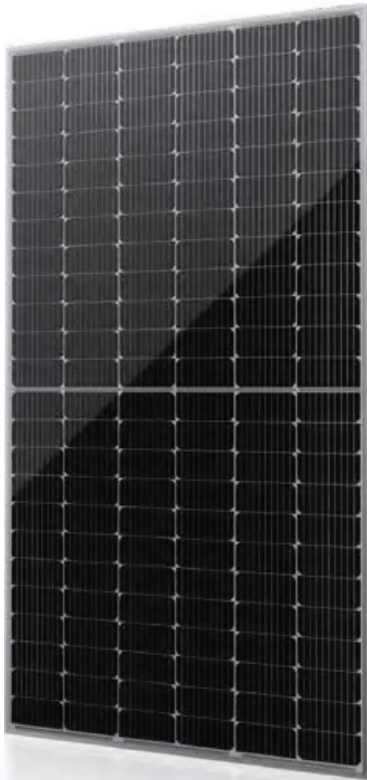


# HT72-166M

Big Size: Cell 166\*83

**435W / 440W**  
**445W / 450W / 455W**



- Module Efficiency: 20.4%
- No. of Cells: 144 (6 × 24)
- Weight: 24.5kg
- Dimensions: 2115mm×1052mm×35mm

Established to develop solar technology for Satellite program



Shanghai Aerospace Automobile Electromechanical Co., Ltd.  
website: www.ht-saae.com.au

Factory:  
Lianyungang ShenZhou New Energy Co., Ltd.  
Turkey HT Solar Energy Joint Stock Company



Half cut cell technology can reduce the internal power loss and improve component overall power. Excellent heat dissipation avoids hot spot production.



9BB The optimized number and width of main gate lines, Maximize the light receiving area of components and Reduce component power consumption

**15Ys**  
Products Warranty



Designed for high voltage systems of up to 1500 VDC, increasing the string length of solar systems and saving on BoS costs

**25Ys**  
Warranty on power output



All the modules are sorted and packaged by amperage, reducing mismatch losses and maximizing system output.

**EL**

Microcrack resistant enhance reliability, triple EL tested of high quality control.

**5W**

Positive tolerance 0/+5w guaranteed



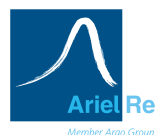
Entire module certified to with stand extreme wind (2400 Pa) and snow loads (5400 Pa)

**PID**

PID Resistant

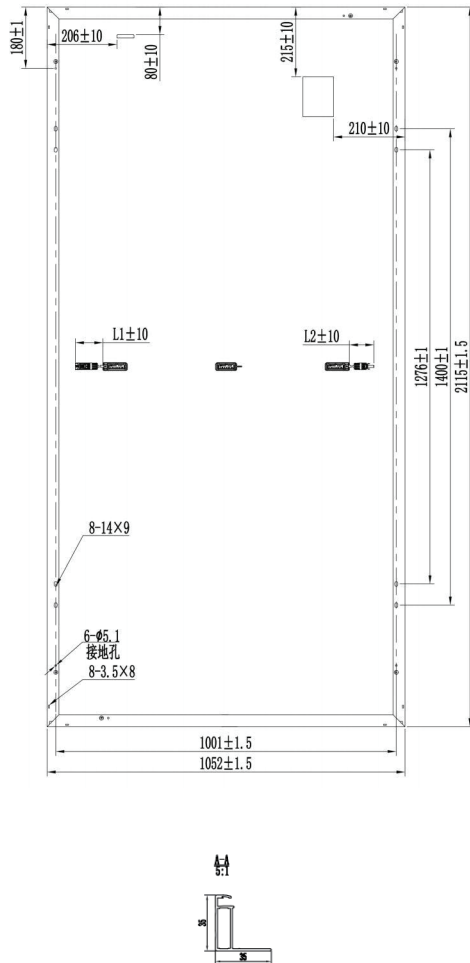
**Comprehensive and first-rate certification system**

IEC61215: 2016, IEC61730: 2016 Latest Standard  
ISO9001, ISO14001 and OHSAS18001,  
meeting the highest international standards  
Strict quality control



## 435W/440W/445W/450W/455W

### Engineering Drawing



### Electrical Characteristics

Module	HT72-166M				
Maximum Power at STC(Pmax)	435W	440W	445W	450W	455W
Open-Circuit Voltage(Voc)	49.6V	49.8V	49.9V	50.0V	50.1V
Short-Circuit Current(Isc)	11.53A	11.60A	11.72A	11.83A	11.96A
Optimum Operating Voltage (Vmp)	40.7V	40.9V	41.0V	41.1V	41.2V
Optimum Operating Current(Imp)	10.70A	10.77A	10.86A	10.96A	11.06A
Module Efficiency	19.6%	19.8%	20.0%	20.2%	20.4%
Power Tolerance	0 ~ +5W				
Maximum System Voltage	1000V / 1500V DC(IEC)				
Maximum Series Fuse Rating	15A				
Operating Temperature	-40 °C to + 85 °C				

\*STC: Irradiance 1000W/m<sup>2</sup>, module temperature 25, AM=1.5  
Optional black frame or white frame module according to customer requirements

### NMOT

Module	HT72-166M				
Maximum Power	322W	326W	330W	333W	337W
Open Circuit Voltage (Voc)	46.9V	47.1V	47.2V	47.2V	47.3V
Short Circuit Current (Isc)	9.31A	9.37A	9.46A	9.55A	9.66A
Maximum Power Voltage (Vmp)	38.5V	38.6V	38.17V	38.8V	38.9V
Maximum Circuit Current (Imp)	8.36A	8.45A	8.53A	8.58A	8.66A
NOCT	45°C ±2°C				

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

### Mechanical Characteristics

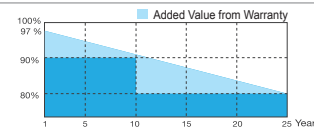
Solar Cells	Monocrystalline 166 × 83 mm
No. of Cells	144 (6 × 24)
Dimensions	2115mm×1052mm×35mm
Weight	24.5 kg
Front Glass	High transmission tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68
Cable	4mm <sup>2</sup> (IEC) Length: (+)200mm,(-)300mm
Connectors	MC+ Compatible
Packaging Configuration	31pcs / box, 682pcs / 40'HQ Container

### Temperature Characteristics

Temperature Coefficient of Pmax	γ (Pm)	-0.39%/K
Temperature Coefficient of Voc	β (Voc)	-0.29%/K
Temperature Coefficient of Isc	α (Isc)	0.049%/K

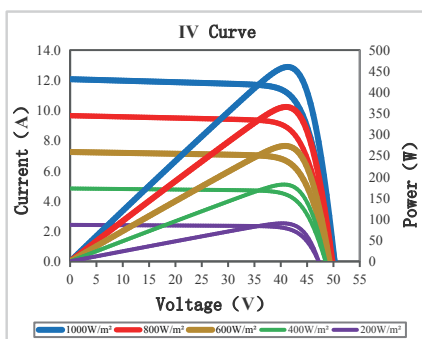
### Warranty

12-year product warranty  
25-year warranty on power output  
Specific information is referred to the product quality guarantee



### I-V Curves

Current-Voltage & Power-Voltage Curve



### Information Box