

# AstroDual™

Reliable in Every Way



## 335W~360W

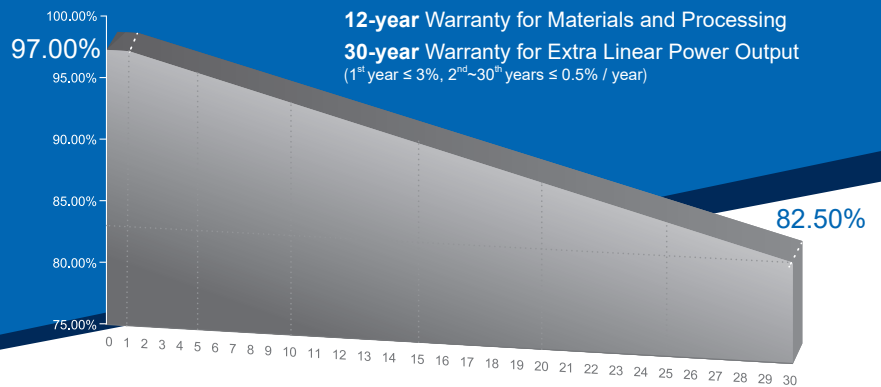
5BB-Monocrystalline PV Module

CHSM6612M(DG) Series (Frameless)

CHSM6612M(DGT) Series (Frameless)

CHSM6612M (DG) is double glass module with white encapsulate material

CHSM6612M (DGT) is double glass module with transparent encapsulate material










### COMPREHENSIVE CERTIFICATES



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

### KEY FEATURES

- 
**ENHANCED FIRE PERFORMANCE**  
 Fire Class A certified according to IEC standard.
- 
**EXCELLENT WEATHER RESISTANCE**  
 Reduces the cell micro-crack and extended product warranty.
- 
**PID FREE**  
 Excellent PID resistance, 1000 hours (@85°C /85%) ability for frameless design.
- 
**OPTIONAL BACK RAIL QUICK INSTALLATION**  
 Effectively improves the installation efficiency comparing with the conventional clamping installation.
- 
**APPLICABLE FOR MULTI DIFFERENT ENVIRONMENTS**  
 Transparent or white encapsulate material available.
- 
**SNAIL TRAIL RESISTANCE**  
 Reduces the probability of snail trails with zero water vapor transmittance.
- 
**STRONGER STRUCTURE**  
 Better cell micro-crack resistance.

For Global Market



**ASTROENERGY**  
A CHNT COMPANY

## ELECTRICAL SPECIFICATIONS

STC rated output ( $P_{mpp}$ )*	335 Wp	340 Wp	345 Wp	350 Wp	355 Wp	360 Wp
Rated voltage ( $V_{mpp}$ ) at STC	38.01 V	38.28 V	38.51 V	38.80 V	38.93 V	39.05 V
Rated current ( $I_{mpp}$ ) at STC	8.82 A	8.88 A	8.96 A	9.02 A	9.12 A	9.22 A
Open circuit voltage ( $V_{oc}$ ) at STC	46.29 V	46.65 V	46.96 V	47.27 V	47.41 V	47.52 V
Short circuit current ( $I_{sc}$ ) at STC	9.35 A	9.40 A	9.47 A	9.54 A	9.64 A	9.73 A
Module efficiency	17.2%	17.4%	17.7%	17.9%	18.2%	18.4%
Rated output ( $P_{mpp}$ ) at NOCT	246.7 Wp	250.4 Wp	254.1 Wp	257.8 Wp	261.5 Wp	265.1 Wp
Rated voltage ( $V_{mpp}$ ) at NOCT	35.07 V	35.36 V	35.56 V	35.83 V	35.95 V	36.06 V
Rated current ( $I_{mpp}$ ) at NOCT	7.03 A	7.08 A	7.15 A	7.19 A	7.27 A	7.35 A
Open circuit voltage ( $V_{oc}$ ) at NOCT	42.92 V	43.25 V	43.54 V	43.83 V	43.96 V	44.06 V
Short circuit current ( $I_{sc}$ ) at NOCT	7.51 A	7.55 A	7.61 A	7.67 A	7.75 A	7.82 A
Temperature coefficient ( $P_{mpp}$ )	- 0.408%/°C					
Temperature coefficient ( $I_{sc}$ )	+0.044%/°C					
Temperature coefficient ( $V_{oc}$ )	- 0.301%/°C					
Normal operating cell temperature (NOCT)	46±2°C					
Maximum system voltage (IEC/UL)	1500V <sub>DC</sub> / 1000V <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

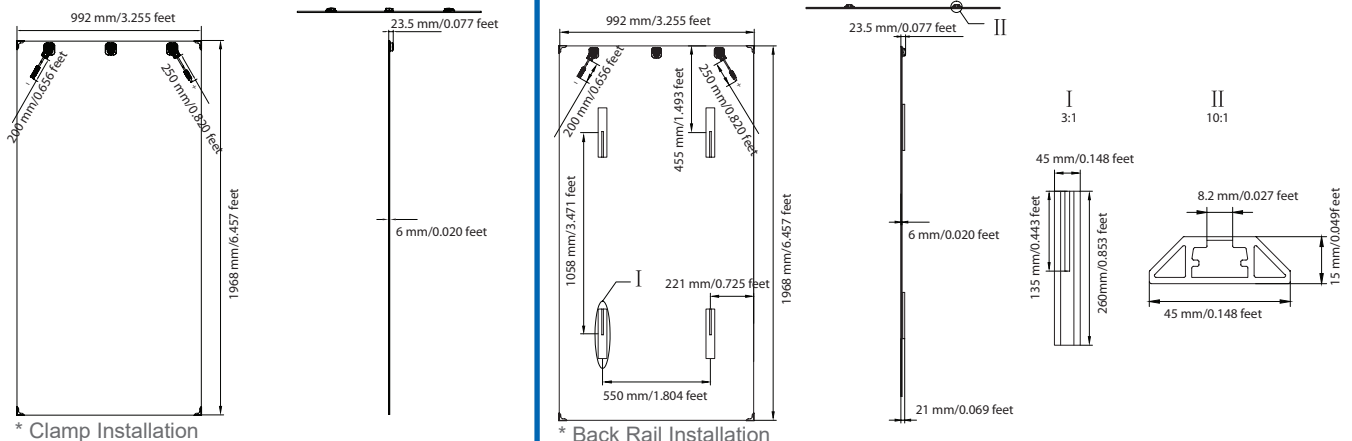
## MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	1968 x 992 x 6 mm 77.48 x 39.06 x 0.24 in
Module composition	Glass / EVA or POE / Glass
Front glass thickness	2.5 mm / 0.098 in
① Cable length (IEC/UL)	250(+)/200(-) mm / 9.84 / 7.87 in
Cable diameter (IEC/UL)	4 mm <sup>2</sup> / 12 AWG
② Maximum mechanical test load	7000 Pa
Fire performance (IEC/UL)	Class A (IEC) or Type 3 (UL)
Connector type (IEC/UL)	MC4 compatible

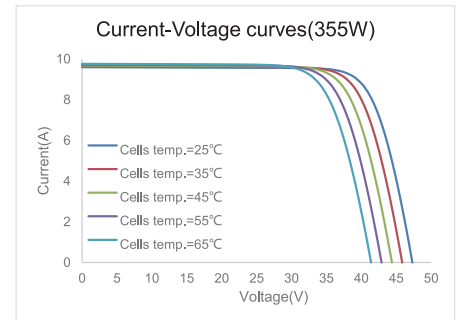
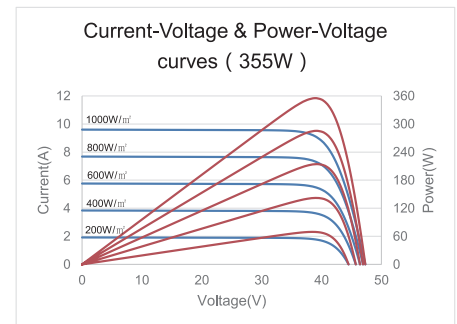
① Positive:250mm,negative:200mm

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)	28 kg / 61.73 lbs (without back rail)
	28.8 kg / 63.49 lbs (with back rail)
② Packing unit	33 pcs / box
Weight of packing unit (for 40'HQ container)	993 kg / 2188 lbs (without back rail)
	1019 kg / 2247 lbs (with back rail)
Number of modules per 40'HQ container	726 pcs

① Tolerance +/- 1.0kg

② Subject to sales contract