

#### COMPREHENSIVE CERTIFICATES























First solar company which passed the TUV Nord IEC/TS 62941 certification audit.

# AstroAtom™ 330W~345W

5BB-Polycrystalline PV Module

# CHSM6612P Series CHSM6612P/HV Series

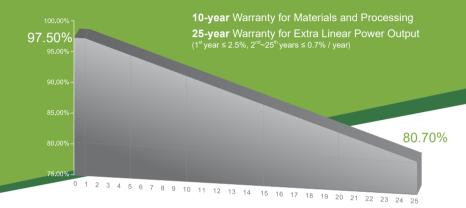
CHSM6612P/HV max system voltage 1500V standard











## **KEY FEATURES**



#### **OUTPUT POSITIVE TOLERANCE**

Guaranteed 0~+5W positive tolerance ensures power output reliability.



# **INNOVATIONAL 5-BUSBAR CELLS**

Reduces the cell series resistance and internal stress, decreases the risk of mirco-crack and improves the module output.



# INNOVATIVE PERC CELL TECHNOLOGY

Excellent cell efficiency and output.



#### **EXCELLENT MECHANICAL LOAD CAPABILITY**

Certified to withstand: snow load (6000 Pa) and wind load (3600 Pa).



#### HIGHER RELIABILITY AND DURABILITY

Effectively deals with harsh environments, such as sand, salt mist and ammonia resistance.



#### **PASSED HAIL TEST**

Certified to hail resistence: ice ball size (d=45mm) and ice ball velocity (v=30.7m/s).



## PID RESISTANCE

Excellent PID resistance at 96 hours (@85°C /85%) test, and also can be improved to meet higher standards for the particularly harsh environment.



ELECTRICAL SPECIFICATIONS					
STC rated output (P <sub>mpp</sub> )*	330 Wp	335 Wp	340 Wp	345 Wp	
Rated voltage (V <sub>mpp</sub> ) at STC	37.15 V	37.26 V	37.33 V	37.38 V	
Rated current (Impp) at STC	8.89 A	9.00 A	9.11 A	9.23 A	
Open circuit voltage (Voc) at STC	45.86 V	45.98 V	46.16 V	46.37 V	
Short circuit current (Isc) at STC	9.52 A	9.57 A	9.62 A	9.67 A	
Module efficiency	17.1%	17.3%	17.6%	17.8%	
Rated output (Pmpp) at NOCT	230.4 Wp	233.9 Wp	237.4 Wp	240.9 Wp	
Rated voltage (V <sub>mpp</sub> ) at NOCT	33.92 V	34.01 V	34.10 V	34.15 V	
Rated current (Impp) at NOCT	6.79 A	6.88 A	6.96 A	7.05 A	
Open circuit voltage (Voc) at NOCT	42.08 V	42.19 V	42.36 V	42.55 V	
Short circuit current (Isc) at NOCT	7.37 A	7.40 A	7.44 A	7.48 A	
Temperature coefficient (P <sub>mpp</sub> )	- 0.408%/°C				
Temperature coefficient (Isc)	+0.050%/°C				
Temperature coefficient (V <sub>oc</sub> )	- 0.311%/°C				
Normal operating cell temperature (NOCT)	46±2°C				
Maximum system voltage (IEC/UL)	$1000V_{DC}$ or $1500V_{DC}$				
Number of diodes	3				
Junction box IP rating	IP 67				
Maximum series fuse rating	15 A				



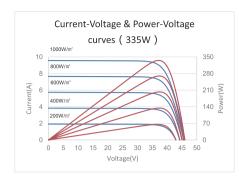
STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5 NOCT: Irradiance 800W/m², Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

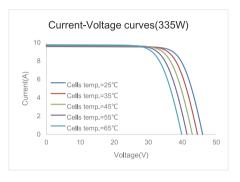
#### **MECHANICAL SPECIFICATIONS** 1954 x 990 x 40 mm Outer dimensions (L x W x H) 76.93 x 38.98 x 1.57 in Frame technology Aluminum, silver anodized Module composition Glass / EVA / Backsheet (white) Front glass thickness 3.2 mm / 0.13 in <sup>①</sup> Cable length (IEC/UL) 1150 mm / 45.28 in 4 mm<sup>2</sup> / 12 AWG Cable diameter (IEC/UL) <sup>2</sup> Maximum mechanical test load 6000 Pa Fire performance (IEC/UL) Class C (IEC) or Type 1 (UL) Connector type (IEC/UL) MC4 compatible



<sup>®</sup> Refer to Astronergy Crystalline Silicon PV Module Installation Manual or contact technical department. Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

# CURVE

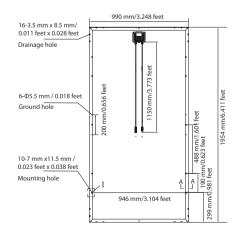


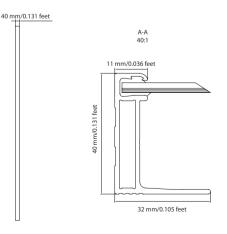


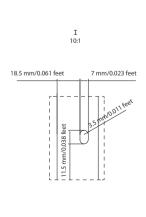
PACKING SPECIFICATIONS			
<sup>①</sup> Weight (module only)	21.8 kg / 48.06 lbs		
<sup>②</sup> Packing unit	27 pcs / box		
Weight of packing unit (for 40'HQ container)	634 kg / 1398 lbs		
Number of modules per 40'HQ container	648 pcs		

<sup>&</sup>lt;sup>①</sup> Tolerance +/- 1.0kg

#### MODULE DIMENSION DETAILS







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