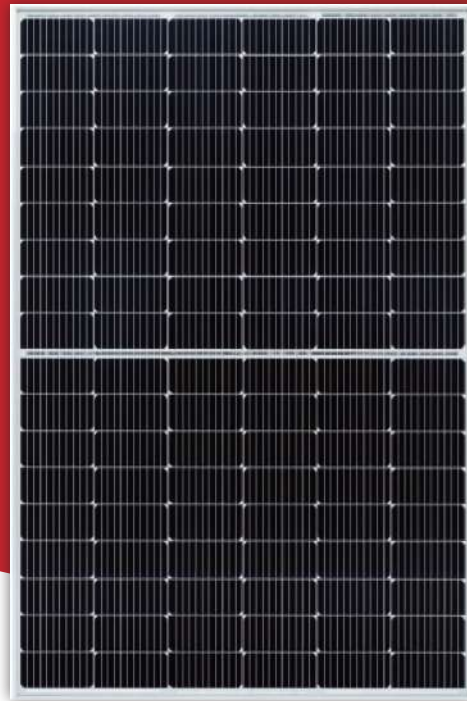


## HI-KILO

# 400-415W

High Efficiency Half-Cell Mono PERC Module



Excellent low irradiance performance.



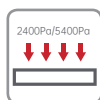
Better light trapping and current collection to improve module power output and reliability.



Industry leading lowest thermal co-efficient of power.



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

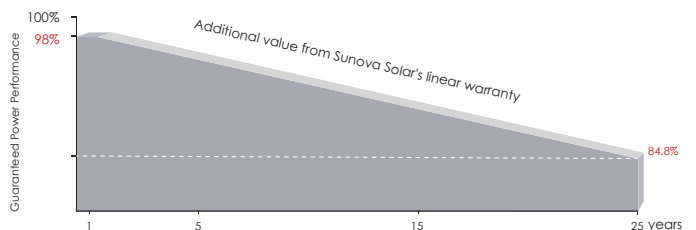


Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



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



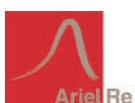
ISO 9001: Quality Management System

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 — $\eta_m$ (%)     | 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/m<sup>2</sup>, Cell Temperature 25 °C, Spectra at AM1.5

**NOCT** (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, 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 <sup>2</sup> , wire length: 300 mm or Customized Length |
| Connector                 | MC4 Compatible   |
| Mechanical load           | Snow load: 5400 Pa / Wind load: 2400 Pa                        |

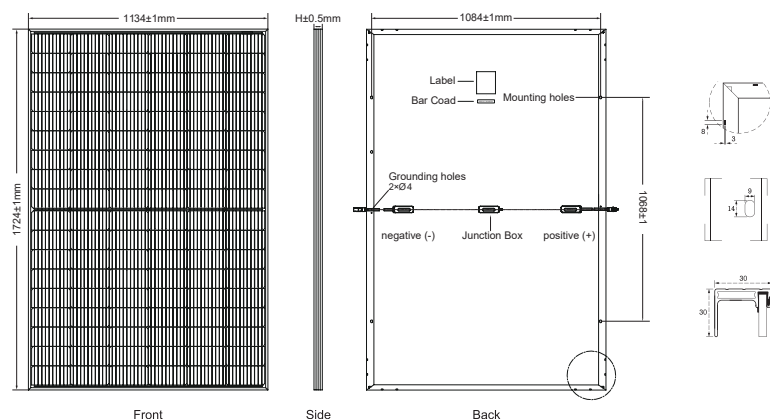
## TEMPERFORMANCE RATINGS

|                                       |            |
|---------------------------------------|------------|
| 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    |

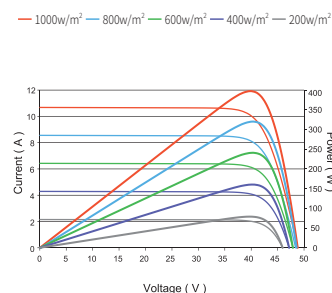
## PACKAGING CONFIGURATION

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

## MODULE DIMENSIONS (MM)



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



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

