

# AstroHalo™

High Tech Leads Industry



Multi-Busbar Module could be the option

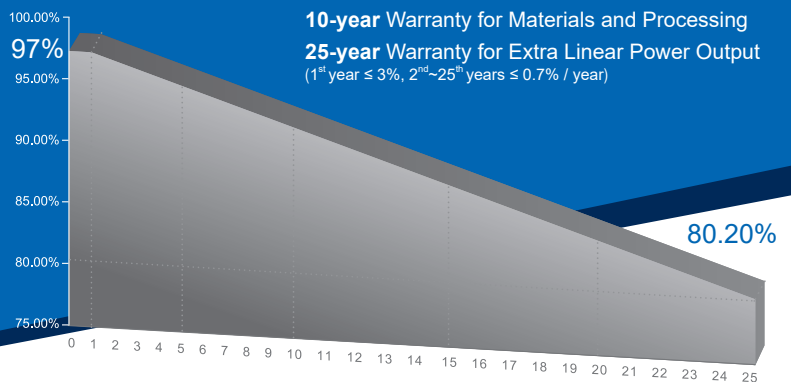
## 350W~370W

Monocrystalline PV Module

CHSM6612M Series

CHSM6612M/HV Series

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



**10-year** Warranty for Materials and Processing  
**25-year** Warranty for Extra Linear Power Output  
(1<sup>st</sup> year ≤ 3%, 2<sup>nd</sup>–25<sup>th</sup> years ≤ 0.7% / year)

### KEY FEATURES

- +5W 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.
- INNOVATIVE PERC CELL TECHNOLOGY**  
Excellent cell efficiency and output.
- LOWER TEMPERATURE COEFFICIENT**  
Improved temperature coefficient decreases power loss in the high temperature application.
- 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).
- Anti PID 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.

### COMPREHENSIVE CERTIFICATES



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

For Global Market



**ASTROENERGY**  
A CHNT COMPANY

## ELECTRICAL SPECIFICATIONS

STC rated output ( $P_{mpp}$ )*	350 Wp	355 Wp	360 Wp	365 Wp	370 Wp
Rated voltage ( $V_{mpp}$ ) at STC	38.58 V	38.82 V	39.14 V	39.38 V	39.56 V
Rated current ( $I_{mpp}$ ) at STC	9.08 A	9.15 A	9.20 A	9.27 A	9.36 A
Open circuit voltage ( $V_{oc}$ ) at STC	47.01 V	47.31 V	47.62 V	47.82 V	48.36 V
Short circuit current ( $I_{sc}$ ) at STC	9.53 A	9.60 A	9.66 A	9.75 A	9.91 A
Module efficiency	18.1%	18.4%	18.6%	18.9%	19.1%
Rated output ( $P_{mpp}$ ) at NOCT	257.8 Wp	261.5 Wp	265.1 Wp	268.8 Wp	272.5 Wp
Rated voltage ( $V_{mpp}$ ) at NOCT	35.58 V	35.81 V	36.13 V	36.36 V	36.50 V
Rated current ( $I_{mpp}$ ) at NOCT	7.24 A	7.30 A	7.34 A	7.39 A	7.47 A
Open circuit voltage ( $V_{oc}$ ) at NOCT	43.59 V	43.87 V	44.15 V	44.34 V	44.84 V
Short circuit current ( $I_{sc}$ ) at NOCT	7.66 A	7.71 A	7.76 A <td 7.83 A	7.96 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

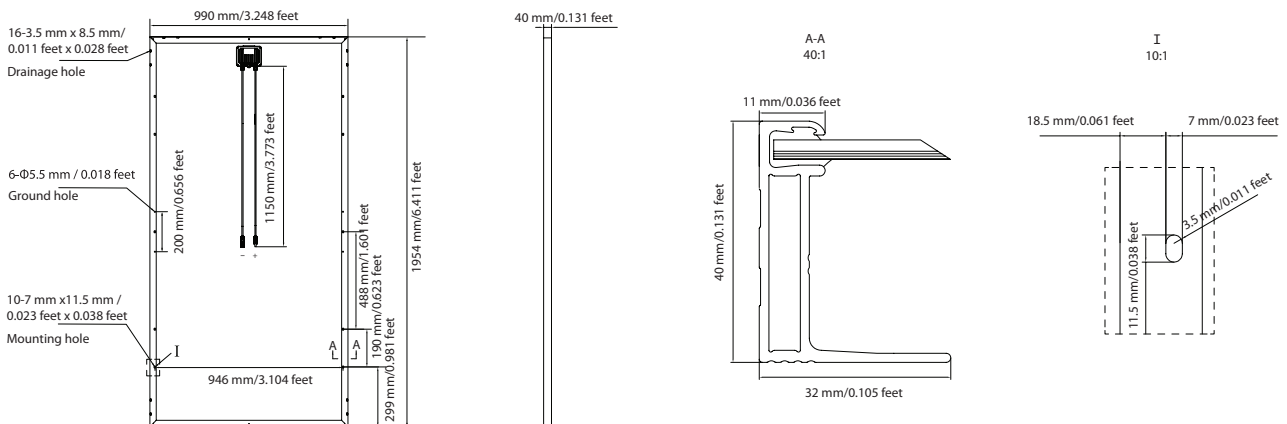
## MECHANICAL SPECIFICATIONS

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

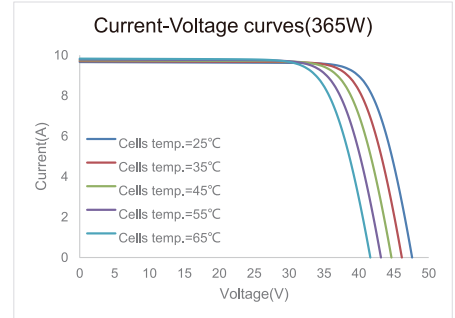
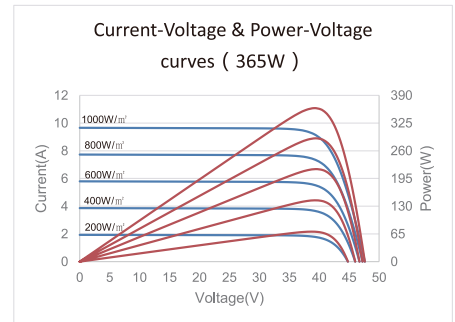
① Option: 900(+)/600(-) mm for defined projects in advance.

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