

For Global Market



# STAR™ II

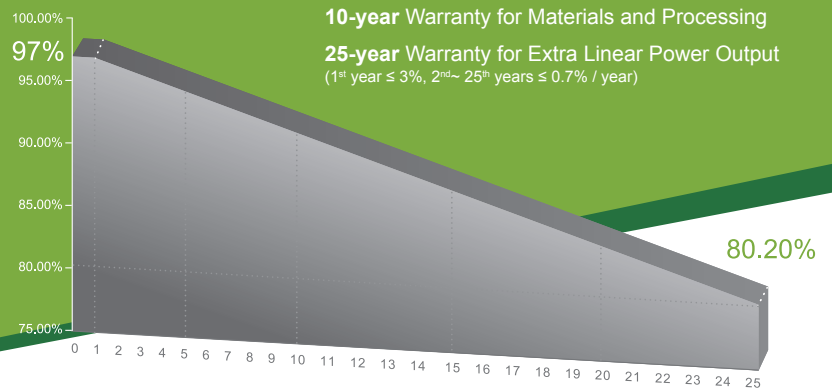
## 290W ~ 305W

5BB-Monocrystalline PV Module

Baseline CHSM6610M Series  
Baseline CHSM6610M/HV Series

CHSM6610M max system voltage 1000V standard  
CHSM6610M/HV max system voltage 1500V standard

<b>Tier 1</b> Bloomberg	<b>No.1</b> PHOTON	MunichRe Insured	DNV GL 2017 TOP Performance
----------------------------	-----------------------	---------------------	--------------------------------



### 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.
- 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).
- 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.



## ELECTRICAL SPECIFICATIONS

STC rated output (Pmpp)*	290 Wp	295 Wp	300 Wp	305 Wp
Rated voltage (Vmpp) at STC	32.15 V	32.38 V	32.59 V	32.80 V
Rated current (Impp) at STC	9.03 A	9.12 A	9.21 A	9.30 A
Open circuit voltage (Voc) at STC	39.45 V	39.81 V	39.90 V	40.05 V
Short circuit current (Isc) at STC	9.54 A	9.59 A	9.68 A	9.72 A
Module efficiency	17.8%	18.1%	18.4%	18.7%
Rated output (Pmpp) at NOCT	213.1 Wp	216.8 Wp	220.5 Wp	224.1 Wp
Rated voltage (Vmpp) at NOCT	29.58 V	29.79 V	30.00 V	30.21 V
Rated current (Impp) at NOCT	7.20 A	7.28 A	7.35 A	7.42 A
Open circuit voltage (Voc) at NOCT	36.60 V	36.93 V	37.01 V	37.15 V
Short circuit current (Isc) at NOCT	7.67 A	7.71 A	7.79 A	7.82 A
Temperature coefficient (Pmpp)	- 0.380%/°C			
Temperature coefficient (Isc)	+0.042%/°C			
Temperature coefficient (Voc)	- 0.284%/°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

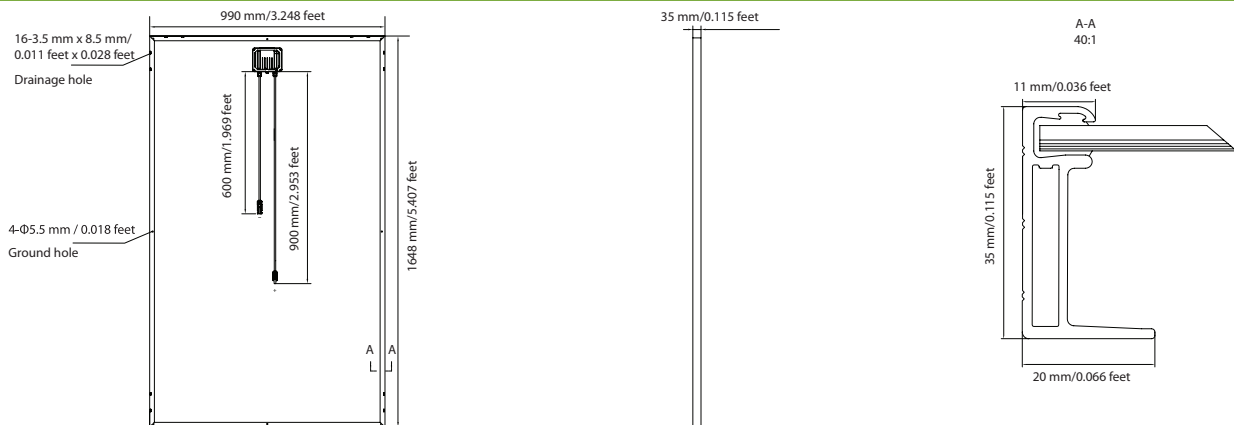
## MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	1648 x 990 x 35 mm 64.88 x 38.98 x 1.38 in
Frame technology	Aluminum, silver anodized
Module composition	Glass / EVA / Backsheet (white)
Front glass thickness	3.2 mm / 0.13 in
①Cable length (IEC/UL)	900(+)/600(-) mm / 35.43/23.62 in
Cable diameter (IEC/UL)	4 mm <sup>2</sup> / 12 AWG
②Maximum mechanical test load	6000 Pa
Fire performance (IEC/UL)	Class C (IEC) or Type 1 (UL)
Connector type (IEC/UL)	MC4 compatible

① Option: 1000 mm for defined projects in advance.

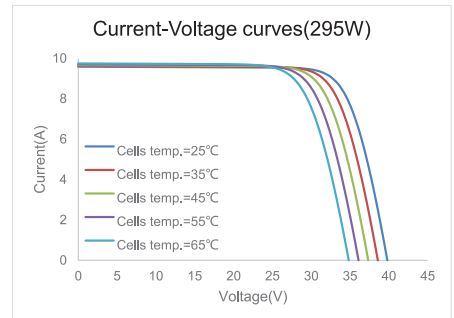
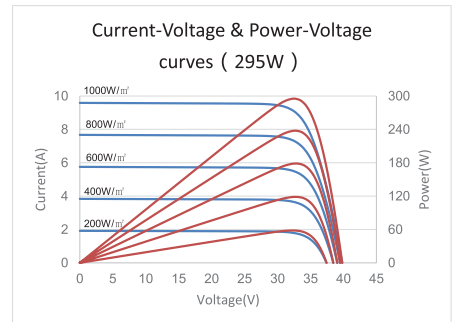
② Refer to Astronergy crystalline installation manual or contact technical department.  
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

## MODULE DIMENSION DETAILS



\* No mounting hole on the frame

## CURVE



## PACKING SPECIFICATIONS

①Weight (module only)	17.9 kg / 39.46 lbs
②Packing unit	31 pcs / box
Weight of packing unit (for 40'HQ container)	604 kg / 1331 lbs
Number of modules per 40'HQ container	868 pcs

① Tolerance +/- 1.0kg

② Subject to sales contract