

SP190-36M

190W

Mono-Crystalline Photovoltaic Module



Power tolerance
0~±3%



Withstand strong snow load
5400 Pa / wind load 2400 Pa



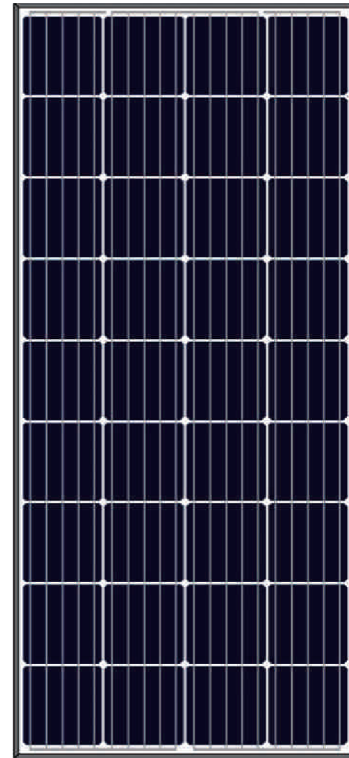
Excellent low light performance
3.5% relative eff.reduction at low-irradiance(200W/m²)



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

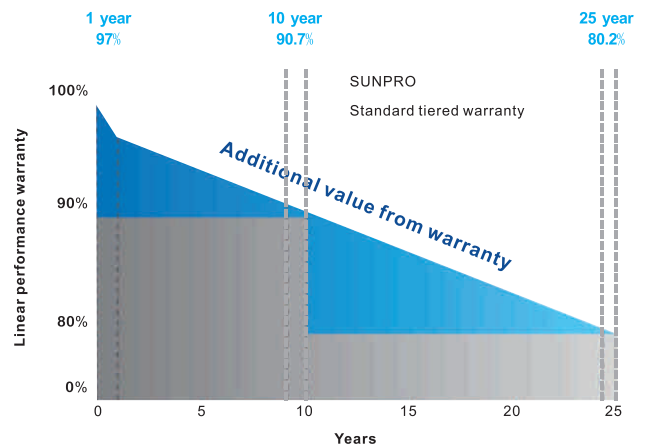
25-year : 80.2% power output



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 |
|-----------------|--|
| Dimensions | 1500x680x35mm |
| Weight | 12kgs |
| Front glass | 3.2mm tempered glass |
| Output cables | 4mm ² symmetrical lengths 900mm |
| Connectors | MC4 compatible IP67 |
| Cell type | Mono Crystalline Silicon 158mmx158mm |
| 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 |

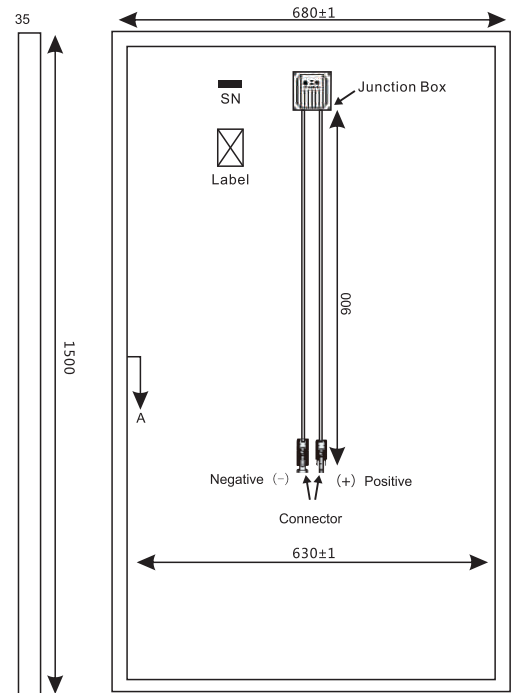
Packing Configuration

| 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 |

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 |

Dimensions and Structure



I-V Curve

