



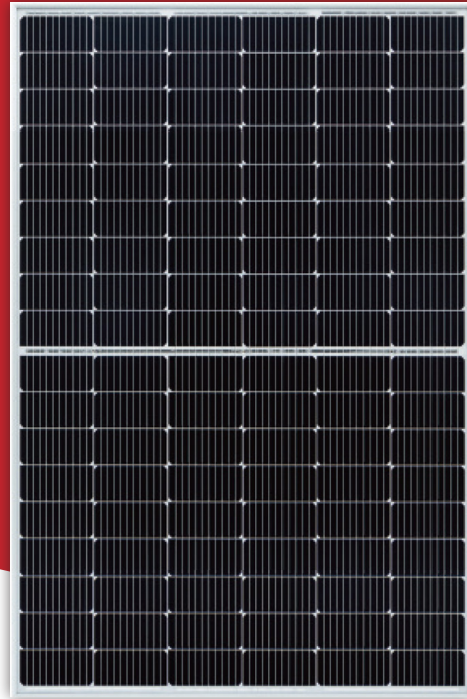
SUNOVA SOLAR

Leading one-stop PV Supplier

HI-KILO

400-415W

High Efficiency Half-Cell Mono PERC Module



Excellent low irradiance performance.



Better light trapping and current collection to improve module power output and reliability.



Industry leading lowest thermal co-efficient of power.



Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.

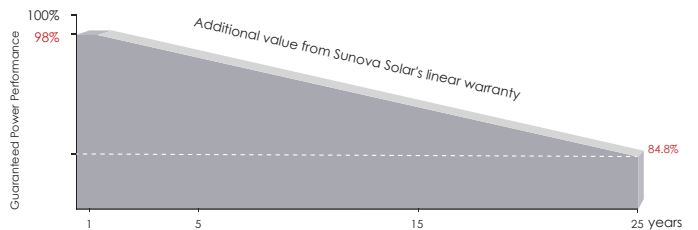


Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



100% triple EL test enabling remarkable reduction of hidden crack rate of modules

LINEAR PERFORMANCE WARRANTY



15 years

Product quality & process guarantee

25 years

Linear power guarantee

0.55 %

Annual Degradation Over 25 years

COMPREHENSIVE CERTIFICATES



ISO 9001: Quality Management System

ISO 14001: Environmental Management System Standard

OHSAS 18001: International Occupational Health and Safety Assessment System Standard

* Different markets have different certification requirements. Also, the products are under rapid innovation. Please confirm the certification status with regional sales representatives.

PERFORMANCE INSURANCE



中国平安

PING AN P & C INSURANCE CO CN SZN

ELECTRIC CHARACTERISTICS

| Model of modules | SS-400-54MDH | | SS-405-54MDH | | SS-410-54MDH | | SS-415-54MDH | |
|--------------------------------------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
| | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power — P_{mp} (W) | 400 | 298 | 405 | 302 | 410 | 305 | 415 | 309 |
| Open-circuit voltage — V_{oc} (V) | 37.18 | 34.95 | 37.33 | 35.09 | 37.68 | 35.42 | 37.79 | 35.59 |
| Short-circuit current — I_{sc} (A) | 13.39 | 10.85 | 13.44 | 10.89 | 13.59 | 11.01 | 13.72 | 11.12 |
| Maximum power voltage — V_{mp} (V) | 31.42 | 29.22 | 31.55 | 29.35 | 31.84 | 29.61 | 31.94 | 29.72 |
| Maximum power current — I_{mp} (A) | 12.74 | 10.21 | 12.84 | 10.29 | 12.88 | 10.31 | 13.01 | 10.42 |
| Module efficiency — η_m (%) | 20.5% | | 20.7% | | 21.0% | | 21.2% | |
| Power tolerance (W) | (0,+5) | | | | | | | |
| Maximum system voltage (V) | 1500 | | | | | | | |
| Maximum rated fuse current (A) | 25 | | | | | | | |
| Current operating temperature (°C) | -40~+85 °C | | | | | | | |

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

STRUCTURAL CHARACTERISTICS

| | |
|---------------------------|--|
| Module dimensions (L*W*H) | 1724 x 1134 x 30 mm |
| Weight | 21.5 kg |
| Number of cells | 108 cells |
| Cell | PERC Monocrystalline 182x91 mm |
| Glass | Tempered, 3.2 mm AR, High transmittance, Low iron |
| Frame | Anodized aluminum alloy |
| Junction box | IP68, 3 diodes |
| Output wire | 4.0 mm ² , wire length: 300 mm or Customized Length |
| Connector | MC4 Compatible |
| Mechanical load | Snow load: 5400 Pa / Wind load: 2400 Pa |

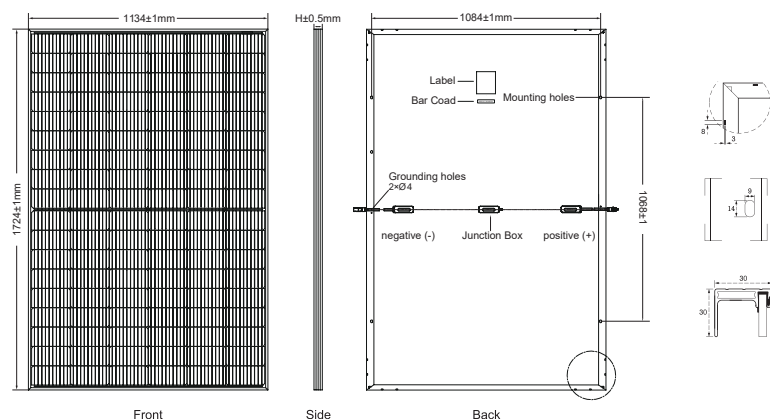
TEMPERFORMANCE RATINGS

| | |
|---------------------------------------|------------|
| Temperature coefficient (P_{max}) | -0.35 %/°C |
| Temperature coefficient (V_{oc}) | -0.27 %/°C |
| Temperature coefficient (I_{sc}) | +0.05 %/°C |
| Nominal operating cell temperature | 45±2 °C |

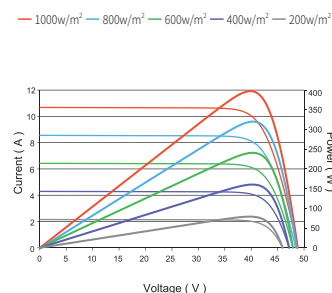
PACKAGING CONFIGURATION

| | |
|--------------------|------|
| Container | 40HQ |
| Quantity/pallet | 36 |
| Pallets/container | 26 |
| Quantity/container | 936 |

MODULE DIMENSIONS (MM)



Current-Voltage & Power-Voltage Curves (400W)



Temperature Dependence of I_{sc} , V_{oc} , P_{max}

