

HIGHWAY

HT48-156P

HT48-156P(V) * V means 1500V module

210W-230W

Comprehensive and first-rate certification system

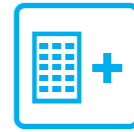
IEC61215:2016, IEC61730:2016 Latest Standard
ISO9001, ISO14001 and OHSAS18001, meeting the highest international standards
Strict quality control



IEC 61215:2016
IEC 61730:2016



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



17.5%
Module Efficiency



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



Certified to withstand dynamic mechanical load 1000 Pascal



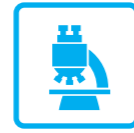
Higher module's output power



PID resistant



Ammonia corrosion resistant
Salt Mist Corrosion resistant



Microcrack resistant
Triple EL tested of high quality control.



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

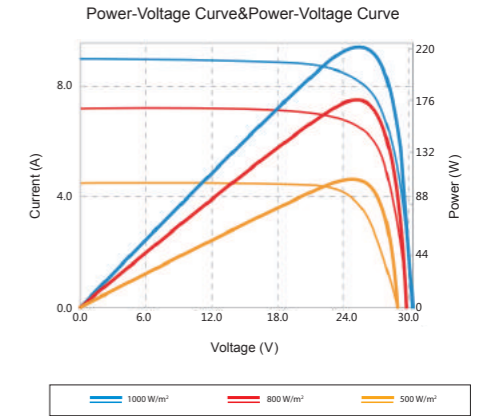
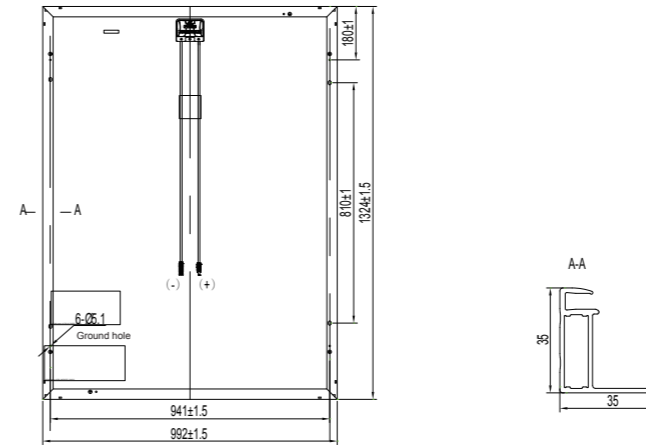


Strict quality control, meeting the highest international standards: ISO 9001, ISO14001 and OHSAS18001



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

Engineering Drawing



I-V Curves

Electrical Characteristics

Module	HT48-156P / HT48-156P(V)				
	210W	215W	220W	225W	230W
Maximum Power at STC(P _{max})	210W	215W	220W	225W	230W
Open-Circuit Voltage(V _{oc})	29.9V	30.2V	30.5V	30.8V	31.1V
Short-Circuit Current(I _{sc})	9.24A	9.35A	9.46A	9.57A	9.68A
Optimum Operating Voltage (V _{mp})	24.3V	24.6V	24.9V	25.4V	25.7V
Optimum Operating Current(I _{mp})	8.67A	8.75A	8.85A	8.87A	8.95A
Module Efficiency	16.0%	16.4%	16.8%	17.1%	17.5%
Power Tolerance	0 ~ +5W				
Maximum System Voltage	1000V/1500V 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

NOCT

Module	HT48-156P / HT48-156P(V)				
	155W	159W	162W	166W	170W
Maximum Power	155W	159W	162W	166W	170W
Open Circuit Voltage (V _{oc})	28.1V	28.4V	28.6V	28.9V	29.2V
Short Circuit Current (I _{sc})	7.46A	7.55A	7.64A	7.73A	7.82A
Maximum Power Voltage (V _{mp})	22.8V	23.1V	23.4V	23.9V	24.1V
Maximum Circuit Current (I _{mp})	6.79A	6.86A	6.94A	6.96A	7.03A

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

Mechanical Characteristics

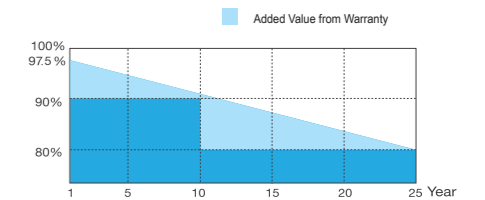
Solar Cells	Polycrystalline 156.75 × 156.75mm
No. of Cells	48 (6 × 8)
Dimensions	1324 × 992 × 35mm (52.1 × 39.1 × 1.38in)
Weight	14.8kg (33.5lbs)
Front Glass	High transmission tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67
Cable	4mm² (IEC)
Connectors	MC4/MC4 Compatible
Packaging Configuration	30pcs/box, 960pcs/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})	0.05%/K

Warranty

- 10ys 10-year product warranty
- 25ys 25-year warranty on power output



Information Box

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

Factory: Lianyungang ShenZhou New Energy Co., Ltd.