

# NHA144MP

# 540-560W

Perc Technology

Half-Cut Cells  
Single-Glass Module



### Half-Cut technique leads to increased power output

Compared with the whole cell, the current of half cell is halved, the heat loss is reduced, the hot spot temperature is reduced, and the power can be effectively increased.



### Series-parallel wiring mode results in reduced shading loss

Series-parallel wiring will not only reduce power loss from shade but also improves the effective use of supports and space.



### Excellent temperature performance

The temperature of HC module is 1.6 °C lower than that of the conventional module under the same working condition, which results less power loss.



### Reduced encapsulation loss due to reduced current

HC module is of lower current and lower CTM loss at around 0.2%.

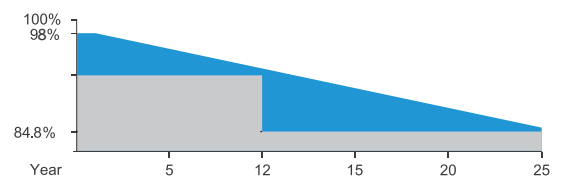
## WARRANTY

12 years

Product warranty on materials and workmanship

25 years

Linear power output warranty



## CERTIFICATES

ISO 9001: 2015  
Quality Management System

IEC 61215 / IEC 61730

ISO 14001: 2015  
Environmental Management System

ISO 45001 : 2018  
Occupational Health &  
Safety Management System



\*Certification requirements vary in different markets, please consult with Nahui sales team for appropriate certification.

## ELECTRICAL PARAMETERS (STC)

Peak Power(Pmax)	540.00	545.00	550.00	555.00	560.00
Maximum Power Voltage(Vmp)	41.96	42.06	42.16	42.24	42.33
Maximum Power Current(Imp)	12.87	12.96	13.05	13.14	13.23
Open Circuit Voltage(Voc)	49.60±3%	49.70±3%	49.80±3%	49.90±3%	50.00±3%
Short Circuit Current(Isc)	13.74±3%	13.84±3%	13.94±3%	14.04±3%	14.14±3%
Module Efficiency( % )	20.90	21.10	21.30	21.49	21.68

\* STC: irradiance 1000 W/m<sup>2</sup>, AM 1.5, and cell temperature of 25°C

## ELECTRICAL PARAMETERS (NMOT)

Peak Power(Pmax)	402.00	406.00	410.00	413.00	416.00
Maximum Power Voltage(Vmp)	38.29	38.35	38.43	38.52	38.59
Maximum Power Current(Imp)	10.50	10.58	10.66	10.73	10.80
Open Circuit Voltage(Voc)	46.12±3%	46.21±3%	46.31±3%	46.40±3%	46.49±3%
Short Circuit Current(Isc)	11.1±3%	11.18±3%	11.26±3%	11.34±3%	11.42±3%

\* NMOT: irradiance 800 W/m<sup>2</sup>, AM 1.5, ambient temperature 20°C, wind speed 1 m/s

## TEMPERATURE & MAXIMUM RATING

Maximum System Voltage (V)	1000/1500
Maximum Series Fuse Rating (A)	25
Power Tolerance	0~+3%
Pmax Temperature Coefficients (W/°C)	-0.36%/°C
Voc Temperature Coefficients (V/°C)	-0.29%/°C
Isc Temperature Coefficients (A/°C)	+0.048 %/°C
NOCT Nominal Operating Cell Temperature (°C)	45±2 °C
Operating and Storage Temperature (°C)	-40~+85 °C

## MECHANICAL CHARACTERISTICS

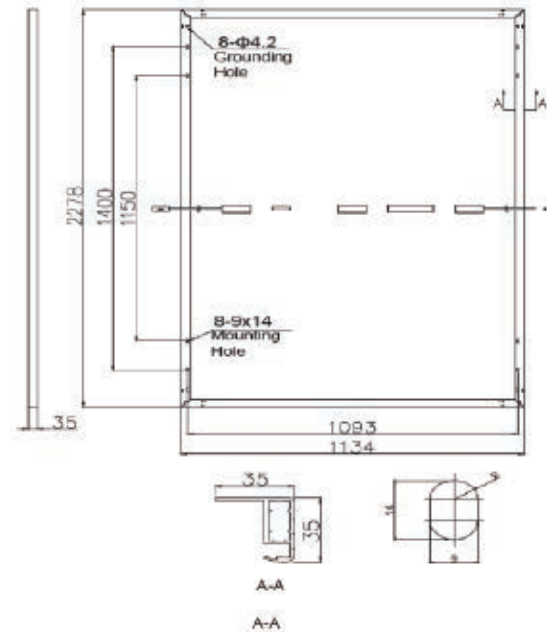
Cell Type	Mono 182*91
No. of Cells	144 (6*24)
Dimensions	2278*1134*35mm
Weight	28.6kg
Frame	Anodised Aluminum
Junction box	IP68, 3 bypass diodes
Output cables	4.0mm <sup>2</sup> , cable 30cm
MaxWind Load/Snow Load	2400/5400

## PACKING WAY

20'FT container	5 Packages/155 pcs
40'HQ container	20 Packages/620 pcs

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## ASSEMBLY DRAWING (Unit:mm)



## IV CURVE (540W)

