

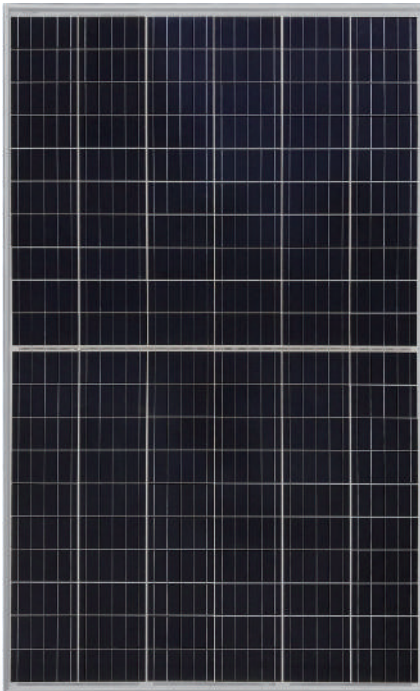
Shanghai Aerospace Automobile
Electromechanical Co., Ltd
website: www.ht-saae.com.au



Factory :
Lianyungang ShenZhou New Energy Co., Ltd.

HT60-156P-C

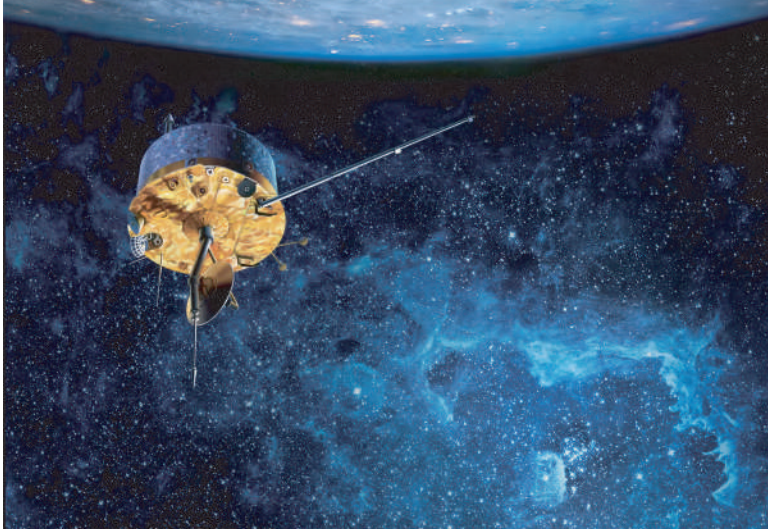
**280W / 285W / 290W
295W / 300W**



- Module Efficiency: 18.2%
- No. of Cells: 120 (6 × 20)
- Weight: 19.0kg
- Dimensions: 1665mm × 992mm × 35mm

- (Optional) Design of Water Leakage Trough
- Polycrystalline
156.75 × 78.375mm

HT-SAAE started on solar technology research for China's Satellite Application since 1960



Advanced surface treatment, lower surface reflection and 5BB cell design can reduce the series resistance and improve the module efficiency



Microcrack resistant Triple EL tested of high quality control



Designed for high voltage systems of up to 1000 VDC, increasing the string length of solar systems and saving on BoS costs



**Design Load/Safety Factors:
2400 Pa / 1.5 (Wind)
2400 Pa / 1.5 (Snow)**



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

Comprehensive and first-rate certification system

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

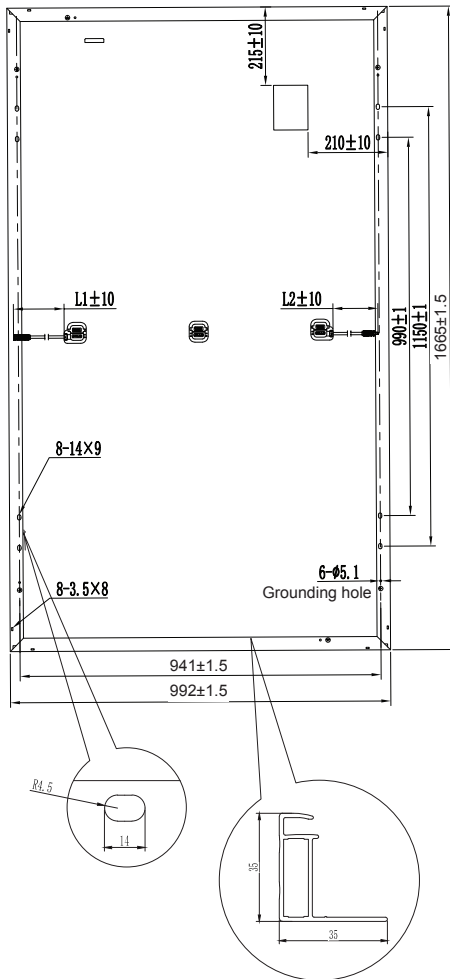


IEC 61215
IEC 61730
Regular Production
Surveillance
www.tuv.com

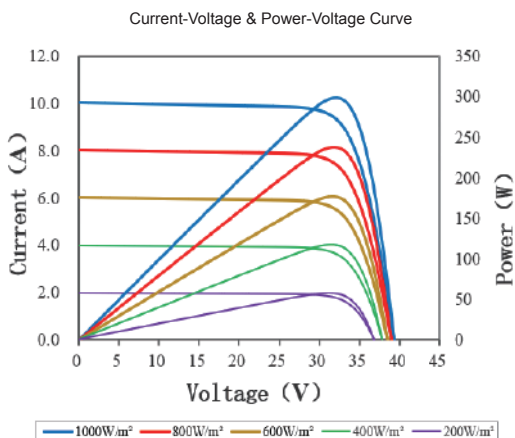
Made in China

MULTIWAY+

• Engineering Drawing



• I-V Curves



• Electrical Characteristics

Module	HT60-156P-C				
Maximum Power at STC(P _{max})	280W	285W	290W	295W	300W
Open-Circuit Voltage(V _{oc})	38.4V	38.6V	38.8V	39.0V	39.2V
Short-Circuit Current(I _{sc})	9.60A	9.73A	9.86A	9.97A	10.08A
Optimum Operating Voltage (V _{mp})	31.2V	31.4V	31.6V	31.8V	32.0V
Optimum Operating Current(I _{mp})	8.99A	9.10A	9.20A	9.30A	9.38A
Module Efficiency	17.0%	17.3%	17.6%	17.9%	18.2%
Power Selection	0 ~ +5W				
Tolerance	P _{max} :±3%;V _{oc} :±5%;I _{sc} :±5%				
Maximum System Voltage	1000V DC(IEC)				
Maximum Series Fuse Rating	15A				
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

• NMOT

Module	HT60-156P-C				
Maximum Power	207W	210W	214W	218W	221W
Open Circuit Voltage (V _{oc})	36.1V	36.3V	36.4V	36.6V	36.8V
Short Circuit Current (I _{sc})	7.75A	7.86A	7.96A	8.05A	8.14A
Maximum Power Voltage (V _{mp})	29.3V	29.5V	29.7V	29.9V	30.1V
Maximum Circuit Current (I _{mp})	7.06A	7.12A	7.21A	7.29A	7.34A
NMOT	45°C ±2°C				

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

• Mechanical Characteristics

Solar Cells	Polycrystalline	156.75 × 78.375mm
No. of Cells	120 (6 × 20)	
Dimensions	1665mm × 992 mm × 35mm	
Weight	19.0kg	
Front Glass	High transmission tempered glass	
Frame	Anodized aluminium alloy	
Junction Box	IP68	
Cable	4mm ² (IEC)	
Connectors	Refer to the information Box below	
Packaging Configuration	30pcs / box, 840pcs / 40'HQ Container	

• Temperature Characteristics

Temperature Coefficient of P _{max}	γ (P _m)	-0.41%/K
Temperature Coefficient of V _{oc}	β (V _{oc})	-0.32%/K
Temperature Coefficient of I _{sc}	α (I _{sc})	0.050%/K

• Warranty

12-year product warranty	<p>The graph shows the percentage of value retained from the warranty over a 25-year period. The value starts at 100% at year 1 and decreases to approximately 80% by year 25. A shaded area indicates the 'Added Value from Warranty'.</p>
25-year warranty on power output	
Specific information is referred to the product quality guarantee	

• Information Box

Connectors:

- 1 PV-HT002-1 Max. Voltage=1500V Max. Current=30A; Manufacturer: Shanghai Aerospace Automobile Electromechanical Co., Ltd.
- 2 PV-HT001-1 Max. Voltage=1500V Max. Current=30A; Manufacturer: Shanghai Aerospace Automobile Electromechanical Co., Ltd.
- 3 PV-KBT4-xy-UR PV-KST4-xy-UR Max. Voltage=1000V Max. Current=39A; Manufacturer: Multi-Contact AG Basel
- 4 PV-JM601 Max. Voltage =1000V Max. Current =30A; Manufacturer: Zhejiang Jiaming Tianheyuan Photovoltaics Technology Co., Ltd.
- 5 PV-JM601A Max. Voltage =1000V Max. Current =30A; Manufacturer: Zhejiang Jiaming Tianheyuan Photovoltaics Technology Co., Ltd.
- 6 PV-KST4-xy-UR; PV-KBT4-xy-UR Max. Voltage =1000V Max. Current =39A(4.0mm²); Manufacturer: Staubli Electrical Connectors AG
- 7 PV-KST4-EVO 2/XY_UR (male); PV-KBT4-EVO 2/XY_UR (female) Max. Voltage =1000V Max. Current =45A(4.0mm²); Manufacturer: Staubli Electrical Connectors AG
- 8 H4CF4DMS; H4CMC4DMS Max. Voltage =1000V Max. Current =35A; Manufacturer: Amphenol Technology (Shenzhen) Co., Ltd.
- 9 UTXCF4bcde; UTXCM4bcde Max. Voltage =1000V Max. Current =35A; Manufacturer: Amphenol Technology (Shenzhen) Co., Ltd.
- 10 TL-CABLE01S-F Max. Voltage =1000V Max. Current =30A; Manufacturer: Jiangsu Tonglin Electric Co., Ltd.
- 11 TL-CABLE01S-FR Max. Voltage =1000V Max. Current =30A; Manufacturer: Jiangsu Tonglin Electric Co., Ltd.
- 12 PV-JM608 Max. Voltage =1000V Max. Current =30A; Manufacturer: Zhejiang Jiaming Tianheyuan Photovoltaics Technology Co., Ltd.
- 13 PV-JM608-1 Max. Voltage =1000V Max. Current =30A; Manufacturer: Zhejiang Jiaming Tianheyuan Photovoltaics Technology Co., Ltd.
- 14 PV-KJ03M-2 Max. Voltage=1500V Max. Current=30A; Manufacturer: Jiangxi Jinko PV Material Co., Ltd
- 15 PV-C002 Max. Voltage=1500V Max. Current=30A; Manufacturer: SUZHOU UKT NEWENERGYTECHNOLOGYCO.,LTD