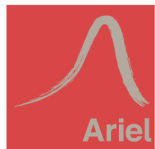


Tier1

BloombergNEF



Lloyd's Syndicate 1910



ISO14001 ISO9001 ISO45001



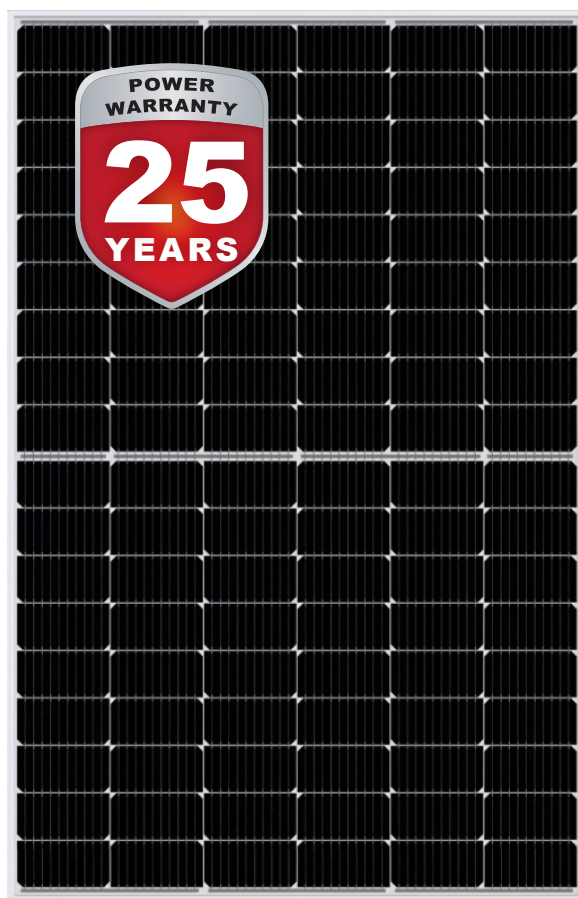
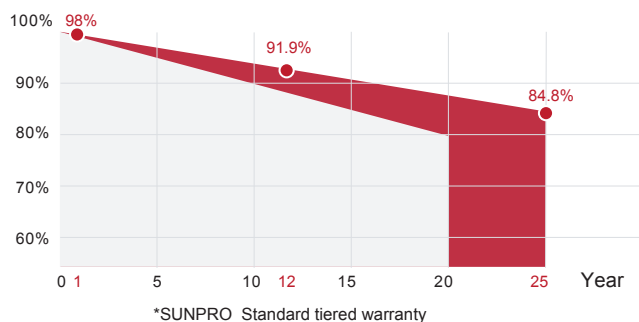
M10 HIEFF TWIN MONO

SPxxx-108M10

- Silver frame (xxx=390~415W)
- Black frame
- Full black
- Bifacial

12Yr quality guarantee | 25Yr power warranty

■ SUNPRO Standard (Additional value from 25-year warranty)
 ■ Industry Standard



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 with SUNPRO Technology.



HIGH EFFICIENCY

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



POWER TOLERANCE

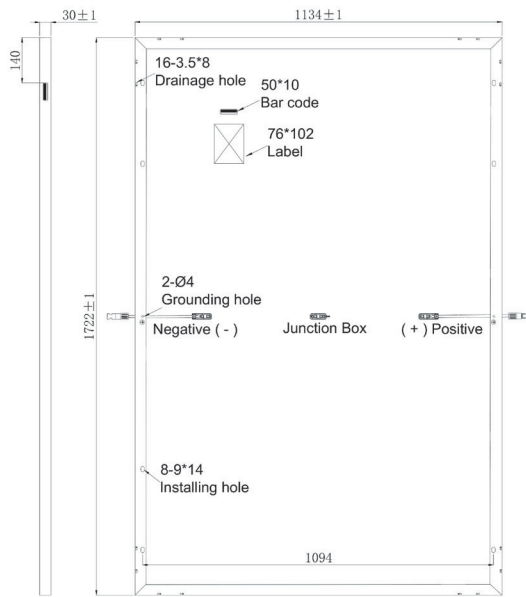
Power positive tolerance: 0~+3%

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

Typical type

| | 390W | 395W | 400W | 405W | 410W | 415W |
|----------------------------|---------------|-------|-------|-------|-------|-------|
| Max power(Pmax) | 390 | 395 | 400 | 405 | 410 | 415 |
| Max power voltage(Vmp) | 30.41 | 30.62 | 30.83 | 31.04 | 31.25 | 31.47 |
| Max power current(Imp) | 12.83 | 12.90 | 12.98 | 13.05 | 13.12 | 13.19 |
| Open circuit voltage(Voc) | 36.53 | 36.73 | 36.93 | 37.13 | 37.33 | 37.53 |
| Short circuit current(Isc) | 13.62 | 13.69 | 13.76 | 13.83 | 13.90 | 13.97 |
| Module Efficiency(%) | 21.88 | 20.20 | 20.46 | 20.72 | 20.97 | 21.23 |
| Max system voltage | DC 1500V(TUV) | | | | | |
| Maximum Series Fuse Rating | 25A | | | | | |

DIMENSIONS AND STRUCTURE



Side

Back

Electrical parameters at NMOT test conditions

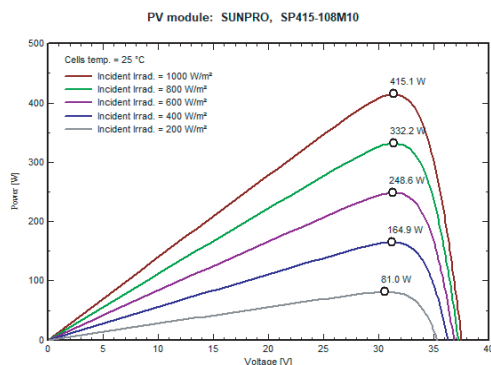
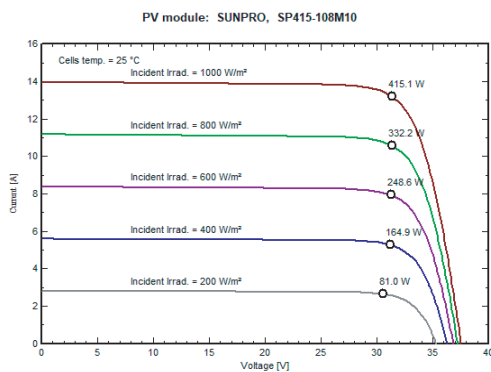
(Irradiance 800W/m², Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s)

| Typical type | 390W | 395W | 400W | 405W | 410W | 415W |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Max power(Pmax) | 317.4 | 321.2 | 325.4 | 329.2 | 333.1 | 337.1 |
| Max power voltage(Vmp) | 30.90 | 31.10 | 31.30 | 31.50 | 31.70 | 31.90 |
| Max power current(Imp) | 10.28 | 10.34 | 10.41 | 10.47 | 10.52 | 10.58 |
| Open circuit voltage(Voc) | 36.70 | 36.90 | 37.10 | 37.30 | 37.50 | 37.70 |
| Short circuit current(Isc) | 10.88 | 10.93 | 10.99 | 11.04 | 11.10 | 11.16 |

Mechanical Data

| | |
|-----------------|---|
| Dimensions | 1722x1134x30mm |
| Weight | 21.5 kg |
| Glass | 3.2mm tempered glass |
| Output cables | 4mm ² , symmetrical lengths 1100mm |
| Connectors | MC4 compatible IP68 |
| Cell type | Mono-Crystalline PERC, 10BB, 182x91mm |
| Number of cells | 108 cells (Half-Cell) |

I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



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) | -0.35%/°C |
| Operating temperature | -40~+85°C |
| Normal operating cell temperature | 44±2°C |

Packing Configuration

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

Tests, Certifications and Warranties

| | |
|-------------------------------------|---|
| Standard tests | IEC 61215, IEC 61730, IEC 61701, IEC 62716, PPP 58042 |
| System certs | ISO 9001, ISO14001, ISO45001 |
| Certifications | TUV, CE, WEEE, INMETRO FIRE CERTIFICATE C1 |
| 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 |