

# AstroNova™

Profitable for Decades



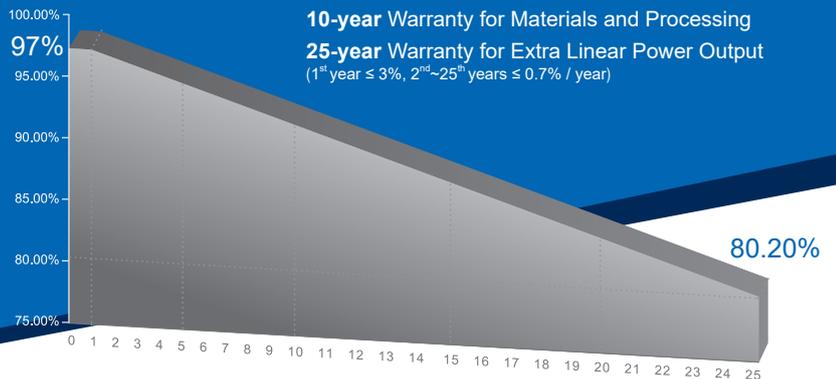
## 335W~350W

5BB-Monocrystalline PV Module

CHSM6612M Series

CHSM6612M/HV Series

CHSM6612M max system voltage 1000V standard  
CHSM6612M/HV max system voltage 1500V standard



### COMPREHENSIVE CERTIFICATES



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

### 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 micro-crack and improves the module output.
- Anti 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.
- 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 resistance: ice ball size (d=45mm) and ice ball velocity (v=30.7m/s).
- LOWER TEMPERATURE COEFFICIENT**  
 Improved temperature coefficient decreases power loss in the high temperature application.

For Global Market



**ASTRONERGY**  
A CHNT COMPANY

## ELECTRICAL SPECIFICATIONS

STC rated output ( $P_{mpp}$ )*	335 Wp	340 Wp	345 Wp	350 Wp
Rated voltage ( $V_{mpp}$ ) at STC	37.82 V	38.08 V	38.34 V	38.58 V
Rated current ( $I_{mpp}$ ) at STC	8.87 A	8.93 A	9.01 A	9.08 A
Open circuit voltage ( $V_{oc}$ ) at STC	45.98 V	46.38 V	46.70 V	47.01 V
Short circuit current ( $I_{sc}$ ) at STC	9.38 A	9.41 A	9.48 A	9.53 A
Module efficiency	17.3%	17.6%	17.8%	18.1%
Rated output ( $P_{mpp}$ ) at NOCT	246.7 Wp	250.4 Wp	254.1 Wp	257.8 Wp
Rated voltage ( $V_{mpp}$ ) at NOCT	34.88 V	35.14 V	35.36 V	35.58 V
Rated current ( $I_{mpp}$ ) at NOCT	7.07 A	7.13 A	7.19 A	7.24 A
Open circuit voltage ( $V_{oc}$ ) at NOCT	42.63 V	43.00 V	43.30 V	43.59 V
Short circuit current ( $I_{sc}$ ) at NOCT	7.54 A	7.56 A	7.62 A	7.66 A
Temperature coefficient ( $P_{mpp}$ )	- 0.376%/°C			
Temperature coefficient ( $I_{sc}$ )	+0.043%/°C			
Temperature coefficient ( $V_{oc}$ )	- 0.282%/°C			
Normal operating cell temperature (NOCT)	46±2°C			
Maximum system voltage (IEC/UL)	1000V <sub>DC</sub> or 1500V <sub>DC</sub>			
Number of diodes	3			
Junction box IP rating	IP 67			
Maximum series fuse rating	15 A			

\* Measurement tolerance +/- 3%

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

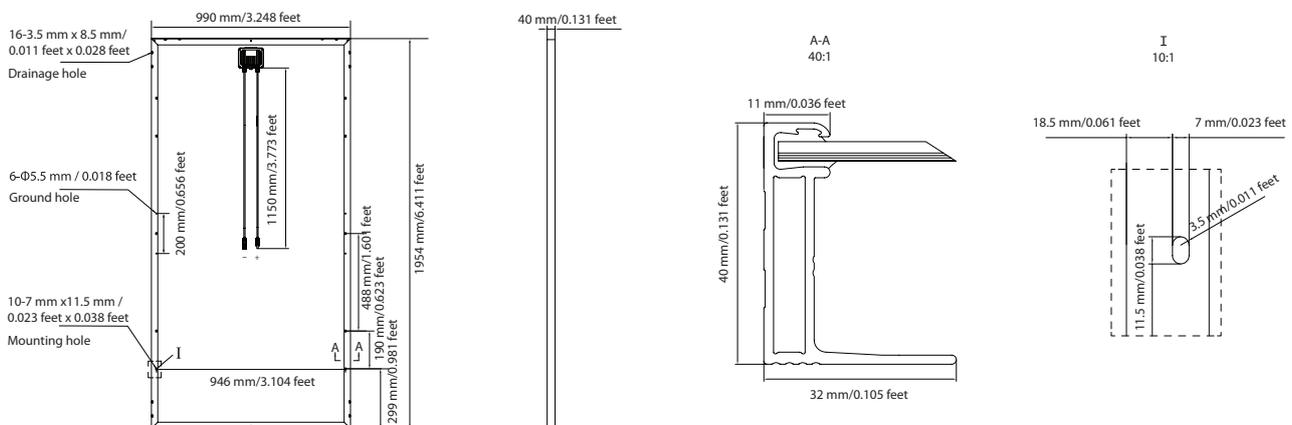
## MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	1954 x 990 x 40 mm 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
① Cable length (IEC/UL)	1150 mm / 45.28 in
Cable diameter (IEC/UL)	4 mm <sup>2</sup> / 12 AWG
② Maximum mechanical test load	6000 Pa
Fire performance (IEC/UL)	Class C (IEC) or Type 1 (UL)
Connector type (IEC/UL)	MC4 compatible

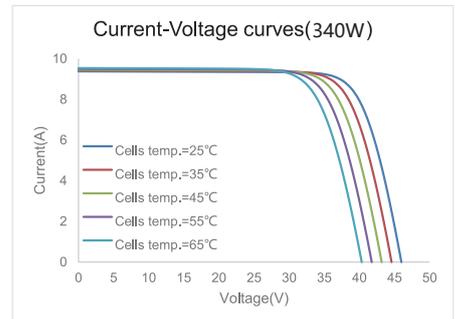
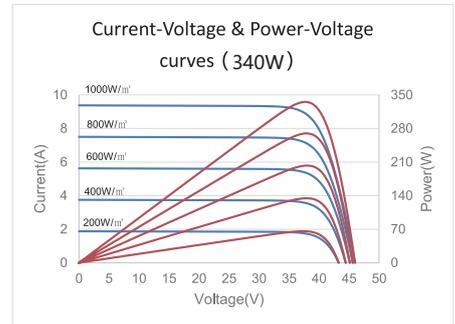
① Option: 900(+)/600(-) mm for defined projects in advance.

② Refer to Astronergy Crystalline Silicon PV Module Installation Manual or contact technical department.  
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

## MODULE DIMENSION DETAILS



## CURVE



## PACKING SPECIFICATIONS

① Weight (module only)	21.8 kg / 48.06 lbs
② 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

① Tolerance +/- 1.0kg

② Subject to sales contract