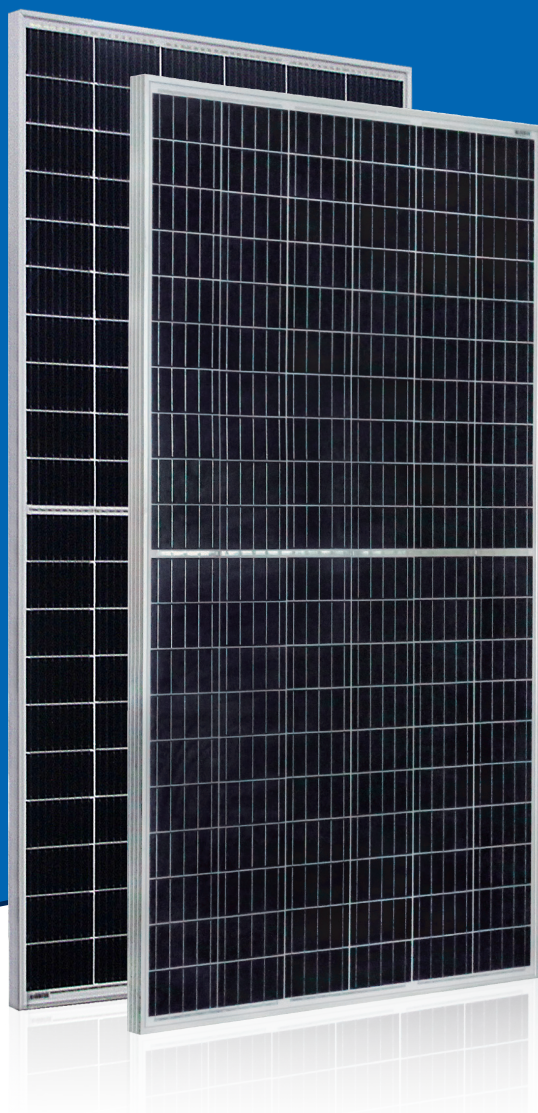


AstroSemi™

Incredible Power for Small Body



Multi-Busbar Module could be the option

320W~340W

Monocrystalline PV Module

CHSM60M-HC Series

Tier 1

Bloomberg

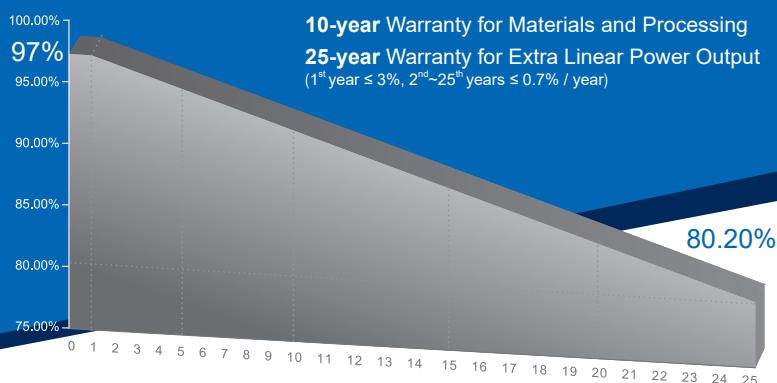
No.1

PHOTON



DNV GL

2018 TOP Performance



KEY FEATURES



OUTPUT POSITIVE TOLERANCE

Guaranteed 0~+5W positive tolerance ensures power output reliability.



INNOVATIONAL HALF-CELL TECHNOLOGY

Improves the module output, decreases the risk of micro-crack, enhances the module reliability.



INNOVATIVE PERC CELL TECHNOLOGY

Excellent cell efficiency and output.



REDUCE SHADOW LOSS

Effectively reduces the effect of shadow on the module surface.



REDUCE INTERNAL MISMATCH LOSS

Reduces mismatch loss and improves output.



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.

For Global Market



ASTRONERGY
A CHNT COMPANY

ELECTRICAL SPECIFICATIONS

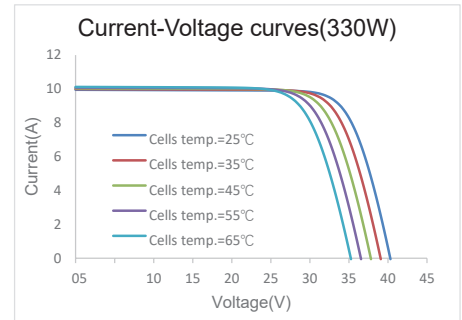
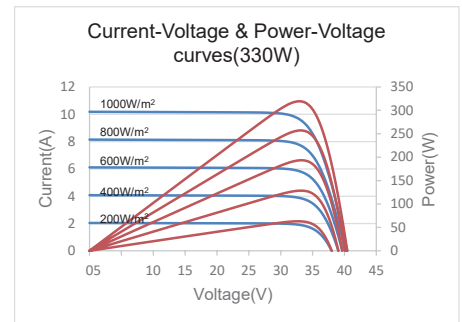
STC rated output (P_{mpp})*	320 Wp	325 Wp	330 Wp	335 Wp	340 Wp
Rated voltage (V_{mpp}) at STC	33.68 V	33.93 V	34.17 V	34.44 V	34.69 V
Rated current (I_{mpp}) at STC	9.50 A	9.58 A	9.66 A	9.73 A	9.80 A
Open circuit voltage (V_{oc}) at STC	40.72 V	41.03 V	41.32 V	41.61 V	41.88 V
Short circuit current (I_{sc}) at STC	9.98 A	10.06 A	10.14 A	10.22 A	10.30 A
Module efficiency	18.9%	19.2%	19.5%	19.8%	20.1%
Rated output (P_{mpp}) at NOCT	238.6 Wp	242.4 Wp	246.1 Wp	249.8 Wp	253.5 Wp
Rated voltage (V_{mpp}) at NOCT	31.39 V	31.63 V	31.85 V	32.10 V	32.35 V
Rated current (I_{mpp}) at NOCT	7.60 A	7.66 A	7.73 A	7.78 A	7.84 A
Open circuit voltage (V_{oc}) at NOCT	38.28 V	38.57 V	38.85 V	39.12 V	39.37 V
Short circuit current (I_{sc}) at NOCT	8.03 A	8.09 A	8.16 A	8.22 A	8.28 A
Temperature coefficient (P_{mpp})	- 0.3438%/°C				
Temperature coefficient (I_{sc})	+0.0353%/°C				
Temperature coefficient (V_{oc})	- 0.2722%/°C				
Normal operating cell temperature (NOCT)	44±2°C				
Maximum system voltage (IEC/UL)	1500V _{DC}				
Number of diodes	3				
Junction box IP rating	IP 67				
Maximum series fuse rating	20 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

CURVE



MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	1692 x 1002 x 35 mm 66.61 x 39.45 x 1.38 in
Frame technology	Aluminum, silver anodized
Module composition	Glass / EVA / Backsheet (white)
Front glass thickness	3.2 mm / 0.13 in
Cable length (IEC/UL)	Portrait: 700 mm (27.56 in) Landscape: 1100 mm (43.31 in)
Cable diameter (IEC/UL)	4 mm ² / 12 AWG
① Maximum mechanical test load	6000 Pa (front) / 3600 Pa (back)
Fire performance (IEC/UL)	Class C (IEC) or Type 1 (UL)
Connector type (IEC/UL)	MC4 compatible

① Refer to Astronergy crystalline installation manual or contact technical department.
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

PACKING SPECIFICATIONS

① Weight (module only)	19.1 kg / 42.11 lbs
② Packing unit	31 pcs / box
Weight of packing unit (for 40'HQ container)	631 kg / 139 lbs
Number of modules per 40'HQ container	806 pcs

① Tolerance +/- 1.0kg
② Subject to sales contract

MODULE DIMENSION DETAILS

