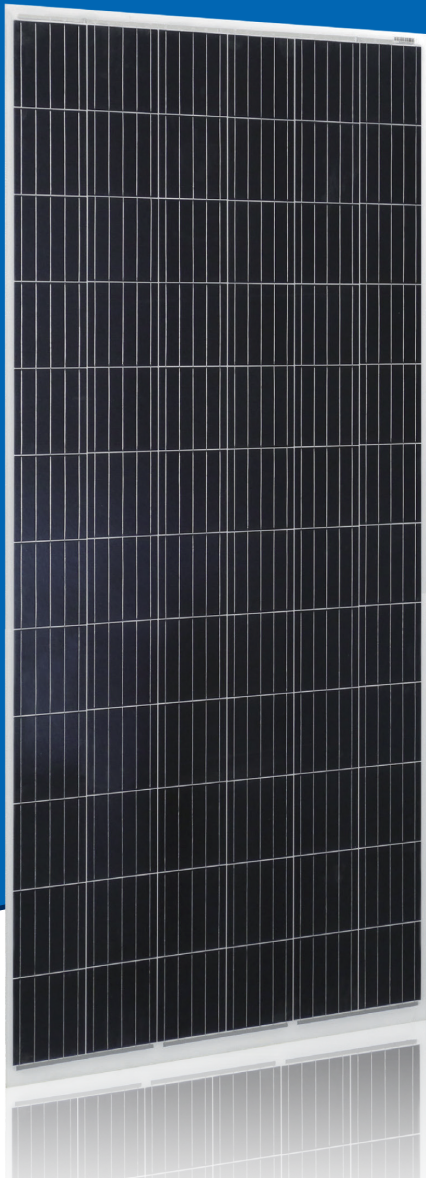


AstroDual™

Reliable in Every Way



320W~345W

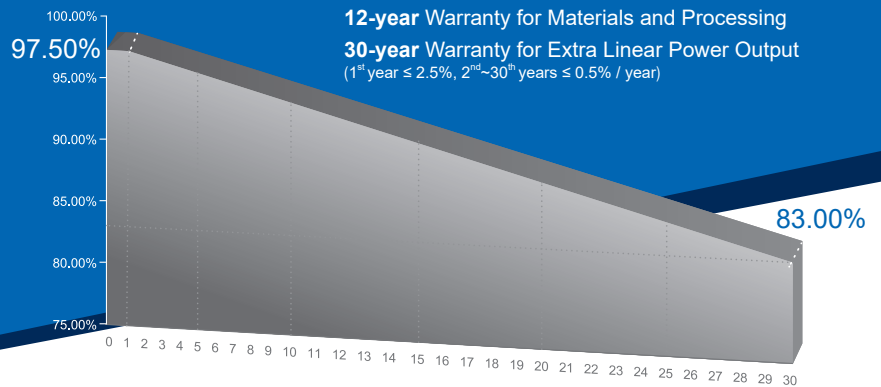
5BB-Polycrystalline PV Module

CHSM6612P(DG) Series (Frameless)

CHSM6612P(DGT) Series (Frameless)

CHSM6612P (DG) is double glass module with white encapsulate material

CHSM6612P (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})* | 320 Wp | 325 Wp | 330 Wp | 335 Wp | 340 Wp | 345 Wp |
| Rated voltage (V_{mpp}) at STC | 37.03 V | 37.08 V | 37.17 V | 37.26 V | 37.33 V | 37.41 V |
| Rated current (I_{mpp}) at STC | 8.64 A | 8.76 A | 8.88 A | 8.99 A | 9.11 A | 9.22 A |
| Open circuit voltage (V_{oc}) at STC | 45.51 V | 45.72 V | 45.87 V | 46.02 V | 46.22 V | 46.42 V |
| Short circuit current (I_{sc}) at STC | 9.21 A | 9.34 A | 9.51 A | 9.56 A | 9.62 A | 9.66 A |
| Module efficiency | 16.4% | 16.6% | 16.9% | 17.2% | 17.4% | 17.5% |
| Rated output (P_{mpp}) at NOCT | 223.5 Wp | 226.9 Wp | 230.4 Wp | 233.9 Wp | 237.4 Wp | 240.9 Wp |
| Rated voltage (V_{mpp}) at NOCT | 33.83 V | 33.88 V | 33.96 V | 34.04 V | 34.11 V | 34.18 V |
| Rated current (I_{mpp}) at NOCT | 6.60 A | 6.70 A | 6.79 A | 6.87 A | 6.96 A | 7.05 A |
| Open circuit voltage (V_{oc}) at NOCT | 41.76 V | 41.95 V | 42.09 V | 42.23 V | 42.41 V | 42.60 V |
| Short circuit current (I_{sc}) at NOCT | 7.12 A | 7.22 A | 7.36 A | 7.39 A | 7.44 A | 7.47 A |
| Temperature coefficient (P_{mpp}) | - 0.400%/°C | | | | | |
| Temperature coefficient (I_{sc}) | +0.044%/°C | | | | | |
| Temperature coefficient (V_{oc}) | - 0.299%/°C | | | | | |
| Normal operating cell temperature (NOCT) | 46±2°C | | | | | |
| Maximum system voltage (IEC/UL) | 1500V _{DC} / 1000V _{DC} | | | | | |
| Number of diodes | 3 | | | | | |
| Junction box IP rating | IP 67 | | | | | |
| Maximum series fuse rating | 15 A | | | | | |

* Measurement tolerance +/- 3%

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

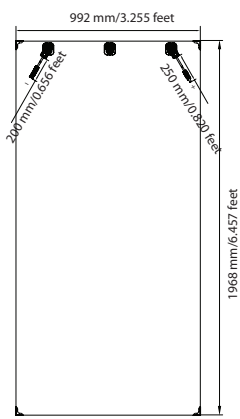
MECHANICAL SPECIFICATIONS

| | |
|--------------------------------|--|
| 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 ² / 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 |

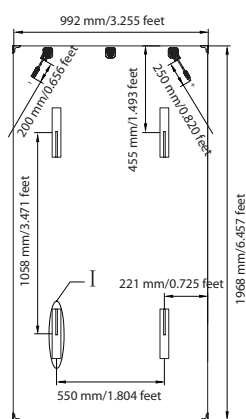
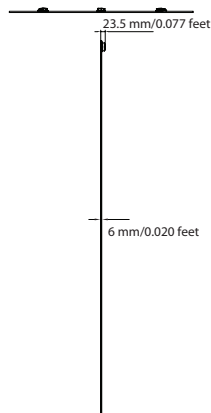
① Positive:250mm,negative:200mm

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

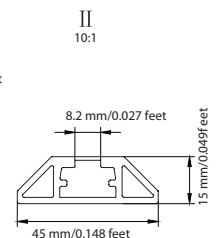
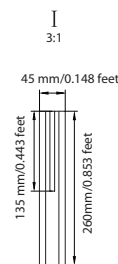
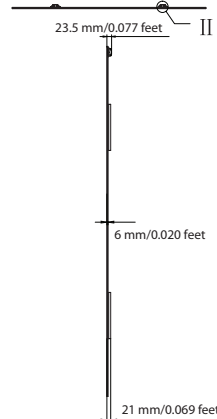
MODULE DIMENSION DETAILS



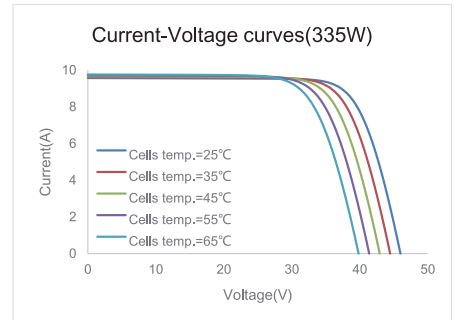
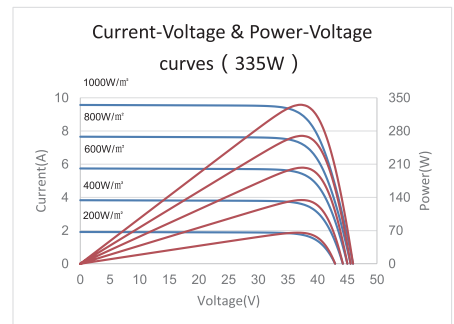
* Clamp Installation



* Back Rail Installation



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