

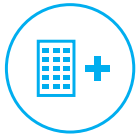
# HIGHWAY DG

## Solar Module

HT60-156M(PD)  
HT60-156M(PD)-F  
HT60-156M(PDV)  
HT60-156M(PDV)-F  
280W-300W



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



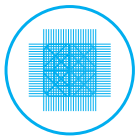
18.2%  
Module Efficiency



PID  
PID resistant



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



Double glass structure which enhance the reliability of anti-microcracks, reduce the snail tracks phenomenon



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



10<sub>Ys</sub>  
Products Warranty



TUV certification



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



30<sub>Ys</sub>  
Warranty on power output



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



5W  
Positive tolerance 0/+5w guaranteed



IEC 61215  
IEC 61730

www.tuv.com  
ID: 000037955

## Electrical Characteristics

Module	HT60-156M(PD) / HT60-156M(PD)-F / HT60-156M(PDV) / HT60-156M(PDV)-F				
Maximum Power at STC(Pmax)	280W	285W	290W	295W	300W
Open-Circuit Voltage(Voc)	38.3V	39.1V	39.2V	39.4V	39.5V
Short-Circuit Current(Isc)	9.37A	9.42A	9.51A	9.60A	9.69A
Optimum Operating Voltage (Vmp)	32.2V	31.8V	32.2V	32.6V	33.0V
Optimum Operating Current(Imp)	8.71A	8.98 A	9.02A	9.06A	9.10A
Module Efficiency	17.0%	17.3%	17.6%	17.9%	18.2%
Power Tolerance	0 ~ +5W				
Maximum System Voltage	1000/1500V DC(IEC)				
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					

## NOCT

Module	HT60-156M(PD) / HT60-156M(PD)-F / HT60-156M(PDV) / HT60-156M(PDV)-F				
Maximum Power	206W	210W	214W	218W	221W
Open Circuit Voltage (Voc)	35.4V	36.4V	36.5V	36.7V	36.8V
Short Circuit Current (Isc)	7.57A	7.62A	7.69A	7.77A	7.84A
Maximum Power Voltage (Vmp)	29.7V	29.6V	30.0V	30.3V	30.7V
Maximum Circuit Current (Imp)	6.93A	7.11A	7.14A	7.17A	7.21A
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 156.75 × 156.75mm
No. of Cells	60 (6 × 10)
Dimensions	1658mm×992mm×6.5mm / 1658mm×992mm×35mm
Weight	25kg/22.5kg(F)
Front Glass	High transmission tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67
Cable	4mm <sup>2</sup> (IEC), 150mm(Positive), 250mm(Negative)
Packaging Configuration	33pcs/box, 1584pcs/17.5m Trailer; 33pcs/box, 858pcs/40'HQ Container 26pcs/box, 1560pcs/17.5m Trailer; 30pcs/box, 840pcs/40'HQ Container (F)

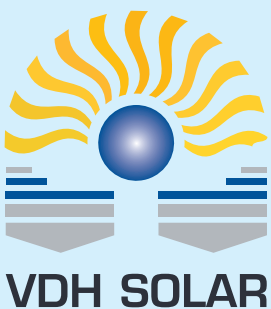
## Temperature Characteristics

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

## Warranty

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

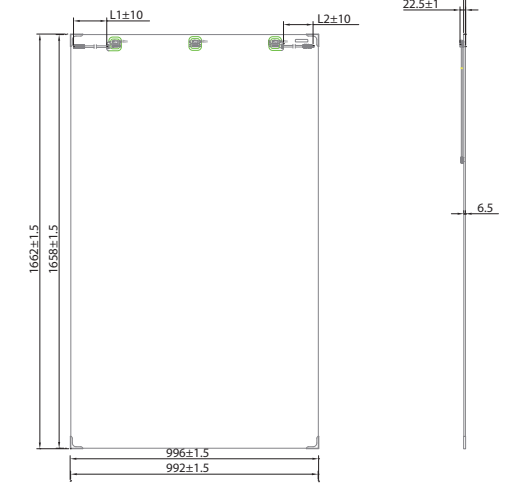
## Information Box



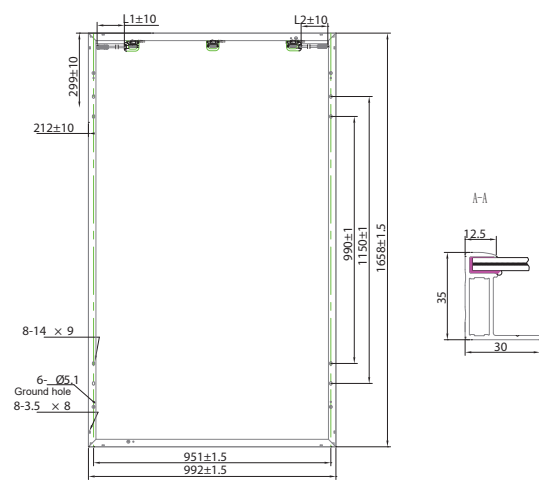
### VDH Solar Groothandel BV

Frankrijklaan 9  
2391 PX HAZERSWOUDE DORP (NL)  
T +31 (0)172 - 235 990  
E info@vdh-solar.nl  
W www.info@vdh-solar.nl

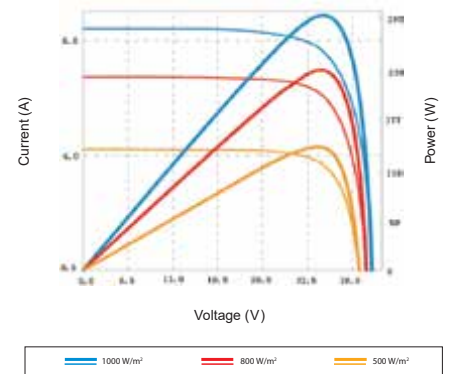
### HT60-156M(PD) / HT60-156M(PDV)



### HT60-156M(PD)-F / HT60-156M(PDV)-F



### Current-Voltage & Power-Voltage Curve



### I-V Curves

Shanghai Aerospace Automobile  
Electromechanical Co., Ltd.  
HT Solar Energy J.S.C.

Factory : Lianyungang ShenZhou  
New Energy Co., Ltd.  
HT Solar Energy J.S.C.