

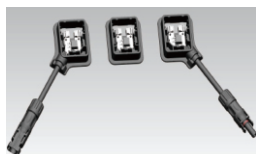
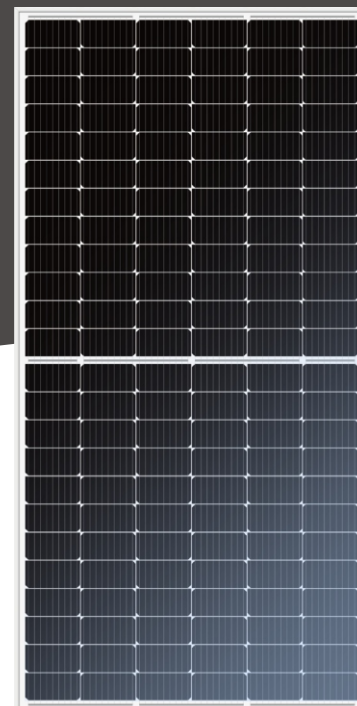
# AU-144MHD

## POWER RANGE

**430W~460W**

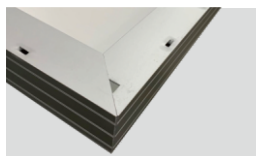
## CELL SIZE

**166\*83mm**



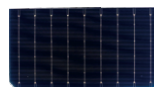
## JUNCTION BOX

Waterproof protection grade: IP67/IP68  
Safety Level: Class II  
Maximum System Voltage: 1500V  
outstanding waterproof level -  
Effectively resist harsh environments



## Frame

Strong machanical load  
resistance up to 5400Pa  
Anodic oxidation layer resistant to  
chemical corrosion available  
in silver and black



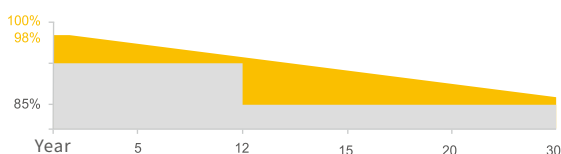
**9BB**

## QUALIFICATIONS AND CERTIFICATES



· IEC61215 / · IEC61730

## WARRANTY



**12**  
YEARS

Guarantee on product materail and workmanship

**30**  
YEARS

Linear Power output warranty



## Higher power

Double-sided power generation can significantly improve the equivalent power generation of solar panels.  
Higher power of solar panels can effectively reduce system BOS cost.



## Higher reliability

Suitable for areas with higher temperature and higher humidity, resistant to salt spray ammonia gas with firing rating in A.  
Anti-PID performance improvement through battery process optimization and material control.



## Higher generated energy

Excellent IAM and low light performance.  
More power generation by lower temperature coefficient and lower operating temperature.



## Easy installation

The conventional frame design makes the double-glass solar panels suitable for various mounting modes.  
Easy to hold, transport and install.

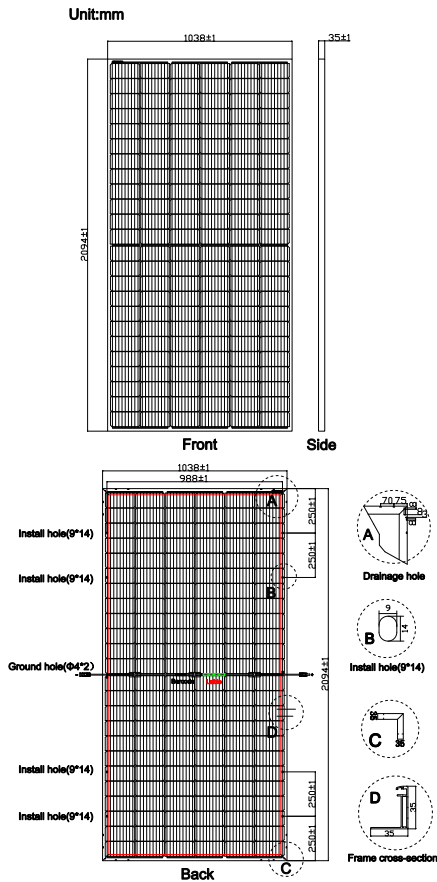
**AUSTA ENERGY**  
[www.austagroup.com](http://www.austagroup.com)

AUSTA ENERGY established in 2008, is a high-tech enterprise integrating R&D, production and sales of solar energy products. It is committed to the overall solution of distributed photovoltaic system and provides services from consulting, design, construction, financing to intelligent operation and maintenance.

AUSTA has 3 production sites in China and branches and representative offices in more than 10 countries overseas. Products include solar cells, modules, On/Off grid solar system, solar pump and other solar related applications. Our products have passed many international certifications such as TUV, MCS, CEC, IEC, ISO, CE, CQC and so on. With excellent quality, our products are exported to more than 100 countries of the world.

Since its establishment, AUSTA has always followed the idea of "Smart energy, Lightening future". It has followed the steps of "the Belt and Road Initiative", we bring bright light to the countries and people who are short of electricity. Sharing the concept of modern civilization, and building a green home together.

## PV DRAWINGS



## ELECTRICAL DATA (STC)

| Model Type                  | AU430-36V<br>-MHD | AU440-36V<br>-MHD | AU450-36V<br>-MHD | AU460-36V<br>-MHD |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|
| Peak Power(Pmax)            | 430.00            | 440.00            | 450.00            | 460.00            |
| Maximum Power Voltage(Vmp)  | 40.60             | 41.00             | 41.40             | 41.80             |
| Maximum Power Current(Impp) | 10.60             | 10.73             | 10.87             | 10.99             |
| Open Circuit Voltage(Voc)   | 48.90±3%          | 49.20±3%          | 49.60±3%          | 50.00±3%          |
| Short Circuit Current(Isc)  | 11.30±3%          | 11.45±3%          | 11.58±3%          | 11.72±3%          |
| Module Efficiency( % )      | 19.78             | 20.24             | 20.70             | 21.16             |

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

## ELECTRICAL DATA (NOCT)

| Model Type                  | AU430-36V<br>-MHD | AU440-36V<br>-MHD | AU450-36V<br>-MHD | AU460-36V<br>-MHD |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|
| Peak Power(Pmax)            | 321.10            | 328.60            | 336.10            | 343.50            |
| Maximum Power Voltage(Vmp)  | 37.90             | 38.20             | 38.60             | 39.00             |
| Maximum Power Current(Impp) | 8.49              | 8.60              | 8.70              | 8.81              |
| Open Circuit Voltage(Voc)   | 45.80±3%          | 46.10±3%          | 46.40±3%          | 46.80±3%          |
| Short Circuit Current(Isc)  | 9.13±3%           | 9.25±3%           | 9.36±3%           | 9.47±3%           |

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

## PARAMETER OF DOUBLE-SIDED POWER GENERATION (430W)

| Pmax gain | Pmax/W | Vmpp/V | Impp/A | Voc/V    | Isc/A    |
|-----------|--------|--------|--------|----------|----------|
| 5%        | 452.00 | 40.60  | 11.13  | 48.90±3% | 11.87±3% |
| 15%       | 495.00 | 40.70  | 12.16  | 49.00±3% | 12.96±3% |
| 25%       | 538.00 | 40.70  | 13.22  | 49.00±3% | 14.09±3% |

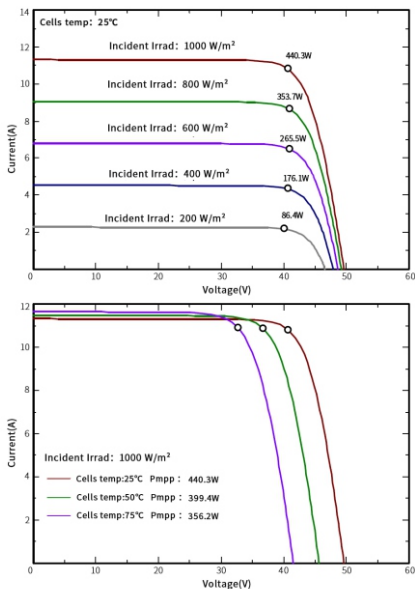
## TEMPERATURE & MAXIMUM RATING

|  |             |
|--|-------------|
| Maximum System Voltage (V)                   | 1500 V      |
| Maximum Series Fuse Rating (A)               | 25 A        |
| Power Tolerance                              | 0~+3 W      |
| Pmax Temperature Coefficients (W/°C)         | -0.350 %/°C |
| Voc Temperature Coefficients (V/°C)          | -0.284 %/°C |
| Isc Temperature Coefficients (A/°C)          | +0.050 %/°C |
| NOCT Nominal Operating Cell Remperature (°C) | 45±2 °C     |
| Operating and Storage Temperature (°C)       | -40~+85 °C  |

## PACKING WAY

|                |                    |
|----------------|--------------------|
| 20FT container | 5 Packages/155pcs  |
| 40HQ container | 22 Packages/726pcs |

## IV CURVE (440W)



## MECHANICAL CHARACTERISRTICS

|                        |   |
|------------------------|---|
| Cell Type              | 166*83 Mono   |
| No. of Cells           | 144 (12*12)   |
| Dimensions             | 2094*1038*35mm  |
| Weight                 | 27.50kg   |
| Front glass            | 2.0mm coated high-transparent tempered glass          |
| Back glass             | 2.0mm high-transparent glass                          |
| Frame                  | Anodized Aluminium Alloy                              |
| Junction box           | IP67/IP68 3diodes                                     |
| Output cables          | 4mm <sup>2</sup> cable 35cm (Inlcuding MC4 connector) |
| MaxWind Load/Snow Load | 2400Pa/5400Pa   |



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The company reserves the right of final interpretation, November 2020 edition