

p.n.420012

410w mono 108 half cut solar panel by 182mm solar cells, size 1724*1134*30mm, Grade A

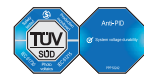
SPxxx-108M10
 (xxx=390~410)
 HIGH EFFICIENCY



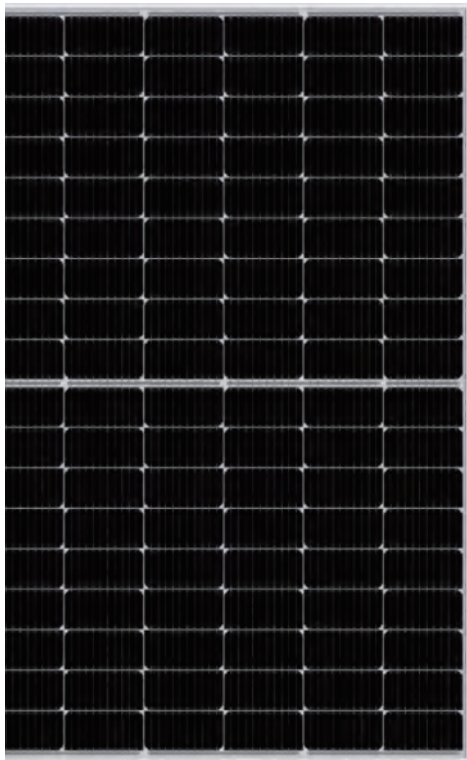
ISO 14001



ISO 9001



ISO 45001



POWER TOLERANCE

0~+3%



**WITHSTAND STRONG SNOW LOAD
 5400 Pa/ WIND LOAD 2400 Pa**



**NEW TECHNOLOGY :
 HIEFF UP TO 20,97%**

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 20.97%.

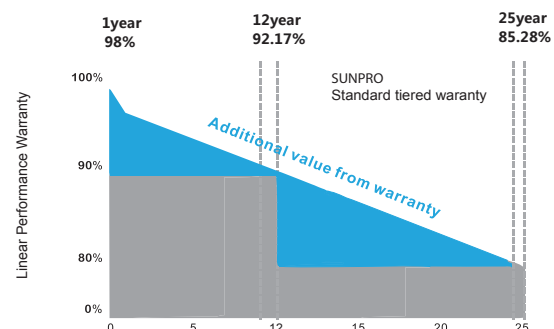


**PRODUCT WITH HIEFF BY
 SUNPRO TECHNOLOGY**

SUNPRO combines cutting edge cell separation and innovative 10-busbar design with SUNPRO Technology

Reliability & Certification

Product Guarantee: **12-year**
 Linear Performance Warranty
12-year: 92.17% power output
25-year: 85.28% power output



Product Specification

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

| Typical type | 390W | 395W | 400W | 405W | 410W |
|----------------------------|------------------------------|-------|-------|-------|-------|
| Max power(Pmax) | 390 | 395 | 400 | 405 | 410 |
| Max power voltage(Vmp) | 30.41 | 30.62 | 30.83 | 31.04 | 31.25 |
| Max power current(Imp) | 12.83 | 12.90 | 12.98 | 13.05 | 13.12 |
| Open circuit voltage(Voc) | 36.53 | 36.73 | 36.93 | 37.13 | 37.33 |
| Short circuit current(Isc) | 13.62 | 13.69 | 13.76 | 13.83 | 13.90 |
| Module Efficiency(%) | 19.95 | 20.20 | 20.46 | 20.72 | 20.97 |
| Max system voltage | DC 1500V(TUV)/ DC 1000V(TUV) | | | | |
| Maximum Series Fuse Rating | 25A | | | | |

Electrical parameters at NMOT test conditions

(NMOT: Irradiance 800W/m²,Ambient Temperature 20°C,
 AM 1.5,Wind Speed 1m/s)

| Item | 390W | 395W | 400W | 405W | 410W |
|----------------------------|-------|-------|-------|-------|-------|
| Max power(Pmax) | 317.4 | 32.12 | 325.4 | 329.2 | 333.1 |
| Max power voltage(Vmp) | 30.9 | 31.1 | 31.3 | 31.5 | 31.7 |
| Max power current(Imp) | 10.28 | 10.34 | 10.41 | 10.47 | 10.52 |
| Open circuit voltage(Voc) | 36.7 | 36.9 | 37.1 | 37.3 | 37.5 |
| Short circuit current(Isc) | 10.88 | 10.93 | 10.99 | 11.04 | 11.10 |

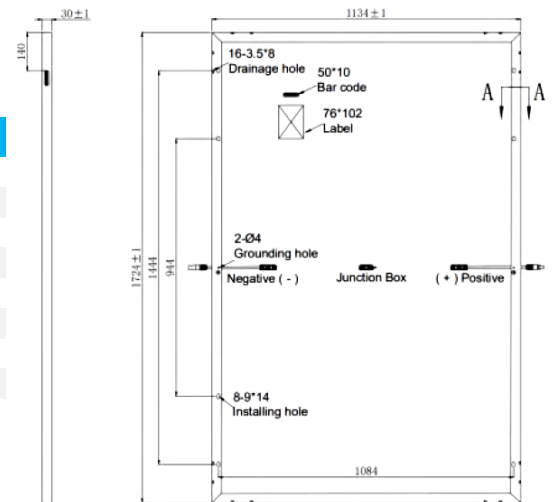
Mechanical Data

| Item | Specification |
|-----------------|---|
| Dimensions | 1724x1134x30mm |
| Weight | 21.5kgs |
| Front glass | 3.2mm tempered glass |
| | 4mm ² |
| Output cables | symmetrical lengths 1100mm |
| Connectors | MC4 compatible IP68 |
| Cell type | Mono-Crystalline PERC Half-Cell9BB 91x182mm |
| Number of cells | 108 cells |

Temperature characteristics

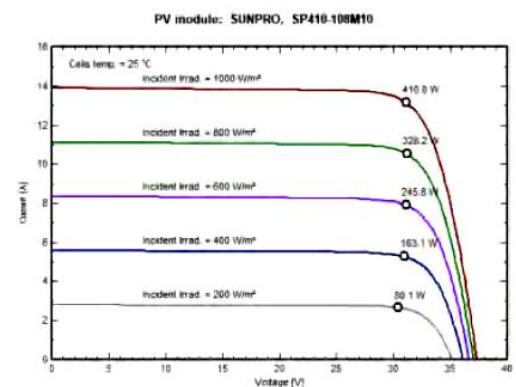
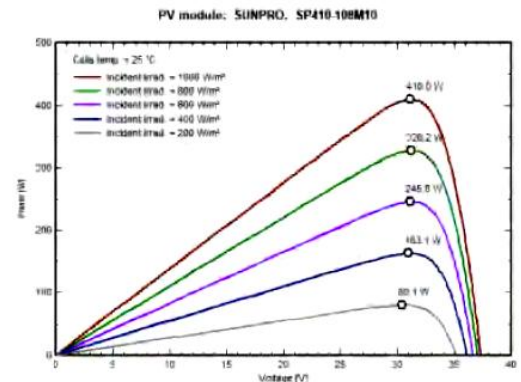
| Item | Specification |
|-----------------------------------|---------------|
| Temp.Coeff.of Isc(TK Isc) | 0.05% / °C |
| Temp.Coeff.of Voc(TK Vod) | -0.29% / °C |
| Temp.Coeff.of Pmax(TK Pmax) | -0.34% / °C |
| Operating temperature | -40 ~ +85°C |
| Normal operating cell temperature | 44±2°C |

Dimensions and Structure



I-V Curve

I-V characteristics at different irradiation



Packing Configuration

| Item | Specification |
|-----------------------|---------------|
| Container | 40'HQ |
| Pieces per pallet | 72 |
| Pallets per container | 13 |
| Pieces per container | 936 |

Tests, Certifications and Warranties

| Item | Specification |
|-------------------------------------|--|
| Standard tests | IEC 61215, IEC 61730, IEC 61701, IEC 62716, PPP 58042B |
| Certifications | TUV, AMMONIA AND SALT MIST CORROSION, ANTI-PID, CE, WEEE, INMERTRO |
| Extreme wind and snow loads testing | Withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal) |
| Power tolerance | 0 ~ ±3% |
| Junction box | IP68 |
| Warranties | 12 years product warranty and 25 years 85.28% of power |