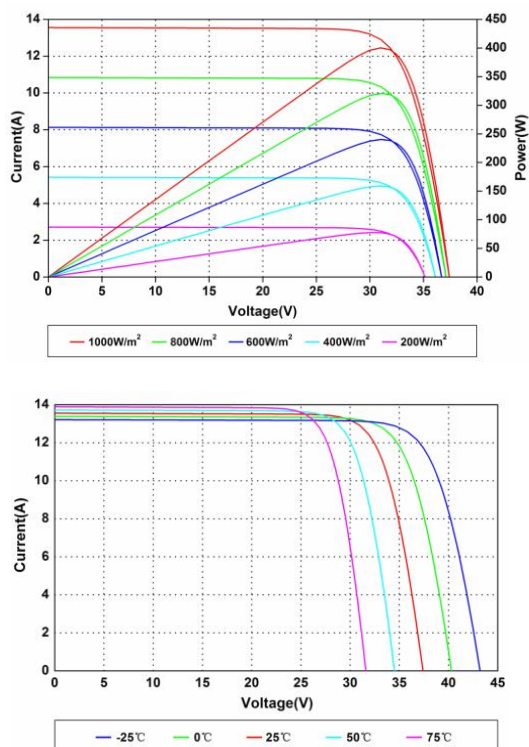
# PACKING

Standarding Packing: 31pcs/Pallet      Module Quantity of 20' container: 330pcs      Module Quantity of 40' container: 806pcs

# ENGINEERING DRAWING



# IV CURVES



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Specifications in this datasheet are subject to change without prior notice