

190w mono solar panel with 900mm 4mm² cable and MC4 connector



Power tolerance

0-±3%



Withstand strong snow load 5400 Pa / wind load 2400 Pa



Excellent low light performance

3.5% relative eff.reduction at low-irradiance(200W/m²)

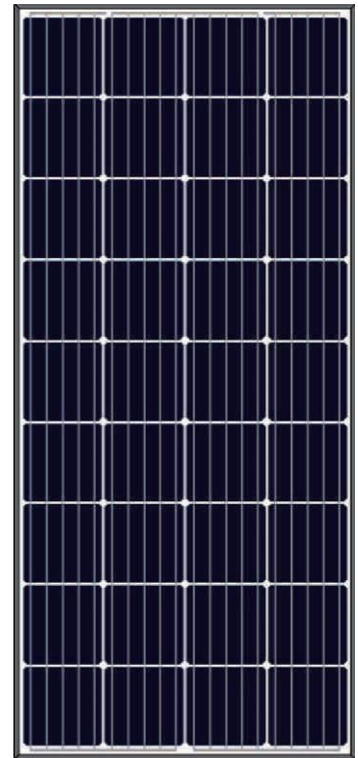


100% EL online Inspection

Better module reliability



AMMONIA & SALT RESISTANCE PID FREE



Reliability & Certification

Product Guarantee: 10-year

Linear Performance Warranty

10-year: 90.7% power output

25-year : 80.2% power output



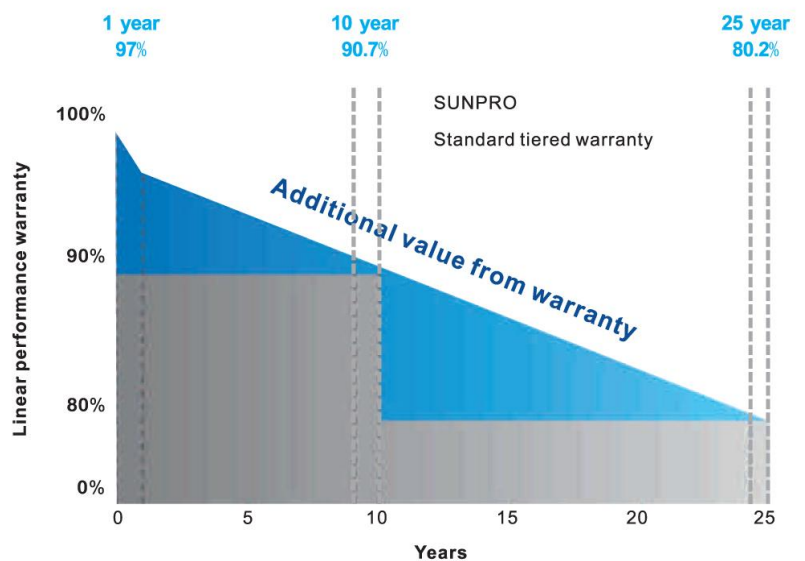
ISO 14001



ISO 9001



OHSAS 18001



Product Specification

Electrical parameters at standard test conditions
 (STC:AM=1.5,1000W/m²,Cells Temperature 25°C)

Typical type	190W
Max power(Pmax)	190
Max power voltage(Vmp)	18.8
Max power current(Imp)	10.11
Open circuit voltage(Voc)	22.8
Short circuit current(Isc)	10.61
Max system voltage	DC 1500V(TUV)/ DC 1000V(TUV)
Module Efficiency(%)	18.9

Mechanical Data

Item	Specification
Dimaensions	1500x680x35mm
Weight	12kgs
Front glass	3.2mm tempered glass 4mm ²
Output cables	Symmetrical lengths 900mm
Connectors	MC4 compatible IP67
Cell type	Mono Crystalline Silicon 158x158mm
Number of cells	36 cells in series

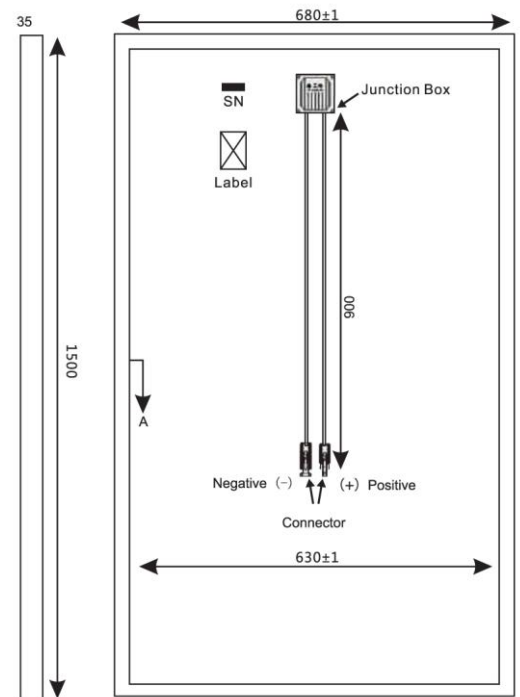
Temperature characteristics

Item	Specification
Temp.Coeff.of Isc(TK Isc)	0.0495% / °C
Temp.Coeff.of Voc(TK Vod)	-0.2893% / °C
Temp.Coeff.of Pmax(TK Pmax)	-0.40% / °C
Operating temperature	-40 ~ +85°C
Normal operating cell temperature	45±2°C

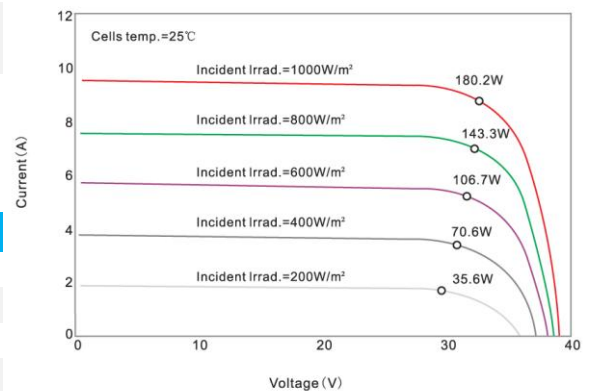
Packing Configuration

Item	Specification		
Container	20'GP	40'GP	40'HQ
Pieces per pallet	84	64	90
Pallets per container	7	15	15
Pieces per container	588	960	1350

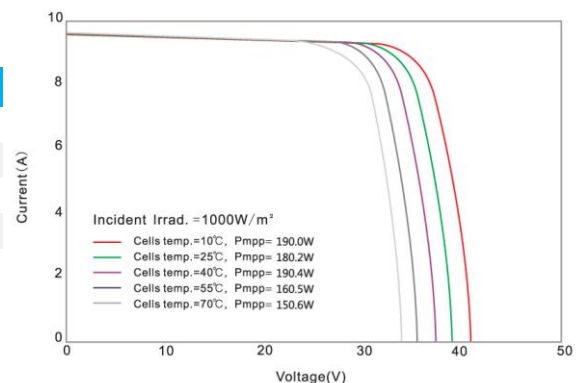
Dimensions and Structure



I-V Curve



I-V Curves at different irradiance



I-V Curves at different temperature

Tests, Certifications and Warranties

Item	Specification
Standard tests	IEC 61215, IEC 61730
System certs	ISO 9001, ISO14001, OHSAS 18001
Certifications	TUV,CE,WEEE,INMETRO
Extreme wind and snow loads testing	Withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)
Power tolerance	0 ~ ±3%
Junction box	IP67
Warranties	10 years product warranty and 25 years 80% of power