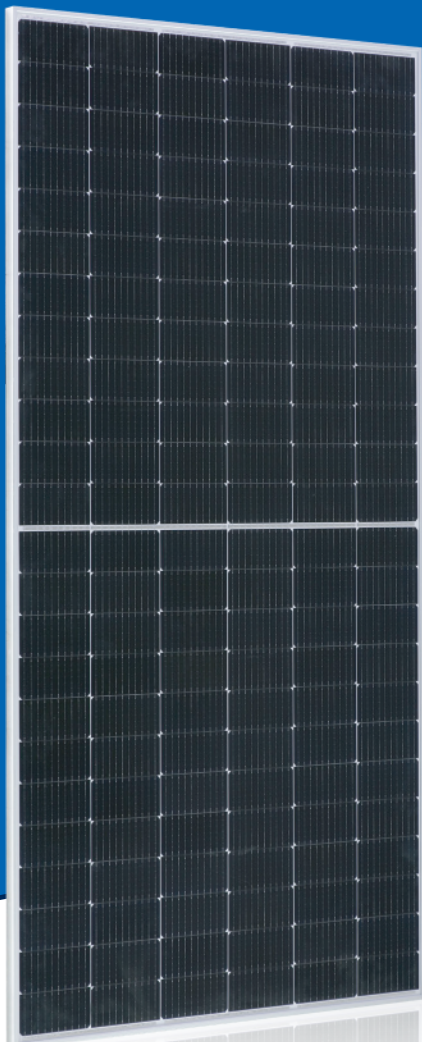


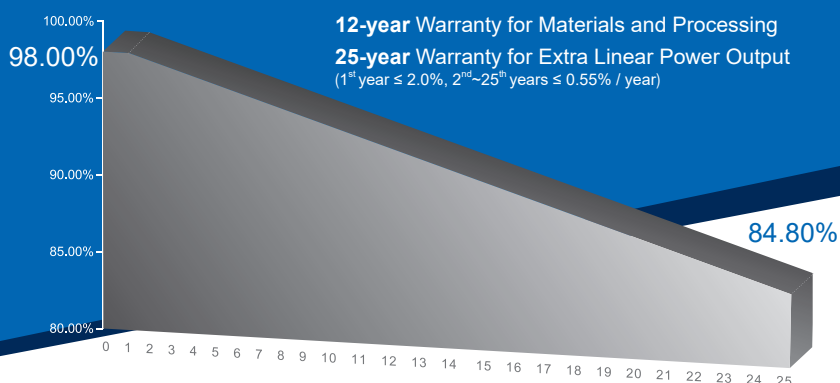
# AstroSemi™

Incredible Power for Small Body



## 525W~545W

Monocrystalline PV Module  
CHSM72M-HC Series (182)



### KEY FEATURES

- OUTPUT POSITIVE TOLERANCE**  
 Guaranteed 0~+5W positive tolerance ensures power output 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.
- 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.

Preliminary  
For Global Market



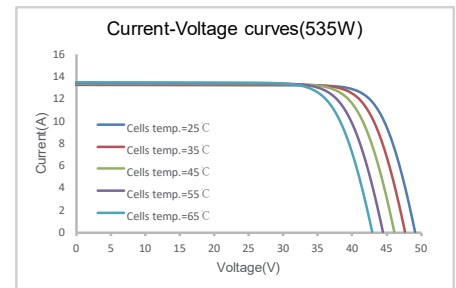
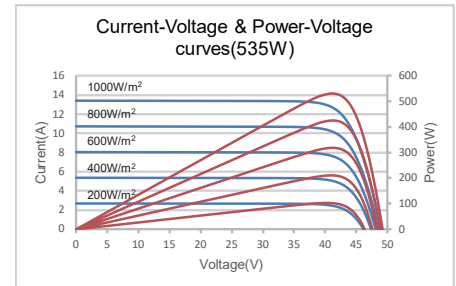
**ASTRONERGY**  
A CHNT COMPANY

## ELECTRICAL SPECIFICATIONS

STC rated output ( $P_{mpp}$ )*	525 Wp	530 Wp	535 Wp	540 Wp	545 Wp
Rated voltage ( $V_{mpp}$ ) at STC	41.26 V	41.43 V	41.60 V	41.76 V	41.93 V
Rated current ( $I_{mpp}$ ) at STC	12.72 A	12.79 A	12.86 A	12.93 A	13.00 A
Open circuit voltage ( $V_{oc}$ ) at STC	49.10 V	49.30 V	49.50 V	49.70 V	49.90 V
Short circuit current ( $I_{sc}$ ) at STC	13.43 A	13.52 A	13.61 A	13.72 A	13.81 A
Module efficiency	20.5%	20.7%	20.9%	21.1%	21.3%
Rated output ( $P_{mpp}$ ) at NMOT	392.3 Wp	396.1 Wp	399.8 Wp	403.5 Wp	407.3 Wp
Rated voltage ( $V_{mpp}$ ) at NMOT	38.45 V	38.61 V	38.77 V	38.92 V	39.08 V
Rated current ( $I_{mpp}$ ) at NMOT	10.20 A	10.26 A	10.31 A	10.37 A	10.42 A
Open circuit voltage ( $V_{oc}$ ) at NMOT	46.40 V	46.59 V	46.78 V	46.97 V	47.16 V
Short circuit current ( $I_{sc}$ ) at NMOT	10.90 A	10.97 A	11.04 A	11.13 A	11.20 A
Temperature coefficient ( $P_{mpp}$ )	- 0.350%/°C				
Temperature coefficient ( $I_{sc}$ )	+0.045%/°C				
Temperature coefficient ( $V_{oc}$ )	- 0.270%/°C				
Nominal module operating temperature (NMOT)	45±2°C				
Maximum system voltage (IEC/UL)	1500V <sub>DC</sub>				
Number of diodes	3				
Junction box IP rating	IP 68				
Maximum series fuse rating	25 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)	2256 x 1133 x 35 mm
Frame technology	Aluminum, silver anodized
Module composition	Glass / EVA / Backsheet (white)
Front glass thickness	3.2 mm
Cable length (IEC/UL)	Portrait: 300 mm Landscape: 1400 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 compatible

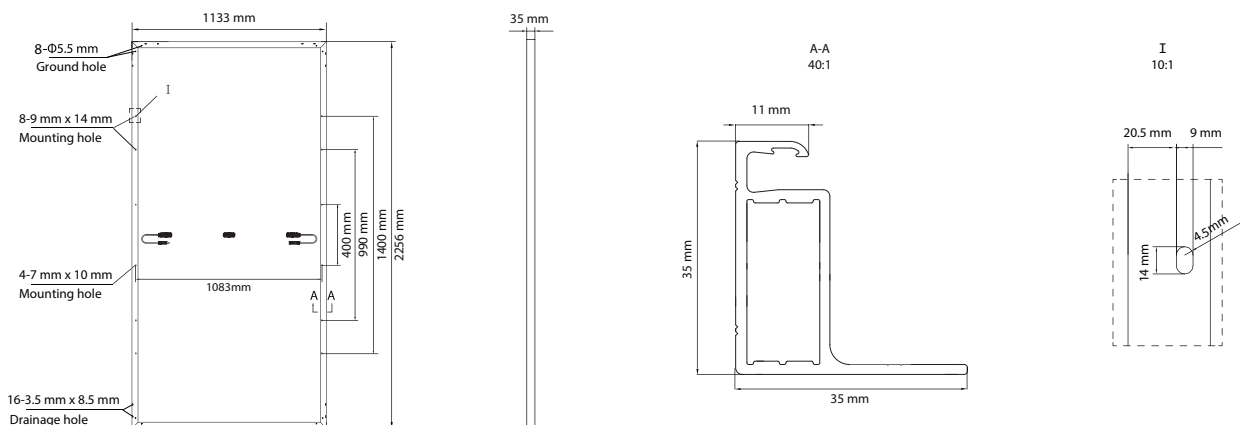
① Refer to Astronergy crystalline installation manual or contact technical department.  
 Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

## PACKING SPECIFICATIONS

① Weight (module only)	27.2 kg
② Packing unit	31 pcs / box
Weight of packing unit (for 40'HQ container)	886 kg
Number of modules per 40'HQ container	620 pcs

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

## MODULE DIMENSION DETAILS



© Chint Solar (Zhejiang) Co., Ltd. Reserves the right of final interpretation. please contact our company to use the latest version for contract.