

# HT60-18X

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



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

NEW

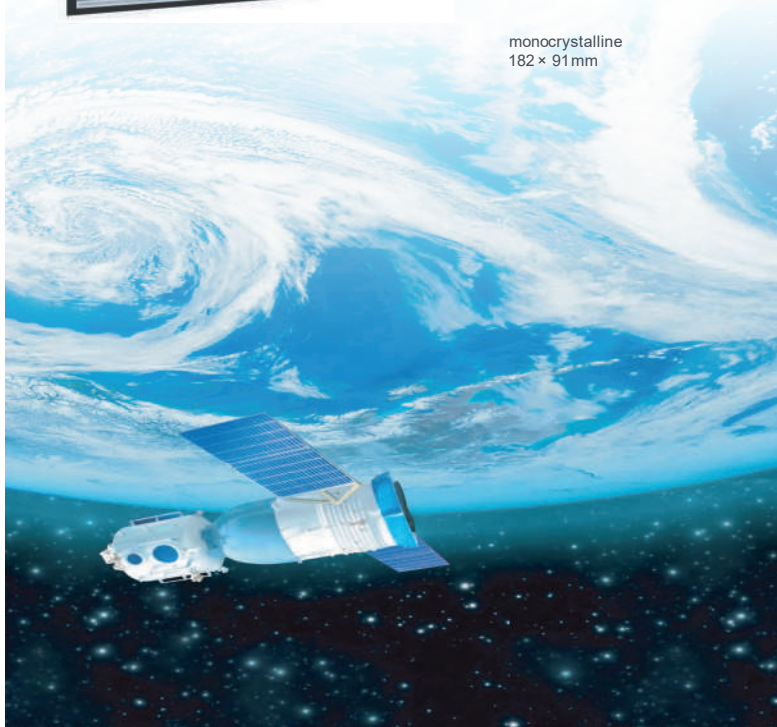
## POWER OUTPUT

455W / 460W  
465W / 470W / 475W



- Module Efficiency: 21.9%
- No. of Cells: 120 (6 × 20)
- Weight: 23.0kg
- Dimensions: 1909mm×1134mm×30mm

monocrystalline  
182 × 91 mm



MULTIWAY

HIGHWAY Half-Cut



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



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

25Ys  
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 Double glass structure enhance reliability, triple EL tested of high quality control.

5W

Positive tolerance 0/+5w guaranteed



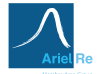
Entire module certified to with stand extreme wind (2400 Pa) and snow loads (5400 Pa)

PID

PID Resistant

### Comprehensive and first-rate certification system

IEC61215: 2016, IEC61730: 2016 Latest Standard  
ISO9001, ISO14001 and ISO45001,  
meeting the highest international standards  
Strict quality control

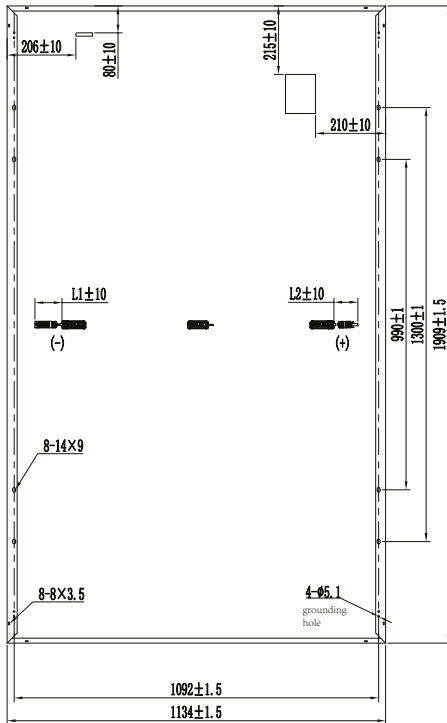


CEC Listed



### 455W/460W/465W/470W/475W

#### Engineering Drawing



#### Electrical Characteristics

Module	HT60-18X				
Maximum Power at STC(Pmax)	455W	460W	465W	470W	475W
Open-Circuit Voltage(Voc)	41.48V	41.63V	41.78V	41.93V	42.08V
Short-Circuit Current(Isc)	13.97A	14.04A	14.11A	14.18A	14.25A
Optimum Operating Voltage (Vmp)	34.93V	35.08V	35.23V	35.38V	35.53V
Optimum Operating Current(Imp)	13.04A	13.13A	13.22A	13.30A	13.38A
Module Efficiency	21.0%	21.2%	21.5%	21.7%	21.9%
Power Tolerance	0 ~ +5W				
Maximum System Voltage	1500V DC(IEC)				
Maximum Series Fuse Rating	25A				
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	HT60-18X				
Maximum Power	338W	342W	346W	350W	353W
Open Circuit Voltage (Voc)	39.31V	39.46V	39.60V	39.74V	39.88V
Short Circuit Current (Isc)	11.27A	11.33A	11.39A	11.44A	11.50A
Maximum Power Voltage (Vmp)	33.11V	33.25V	33.39V	33.53V	33.68V
Maximum Circuit Current (Imp)	10.21A	10.29A	10.36A	10.44A	10.48A
NMOT	45°C±2°C				

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

#### Mechanical Characteristics

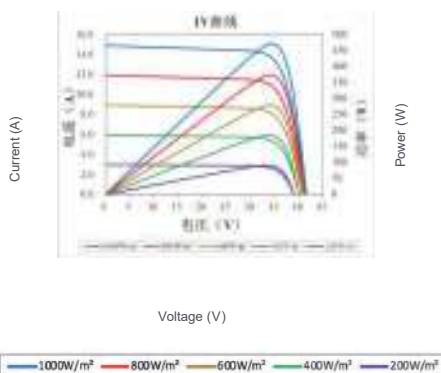
Solar Cells	monocrystalline 182 × 91mm
No. of Cells	120(6 × 20)
Dimensions	1909mm×1134mm×30mm
Weight	23.0kg
Front Glass	High transmission tempered glass
Frame	Anodized aluminium alloy, silver / black frame
Junction Box	IP68
Cable	4mm <sup>2</sup> (IEC) Length: (+)200mm, (-)300mm
Connectors	MC4 / MC4 Compatible
Packaging Configuration	36pcs / box, 864pcs / 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

#### I-V Curves

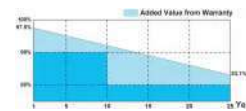
Current-Voltage & Power-Voltage Curve



#### Warranty

- 25-year product warranty
- 25-year warranty on power output

Specific information is referred to the product quality guarantee



#### Information Box

DS18X-004-A2