

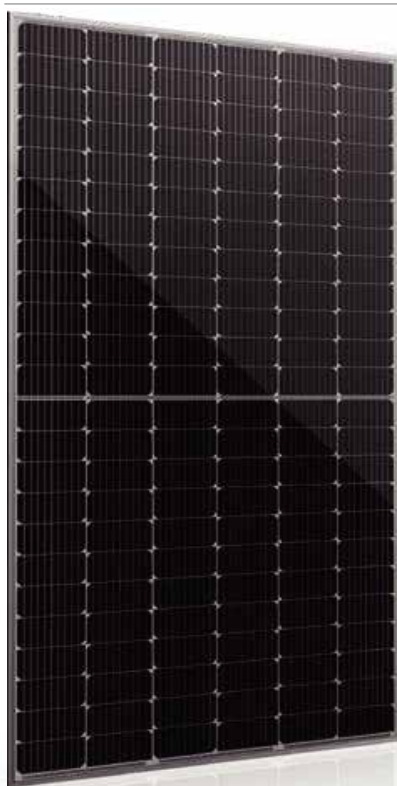
# HT72-166M Transparent

High Efficiency Low LID Bifacial PERC with Half-cut Technology

NEW

Big Size: Cell 166\*83

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



- Module Efficiency: 20.9%
- No. of Cells: 144 (6 × 24)
- Weight: 23.5kg
- Dimensions: 2094mm×1038mm×35mm



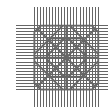
Shanghai Aerospace Automobile  
Electromechanical Co., Ltd.  
website: [www.htsolar.com.tr](http://www.htsolar.com.tr)



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



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



**Transparent Backsheet structure** which enhance the Module power increases 5-25% generally (per different reflective condition) lower LCOE and higher IRR

**12Ys**  
Products  
Warranty



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

**30Ys**  
Warranty on  
power output



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

**EL**

**Microcrack resistant Double glass structure** enhance reliability, triple EL tested of high quality control.



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

**5W**

**Positive tolerance 0/+5w guaranteed**

**PID**

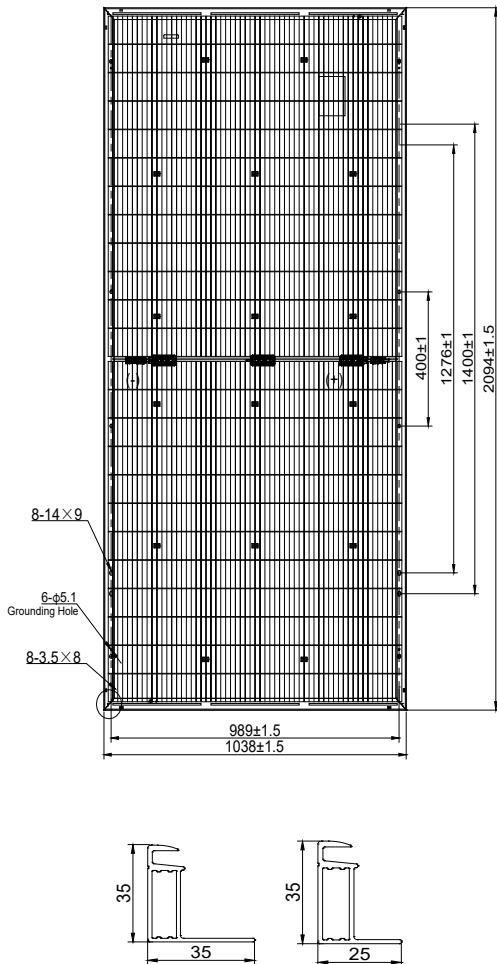
**PID Resistant**

**Comprehensive and first-rat certification syste**

IEC61215: 2016, IEC61730: 2016 Latest Standard and UL 61730 Latest Standard, ISO9001, ISO14001 and OHSAS18001, meeting the highest international standards  
Strict quality control



### 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	20.0%	20.2%	20.5%	20.7%	20.9%
Power Tolerance	0 ~ +5W				
Maximum System Voltage	1000V / 1500V DC(IEC)				
Maximum Series Fuse Rating	20A				
Operating Temperature	-40 °C to +85 °C				

\*STC: Irradiance 1000W/m², module temperature 25, AM=1.5  
Optional black frame or white frame module according to customer requirements

### NOCT

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	38.7V	38.8V	38.9V
Maximum Circuit Current (Imp)	8.36A	8.45A	8.53A	8.58A	8.66A
NOCT	45°C±2°C				

\*NOCT: Irradiance 800W/m², ambient temperature 20 °C, wind speed 1 m/s

### BIFACIAL REARSIDE POWER GAIN

Electrical characteristics with different rear side power gain (reference to 455W front)

Module		HT72-166M-455			
Maximum Power	Pmax Gain	Voc/V	Isc/A	Vmp/V	Imp/A
478W	5%	50.10	12.42	41.2	11.61
501W	10%	50.10	13.01	41.2	12.17
523W	15%	50.10	13.60	41.2	12.72
546W	20%	50.10	14.20	41.2	13.27
569W	25%	50.10	14.79	41.2	13.83

\*bifacial gain: the additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting(structure,height,tilt angle etc.)and abledo of the ground.

### Mechanical Characteristics

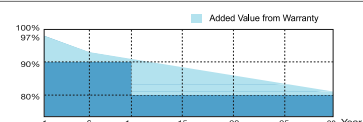
Solar Cells	Monocrystalline 166×83mm
No. of Cells	144 (6 × 24)
Dimensions	2094mm×1038mm×35 mm
Weight	23.5 kg
Front Glass	High transmission tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68
Cable	4mm²(UL/IEC) Length: 1200mm
Connectors	MC4 / MC4 Compatible
Packaging Configuration	30pcs / box, 704pcs / 40'HQ Container

### Temperature Characteristics

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

### Warranty

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



### I-V Curves

Current-Voltage & Power-Voltage Curve

