



**Tier 1**

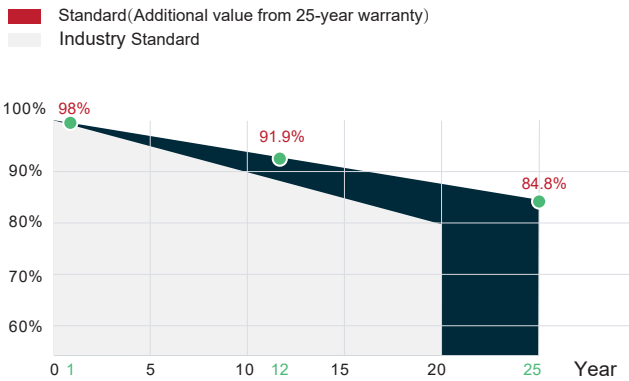
**410W**

**Solar Panel**

SKU: 11912 Full Black



**12Yr quality guarantee | 25Yr power warranty**



**WARRANTY & GUARANTEE**

Linear output power guarantee  
 12 years: 91.9% power output  
 25 years: 84.8% power output



**WITHSTAND STRONG**

Snow load 5400Pa  
 Wind load 2400Pa



**R&D AND PRODUCTION**

Advanced production line. The leading solar cell cutting process and multi busbar design



**HIGH EFFICIENCY**

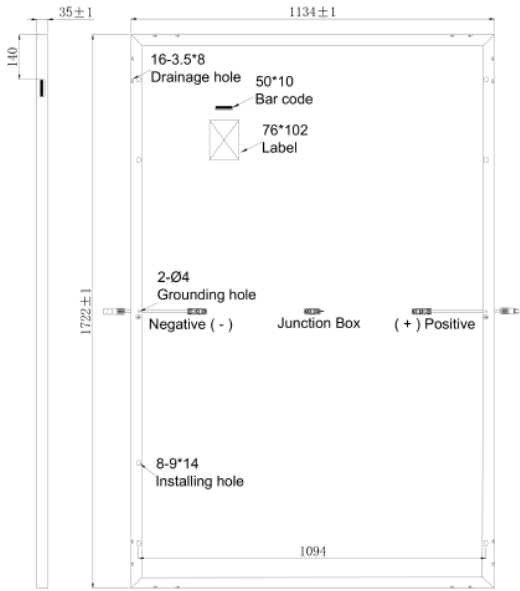
Efficiency can reach 21.23%. Excellent low light performance. Higher power output under the conditions of haze, overcast, etc.



**POWER TOLERANCE**

Power positive tolerance 0~+3%

## ENGINEERING DRAWING



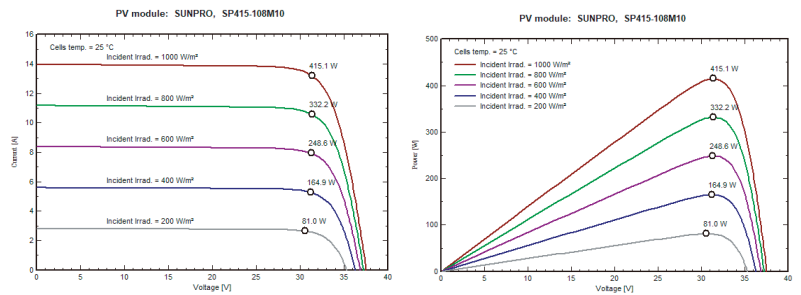
Side

Back

## Mechanical Data

Dimensions	1722x1134x35mm
Weight	21.5 kg
Glass	3.2mm ultra clear embossed tempered coated glass
Output cables	4mm <sup>2</sup> , symmetrical lengths 1100mm
Connectors	MC4 compatible IP68
Cell type	Mono-Crystalline PERC, 182x91mm
Number of cells	108 cells ( Half-Cell )

## I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



## Electrical parameters at NMOT test conditions

(Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C ,AM 1.5, Wind Speed 1m/s)

Max power(Pmax)	305
Max power voltage(Vmp)	28.80
Max power current(Imp)	10.58
Open circuit voltage(Voc)	34.80
Short circuit current(Isc)	11.20

## Electrical parameters at standard test conditions

(STC:AM=1.5, 1000W/m<sup>2</sup> ,Cells Temperature25°C )

Max power(Pmax)	410
Max power voltage(Vmp)	31.25
Max power current(Imp)	13.12
Open circuit voltage(Voc)	37.33
Short circuit current(Isc)	13.90
Module Efficiency(%)	20.97
Max system voltage	DC 1500V(TÜV,UL) / 1000V(CUL)
Maximum Series Fuse Rating	25A

## Temperature Characteristics

Temp.Coeff.of Isc(TK Isc)	0.048%/°C
Temp.Coeff.of Voc(TK Voc)	-0.27%/°C
Temp.Coeff.of Pmax(TK Pmax)	-0.34%/°C
Operating temperature	-40~+85°C
Normal operating cell temperature	44±2°C

## Packing Configuration

Container	40'HQ
Pieces per pallet	62
Pallets per container	13
Pieces per container	806

## Tests, Certifications and Warranties

Standard tests	IEC 61215, IEC 61730, IEC 61701, IEC 62716, PPP 58042
System certs	ISO 9001, ISO14001, ISO45001
Certifications	TÜV, CE, UL, CEC, INMETRO, WEEE
Extreme wind and snow loads testing	Withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)
Power tolerance	0~+3%
Junction box	IP 68
Warranties	12 years product warranty and 25 years 84.8% of power