

ASTRO 5 Semi

Create Sustainable and Efficient Green Energy



ASTRONERGY
A CHINT COMPANY

530W~550W

Monocrystalline PV Module
CHSM72M-HC Series (182)



KEY FEATURES

+5W
OUTPUT POSITIVE TOLERANCE
 Guaranteed 0~+5W positive tolerance to ensure power output.

NON-DESTRUCTIVE CUTTING
 Higher bending strength of cells and mechanical properties of modules.

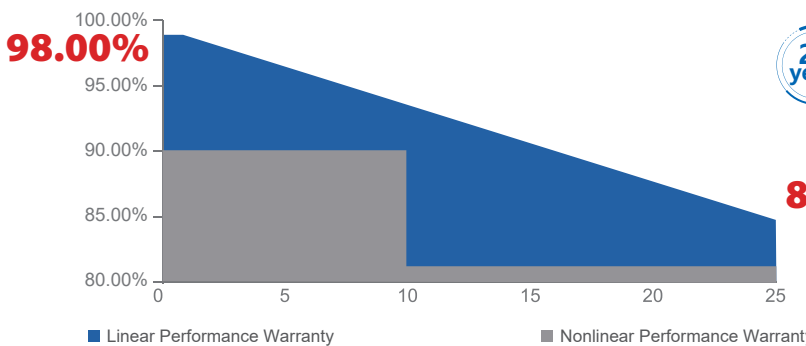
HIGH CUSTOMER VALUE
 Lower BOS cost and LCOE.

INNOVATIONAL HALF-CUT&MULTI-BUSBAR TECHNOLOGY
 Lower risk of microcrack, better shading tolerance, higher reliability.

SUPER PERC+ CELL TECHNOLOGY
 Higher module power and module efficiency, lower power degradation.

Anti PID
PID RESISTANCE
 Excellent PID resistance.

WARRANTY



- 12 years** Warranty for Materials and Processing
- 25 years** Warranty for Extra Linear Power Output (1st year ≤ 2.0%, 2nd~25th years ≤ 0.55% / year)

For Global Market

ELECTRICAL SPECIFICATIONS

STC rated output (P_{mpp})	530 Wp	535 Wp	540 Wp	545 Wp	550 Wp
Rated voltage (V_{mpp}) at STC	41.43 V	41.60 V	41.76 V	41.93 V	42.10 V
Rated current (I_{mpp}) at STC	12.79 A	12.86 A	12.93 A	13.00 A	13.06 A
Open circuit voltage (V_{oc}) at STC	49.30 V	49.50 V	49.70 V	49.90 V	50.10 V
Short circuit current (I_{sc}) at STC	13.52 A	13.61 A	13.72 A	13.81 A	13.90 A
Module efficiency	20.7%	20.9%	21.1%	21.3%	21.5%
Rated output (P_{mpp}) at NMOT	396.1 Wp	399.8 Wp	403.5 Wp	407.3 Wp	411.0 Wp
Rated voltage (V_{mpp}) at NMOT	38.61 V	38.77 V	38.92 V	39.08 V	39.24 V
Rated current (I_{mpp}) at NMOT	10.26 A	10.31 A	10.37 A	10.42 A	10.48 A
Open circuit voltage (V_{oc}) at NMOT	46.59 V	46.78 V	46.97 V	47.16 V	47.34 V
Short circuit current (I_{sc}) at NMOT	10.97 A	11.04 A	11.13 A	11.20 A	11.27 A
Temperature coefficient (P_{mpp})			- 0.35%/°C		
Temperature coefficient (I_{sc})			+ 0.045%/°C		
Temperature coefficient (V_{oc})			- 0.27%/°C		
Nominal module operating temperature (NMOT)			41±2°C		
Maximum system voltage (IEC/UL)			1500V _{DC}		
Number of diodes			3		
Junction box IP rating			IP 68		
Maximum series fuse rating			25 A		

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

NMOT: Irradiance 800W/m², Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	2256 x 1133 x 35 mm
Frame technology	Aluminum, silver anodized
Front glass thickness	3.2 mm
Cable length (IEC/UL)	Portrait: 300 mm Landscape: 1400 mm
Cable diameter (IEC/UL)	4 mm ² / 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)	HCB40 / MC4-EVO2 (optional)

① Refer to Astronergy crystalline installation manual or contact technical department.

Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

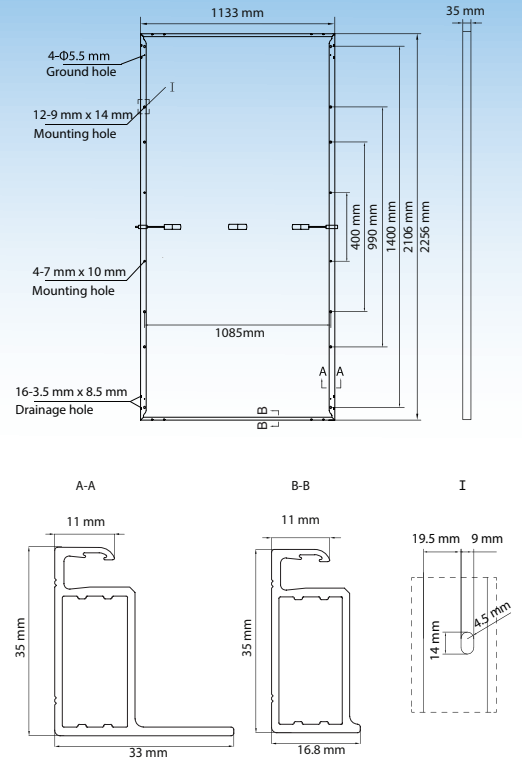
PACKING SPECIFICATIONS

① Module Weight	26.5 kg
② Packing unit	31 pcs / box
Weight of packing unit (for 40'HQ container)	860 kg
Number of modules per 40'HQ container	620 pcs

① Tolerance +/- 1.0kg

② Subject to sales contract

MODULE DIMENSION DETAILS



CURVE

