

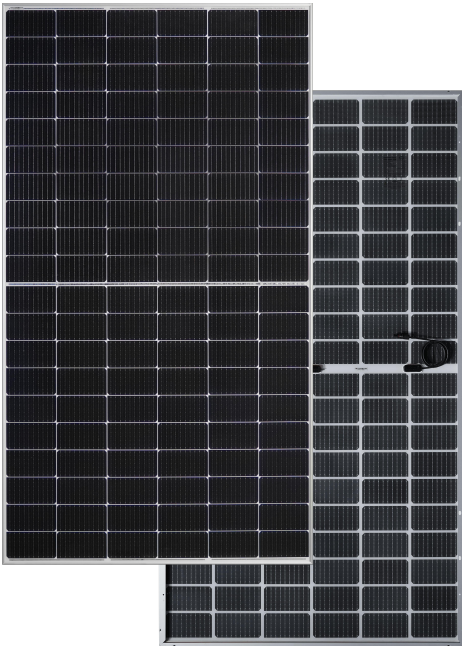
# MULTIWAY+

## HT60-18X (PD)-F Double Glass

High Efficiency Low LID and Bifacial cell with Half-cut Technology  
Big Size : Cell 182mm × 91mm Monocrystalline

**450W / 455W**

**460W / 465W / 470W**



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



10BB The optimized number and width of main gate lines, Maximize the light receiving area of components and reduce component power consumption.



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



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



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

**12Ys**

products

**30Ys**

warranty on power output

**PID**

PID resistant

**5W**

positive tolerance 0/+5W guaranteed

**EL**

microcrack resistant high performance Transparent backsheet structure enhance reliability, triple EL tested of high quality control.

### Comprehensive and First-rate Certification System

IEC61215: 2021 . IEC61730: 2023 . UL61730: 2017 . IEC62804: 2015  
ISO9001 . ISO14001 . and . ISO45001



■ Module Efficiency  
**21.7%**

■ No.of Cells  
**120(6 × 20)**

■ Weight  
**26.0±0.5kg**

■ Dimensions  
**1909mm × 1134mm × 30mm**

## Electrical Characteristics

Module	HT60-18X(PD)-F				
Maximum Power at STC (Pmax)	450W	455W	460W	465W	470W
Open - Circuit Voltage (Voc)	41.33V	41.48V	41.63V	41.78V	41.93V
Short - Circuit Current (Isc)	13.90A	13.97A	14.04A	14.11A	14.18A
Optimum Operating Voltage (Vmp)	34.78V	34.93V	35.08V	35.23V	35.38V
Optimum Operating Current (Imp)	12.95A	13.04A	13.13A	13.22A	13.30A
Module efficiency	20.8%	21.1%	21.3%	21.5%	21.7%
Power Tolerance	0 ~ + 5W				
Maximum System Voltage	1500V DC (UL / 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(PD)-F (Bifaciality 75±5%)				
Maximum Power	335W	338W	342W	346W	350W
Open - Circuit Voltage (Voc)	39.17V	39.31V	39.46V	39.60V	39.74V
Short - Circuit Current (Isc)	11.22A	11.27A	11.33A	11.39A	11.44A
Maximum Power Voltage (Vmp)	32.96V	33.11V	33.25V	33.39V	33.53V
Maximum Circuit Current (Imp)	10.16A	10.21A	10.29A	10.36A	10.44A
NMOT	45±2 °C				

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

## Mechanical Characteristics

Solar Cells	Monocrystalline 182 × 91mm
No.of Cells	120(6 × 20)
Dimensions	1909mm × 1134mm × 30mm
Weight	26.0±0.5kg
Front Glass	High transmission tempered glass; thickness; 2.0mm
Frame	Anodized aluminium alloy
Junction Box	IP68
Cable	4mm <sup>2</sup> (UL / IEC) length : (+)400mm, (-)200mm / length can be customized
Connectors	MC4/MC4 Compatible
Packaging Configuration	36pcs / box,864pcs / 40'HQ container

## Temperature Characteristics

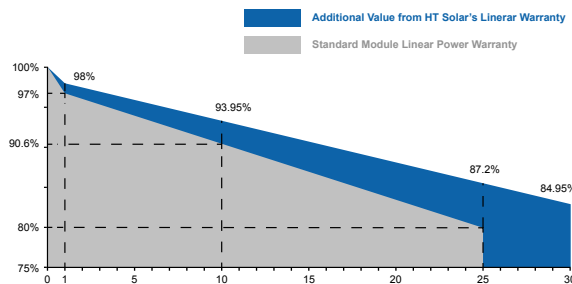
Temperature Coefficient of Pmax	-0.326%/°C
Temperature Coefficient of Voc	-0.258%/°C
Temperature Coefficient of Isc	+0.051%/°C

## Warranty

**12 - years**  
product warranty

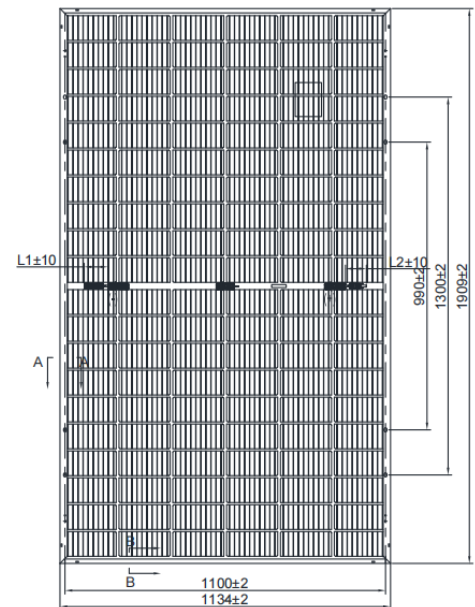
**30 - years**  
warranty on power output

Specific information is referred to the product quality guarantee



The module recycling should be carried out by the professional institutions at the end of module life cycle

## Engineering Drawing



## IV Curves

