

Reliable State-owned Enterprise Deliver Solar Power since 1960s



Solar Module

HT60-156M(NDV) HT60-156M(NDV)-F

290W-305W

[Bifacial Module]

Bifacial generating capacity ,
output 333W/339W/345W/350W(15% increase)

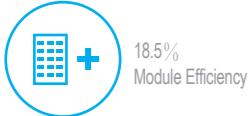
* V means 1500V module



Absorb the light by both surfaces of the cells



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



18.5%
Module Efficiency



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



PID resistant



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



N-Type mono technology,
effectively increase the output power of unit area



Initial light induced degradation,
effectively increase the overall power generation amount



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



TUV certification



Products Warranty



Warranty on power output



Better temperature coefficient



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



Better low irradiation response provides more effective working time



Positive tolerance 0/+5w guaranteed

Electrical Characteristics(STC)

HT60-156M(NDV) / HT60-156M(NDV)-F				
Maximum Power at STC(Pmax)	290W	295W	300W	305W
Open-Circuit Voltage(Voc)	39.0V	39.2V	39.4V	39.6V
Short-Circuit Current(Isc)	9.44A	9.49A	9.54A	9.58A
Optimum Operating Voltage (Vm)	32.1V	32.4V	32.6V	32.9V
Optimum Operating Current(Imp)	9.04A	9.13A	9.22A	9.30A
Module Efficiency	17.6%	17.9%	18.2%	18.5%
Power Tolerance	0 ~ +5W			
Maximum System Voltage	1500V DC(IEC)			
Maximum Series Fuse Rating	15A			
Operating Temperature	-40 °C to +85 °C			

* Irradiance 1000W/m², module temperature 25, AM=1.5

NOCT

HT60-156M(NDV) / HT60-156M(NDV)-F			
Maximum Power	213W	217W	220W
Open Circuit Voltage (Voc)	36.0V	36.2V	36.4V
Short-Circuit Current(Isc)	7.62A	7.66A	7.70A
Optimum Operating Voltage (Vm)	29.6V	29.8V	30.1V
Optimum Operating Current(Imp)	7.20A	7.27A	7.33A
NOCT	43°C±2°C		

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

Mechanical Characteristics

Solar Cells	N type mono-crystalline cell 156.75*156.75mm 5BB		
No.of Cells	60 (6 ×10)		
Dimensions	1658mm×992mm×6.5mm / 1658mm×992mm×35mm		
Weight	25kg/22.5kg(F)		
Junction Box	IP67 , 3 diodes		
Snow pressure	5400Pa		
Wind pressure	2400Pa		
Area	1.64m ²		
Light Transmittance	12.8%		
Packaging Configuration	33pcs/box, 1584pcs/17.5m Trailer; 33pcs/box, 858pcs/40HQ Container 26pcs/box, 1560pcs/17.5m Trailer; 30pcs/box, 840pcs/40HQ Container (F)		

Temperature Characteristics

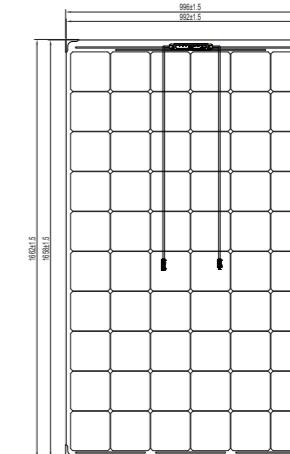
Temperature Coefficient of Pmax	γ (Pm)	-0.39%/K
Temperature Coefficient of Voc	β (Voc)	-0.28%/K
Temperature Coefficient of Isc	α (Isc)	0.045%/K

Warranty

10-year product warranty	Added Value from Warranty of N type module
30-year warranty on power output	Power Output Guarantee
Specific information is referred to the product quality guarantee	Added Value from Warranty of HT Standard Added Value from Warranty of N type module

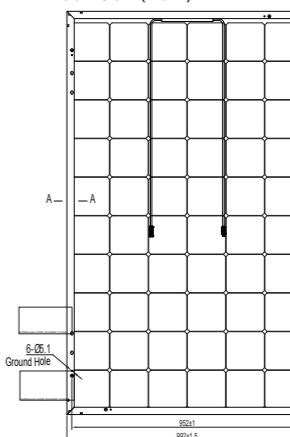
Information Box

HT60-156M(NDV)

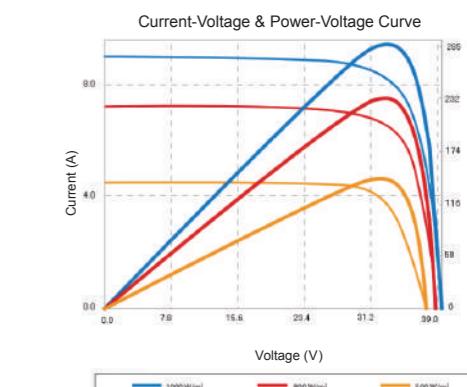


22
6.5

HT60-156M(NDV)-F



35
30
A-A
6.0±1
Ground Hole
350±1
350±1.5



I-V Curves

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

Factory : Lianyungang ShenZhou
New Energy Co., Ltd.