

# ASTRO 6 Semi

Create Sustainable and Efficient Green Energy



**ASTRONERGY**  
A CHINT COMPANY

## 645W~660W

Monocrystalline PV Module  
CHSM66M-HC Series (210)



### 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.

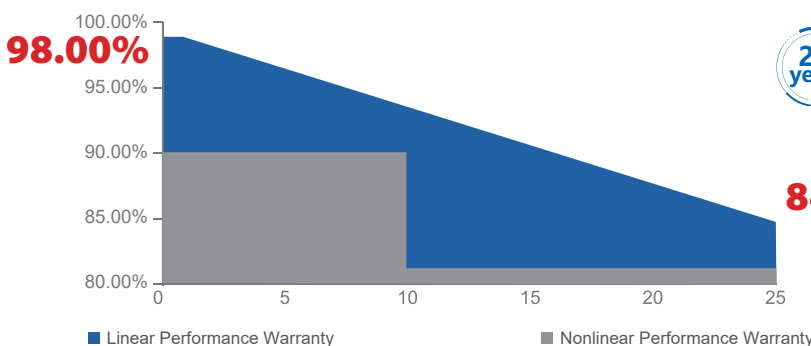
**HIGH CUSTOMER VALUE**  
Lower BOS cost and LCOE.

**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  
(1<sup>st</sup> year ≤ 2.0%, 2<sup>nd</sup>~25<sup>th</sup> years ≤ 0.55% / year)

Preliminary  
For Global Market

## ELECTRICAL SPECIFICATIONS

STC rated output ( $P_{mpp}$ )	645 Wp	650 Wp	655 Wp	660 Wp
Rated voltage ( $V_{mpp}$ ) at STC	37.25 V	37.45 V	37.65 V	37.85 V
Rated current ( $I_{mpp}$ ) at STC	17.32 A	17.36 A	17.41 A	17.45 A
Open circuit voltage ( $V_{oc}$ ) at STC	45.08 V	45.28 V	45.48 V	45.68 V
Short circuit current ( $I_{sc}$ ) at STC	18.38 A	18.43 A	18.48 A	18.53 A
Module efficiency	20.8%	20.9%	21.1%	21.2%
Rated output ( $P_{mpp}$ ) at NMOT	482.0 Wp	485.8 Wp	489.5 Wp	493.2 Wp
Rated voltage ( $V_{mpp}$ ) at NMOT	34.72 V	34.90 V	35.09 V	35.28 V
Rated current ( $I_{mpp}$ ) at NMOT	13.89 A	13.92 A	13.96 A	13.99 A
Open circuit voltage ( $V_{oc}$ ) at NMOT	42.60 V	42.79 V	42.98 V	43.17 V
Short circuit current ( $I_{sc}$ ) at NMOT	14.91 A	14.95 A	14.99 A	15.03 A
Temperature coefficient ( $P_{mpp}$ )		- 0.34%/°C		
Temperature coefficient ( $I_{sc}$ )		+ 0.04%/°C		
Temperature coefficient ( $V_{oc}$ )		- 0.25%/°C		
Nominal module operating temperature (NMOT)		43±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		30 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

## MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	2384 x 1303 x 35 mm
Frame technology	Aluminum, silver anodized
Front glass thickness	3.2 mm
Cable length (IEC/UL)	Portrait: 350 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)	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.

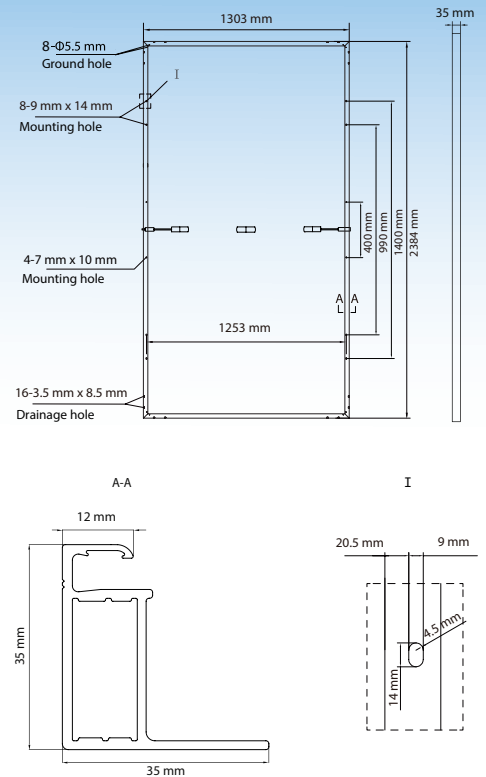
## PACKING SPECIFICATIONS

① Module Weight	34.8 kg
② Packing unit	31 pcs / box
Weight of packing unit (for 40'HQ container)	1133 kg
Number of modules per 40'HQ container	527 pcs

① Tolerance +/- 1.0kg

② Subject to sales contract

## MODULE DIMENSION DETAILS



## CURVE

