

# HIGHWAY Solar Module

## HT72-156M-4BB-315W/320W/325W

Reliable State-owned Enterprise  
Deliver Solar Power since 1960s



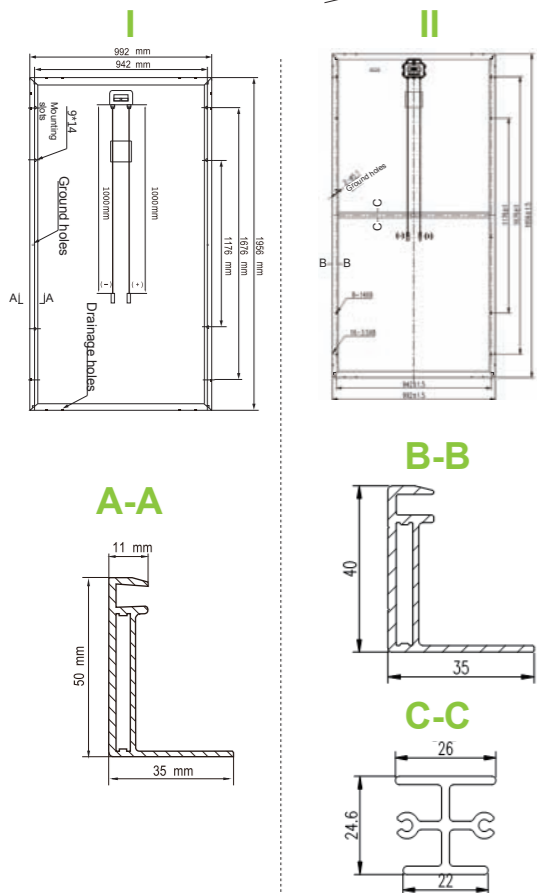
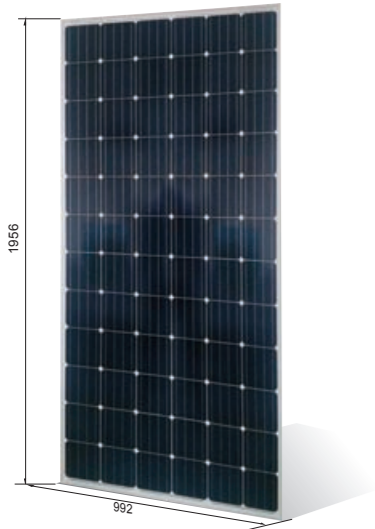
Shanghai Aerospace Automobile  
Electromechanical Co., Ltd

### Key Features

Cell Efficiency **19.6 %** Power Output **325 W**

Warranty on Materials and Workmanship **10 YEARS**

Warranty on Power Output **25 YEARS**



Shorter current transmission path

Less SOLAR CELL'S series resistance

PID (potential induced degradation) Resistant

All HT modules are double EL tested avoiding invisible cracks, dark cells and broken bars to ensure the performance, quality and reliability.

Independent international authentication certified.

HT-SAAE guarantees highest production standards: IEC 61215, IEC 61730, IEC 62716 (Ammonia corrosion) & IEC 61701 (Salt Mist Corrosion)



Higher module's output power

Guaranteed positive tolerance 0/+5w ensures power output reliability

Excellent performance under low light environments (mornings, evenings and cloudy days)

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

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

Strict quality control, meeting the highest international standards: ISO 9001, ISO14001 and OHSAS18001



### Electrical Characteristics

Module	HT72-156M-4BB-315	HT72-156M-4BB-320	HT72-156M-4BB-325
Maximum Power at STC(Pmax)	315W	320W	325W
Open-Circuit Voltage(Voc)	45.3V	45.5V	45.7V
Optimum Operating Voltage (Vmp)	37.5V	37.9V	38.3V
Short-Circuit Current(Isc)	9.00A	9.07A	9.14A
Optimum Operating Current(Imp)	8.40A	8.45A	8.49A
Module Efficiency	16.2%	16.5%	16.7%
Power Tolerance	0 ~ +5W		
Maximum System Voltage	1000V DC (IEC) / 600V DC(UL)		
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

Module	HT72-156M-4BB-315	HT72-156M-4BB-320	HT72-156M-4BB-325
Maximum Power	230W	234W	238W
Open Circuit Voltage (Voc)	41.0V	41.2V	41.4V
Maximum Power Voltage (Vmp)	34.0V	34.3V	34.7V
Short Circuit Current (Isc)	7.27A	7.32A	7.38A
Maximum Circuit Current (Imp)	6.78A	6.82A	6.85A
NOCT	45 °C ± 2 °C		

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

### Mechanical Characteristics

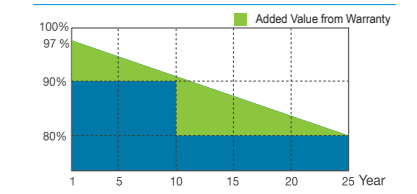
Solar Cells	Monocrystalline 156 × 156mm	
No. of Cells	72 (6 × 12)	
Dimensions	1956 × 992 × 50/40mm (77.0 × 39.1 × 1.97/1.57in)	
Weight	27.0kg (59.5lbs) / 23kg (50.7lbs)	
Front Glass	High transmission tempered glass	
Frame	Anodized aluminium alloy	
Junction Box	IP67 / IP65 3diodes	
Cable	4mm <sup>2</sup> (IEC)/12AWG(UL), 1000mm	
Connectors	MC4/MC4 Comparable	
Module Pieces per Container (40' High Cube Container)	440/550pcs (Varies depending on the size)	

### Temperature Characteristics

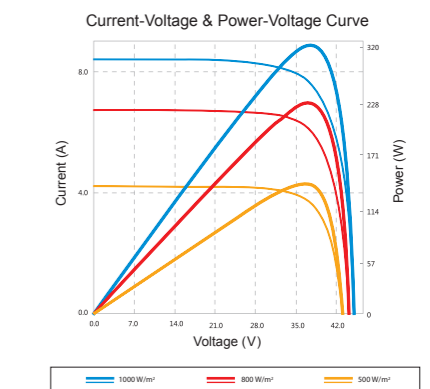
Temperature Coefficient of Pmax	γ (Pm)	-0.41%/K
Temperature Coefficient of Voc	β (Voc)	-0.34%/K
Temperature Coefficient of Isc	α (Isc)	0.049%/K

### Warranty

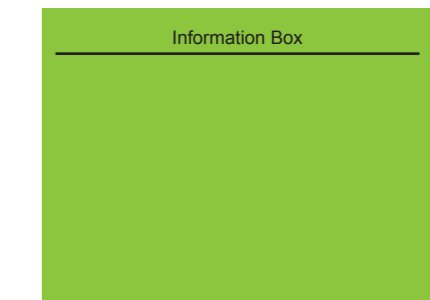
- 10-year product warranty
- 25-year warranty on power output
- Specific information is referred to the product quality guarantee



### I-V Curves



### Information Box



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