



# SUNOVA SOLAR

Pv Tech Expert.

## HI-M ILO

# 580-595W

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.

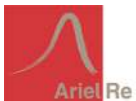


Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



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

## PERFORMANCE INSURANCE

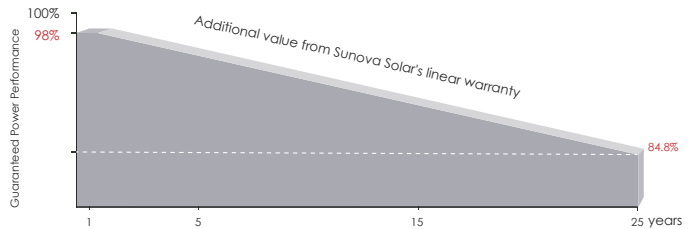


中国平安

PING AN P & C INSURANCE CO CN SZ

\* Optional performance warranty insurance. Please contact our local sales staff for more information.

## 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

ISO 45001: International Occupational Health and Safety Assessment System Standard

SA 8000: 2014 Social Accountability Management System

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

MADE IN CHINA / VIETNAM

www.sunova-solar.com

## ELECTRIC CHARACTERISTICS

| Model of modules                                     | SS-580-78MDH               |       | SS-585-78MDH |       | SS-590-78MDH |       | SS-595-78MDH |       |
|--|----------------------------|-------|--------------|-------|--------------|-------|--------------|-------|
|  | STC                        | NOCT  | STC          | NOCT  | STC          | NOCT  | STC          | NOCT  |
| Maximum power — $P_{mp}$ (W)                         | 580                        | 432   | 585          | 435   | 590          | 439   | 595          | 443   |
| Open-circuit voltage — $V_{oc}$ (V)                  | 53.54                      | 50.54 | 53.65        | 50.64 | 53.76        | 50.75 | 53.84        | 50.87 |
| Short-circuit current — $I_{sc}$ (A)                 | 13.77                      | 11.12 | 13.85        | 11.19 | 13.97        | 11.27 | 14.04        | 11.37 |
| Maximum power voltage — $V_{mp}$ (V)                 | 44.34                      | 41.29 | 44.41        | 41.39 | 44.49        | 41.46 | 44.57        | 41.54 |
| Maximum power current — $I_{mp}$ (A)                 | 13.09                      | 10.47 | 13.18        | 10.51 | 13.27        | 10.59 | 13.35        | 10.67 |
| Module efficiency — $\eta_m$ (%)                     | 20.8%                      |       | 20.9%        |       | 21.1%        |       | 21.3%        |       |
| Power tolerance (W)                                  | (0,+5)                     |       |              |       |              |       |              |       |
| Tolerance of rated $P_{mpp}$ (%)                     | $\pm 3$                    |       |              |       |              |       |              |       |
| Maximum system voltage (V)                           | 1500                       |       |              |       |              |       |              |       |
| Maximum rated fuse current (A)                       | 25                         |       |              |       |              |       |              |       |
| Current operating temperature ( $^{\circ}\text{C}$ ) | -40~+85 $^{\circ}\text{C}$ |       |              |       |              |       |              |       |

**STC** (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25  $^{\circ}\text{C}$ , Spectra at AM1.5

**NOCT** (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20 $^{\circ}\text{C}$ , Spectra at AM1.5, Wind at 1m/s

## STRUCTURAL CHARACTERISTICS

|                           |  |
|---------------------------|--|
| Module dimensions (L*W*H) | 2464 x 1134 x 35 mm                                |
| Weight                    | 29 kg  |
| Number of cells           | 156 cells  |
| Cell                      | PERC Monocrystalline 182x91 mm                     |
| Glass                     | Tempered, 3.2 mm AR, High transmittance, Low iron  |
| Frame                     | Anodized aluminum alloy                            |
| Junction box              | IP68   |
| Output wire               | 4.0 mm <sup>2</sup> , wire length:300mm/customized |
| Connector                 | PV-KST4-EVO 2/xy_UR,PV-KBT4-EVO 2/xy_UR            |
| Mechanical load           | Snow load: 5400 Pa / Wind load: 2400 Pa            |

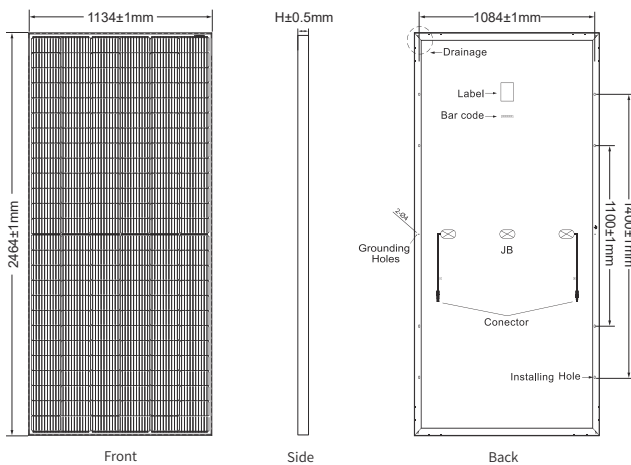
## TEMPERATURE RATINGS

|                                       |                               |
|---------------------------------------|-------------------------------|
| Temperature coefficient ( $P_{max}$ ) | -0.35 %/ $^{\circ}\text{C}$   |
| Temperature coefficient ( $V_{oc}$ )  | -0.28 %/ $^{\circ}\text{C}$   |
| Temperature coefficient ( $I_{sc}$ )  | +0.045 %/ $^{\circ}\text{C}$  |
| Nominal operating cell temperature    | 43 $\pm 2$ $^{\circ}\text{C}$ |
| Fire safety class                     | C                             |

## PACKAGING CONFIGURATION

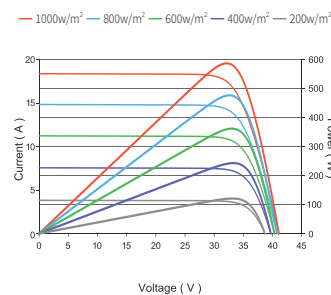
|                    |      |
|--------------------|------|
| Container          | 40HQ |
| Quantity/pallet    | 31   |
| Pallets/container  | 18   |
| Quantity/container | 558  |

## MODULE DIMENSIONS (MM)



\* The tolerance is  $\pm 1$  mm  
Length shown in mm

Current-Voltage & Power-Voltage Curves (595W)



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

