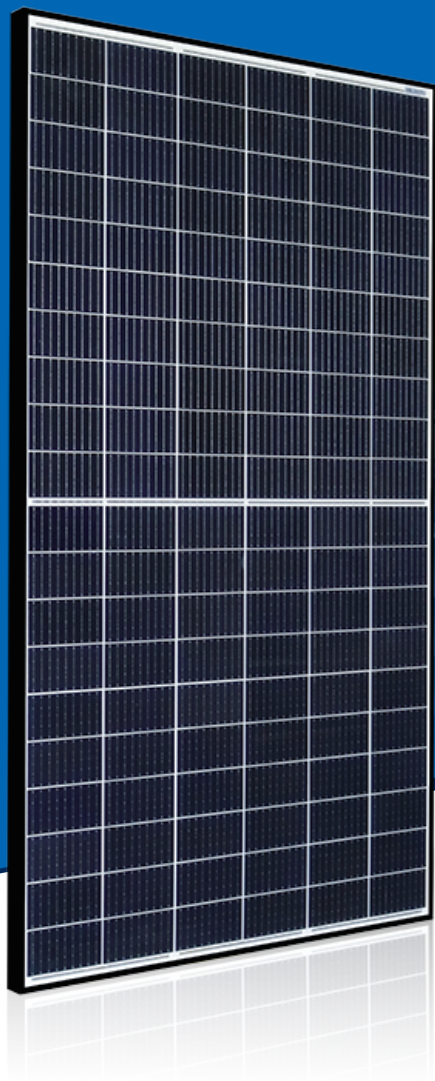


# AstroSemi™

Incredible Power for Small Body

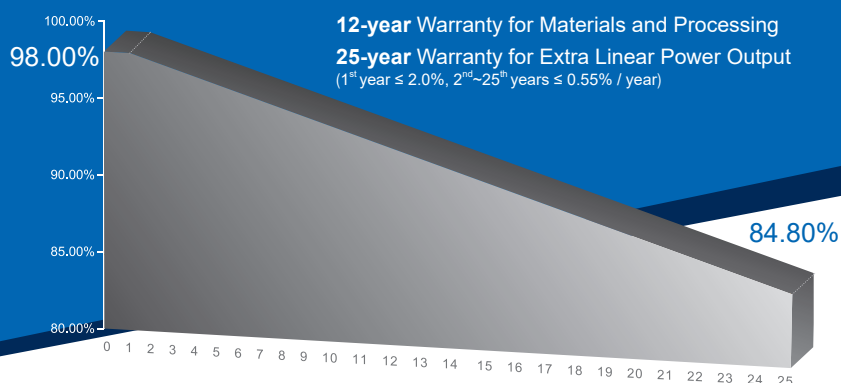


## 335W~350W

Monocrystalline PV Module

CHSM60M-HC Series

CHSM60M/LV-HC Series (158.75)



### KEY FEATURES



#### OUTPUT POSITIVE TOLERANCE

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



#### INNOVATIONAL HALF-CELL TECHNOLOGY

Improve the module output, decrease the risk of micro cracking, enhance the module reliability.



#### INNOVATIVE PERC CELL TECHNOLOGY

Excellent cell efficiency and output.



#### REDUCE SHADOW LOSS

Effectively reduce the effect of shading on the module surface.



#### REDUCE INTERNAL MISMATCH LOSS

Reduce mismatch loss and improve output.



#### PASSED HAIL TEST

Certified to hail resistance: ice ball size (d=25mm) and ice ball velocity (v=23m/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

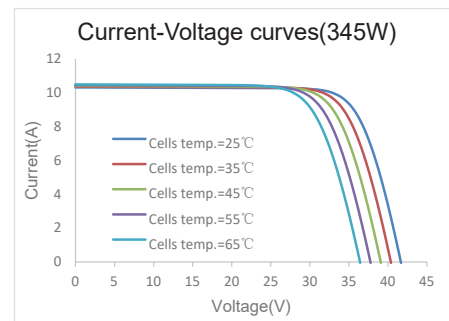
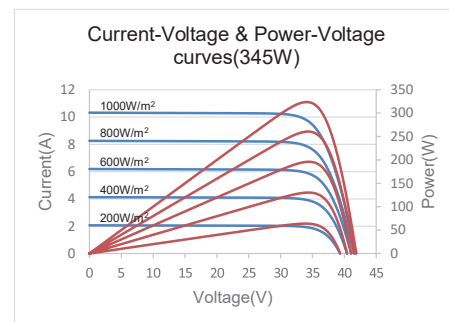
## ELECTRICAL SPECIFICATIONS

STC rated output ( $P_{mpp}$ )*	335 Wp	340 Wp	345 Wp	350 Wp
Rated voltage ( $V_{mpp}$ ) at STC	34.44 V	34.69 V	34.96 V	35.22 V
Rated current ( $I_{mpp}$ ) at STC	9.73 A	9.80 A	9.87 A	9.94 A
Open circuit voltage ( $V_{oc}$ ) at STC	41.61 V	41.88 V	42.16 V	42.44 V
Short circuit current ( $I_{sc}$ ) at STC	10.22 A	10.30 A	10.38 A	10.46 A
Module efficiency	19.8%	20.1%	20.3%	20.6%
Rated output ( $P_{mpp}$ ) at NMOT	249.8 Wp	253.5 Wp	257.3 Wp	261.0 Wp
Rated voltage ( $V_{mpp}$ ) at NMOT	32.10 V	32.35 V	32.59 V	32.83 V
Rated current ( $I_{mpp}$ ) at NMOT	7.78 A	7.84 A	7.89 A	7.95 A
Open circuit voltage ( $V_{oc}$ ) at NMOT	39.12 V	39.37 V	39.64 V	39.90 V
Short circuit current ( $I_{sc}$ ) at NMOT	8.22 A	8.28 A	8.35 A	8.41 A
Temperature coefficient ( $P_{mpp}$ )	- 0.34%/°C			
Temperature coefficient ( $I_{sc}$ )	+0.04%/°C			
Temperature coefficient ( $V_{oc}$ )	- 0.27%/°C			
Nominal module operating temperature (NMOT)	44±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 68			
Maximum series fuse rating	20 A			

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

NMOT: Irradiance 800W/m<sup>2</sup>, 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 40 mm
Frame technology	Aluminum, black anodized
Module composition	Glass / EVA / Backsheet (white)
Front glass thickness	3.2 mm
Cable length (IEC/UL)	1200 mm
Cable diameter (IEC/UL)	4 mm <sup>2</sup> / 12 AWG
① Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Fire performance (IEC/UL)	Class C (IEC) or Type 4 (UL)
Connector type (IEC/UL)	MC4 original connector

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)	19.3 kg
② Packing unit	27 pcs / box
Weight of packing unit (for 40'HQ container)	560 kg
Number of modules per 40'HQ container	702 pcs

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

## MODULE DIMENSION DETAILS

