

# ASTRO 4 Semi

Create Sustainable and Efficient Green Energy



ASTRONERGY  
A CHINT COMPANY

## 370W~380W

Monocrystalline PV Module  
CHSM60M(BL)-HC Series (166)



### KEY FEATURES



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



**INNOVATIONAL HALF-CUT TECHNOLOGY**  
Better shading tolerance, higher reliability.



**INNOVATIONAL MULTI-BUSBAR TECHNOLOGY**  
Higher light absorption, lower risk of microcrack.

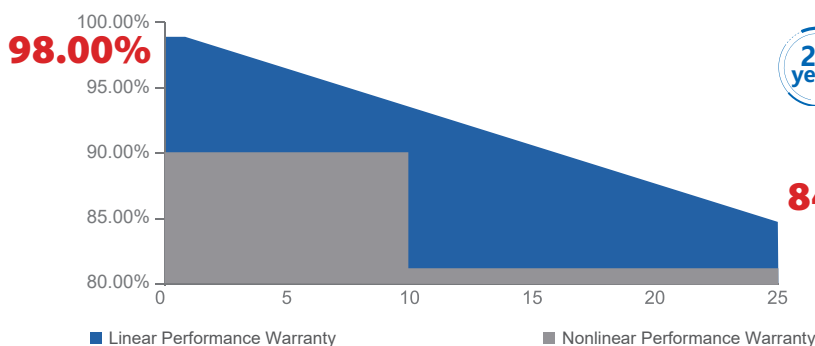


**SUPER PERC+ CELL TECHNOLOGY**  
Higher module power and module efficiency, lower power degradation.



**THE-STATE-OF-THE-ART APPEARANCE**  
Full black designed for a better aesthetic appearance and building integration.

### WARRANTY



**15 years** Warranty for Materials and Processing  
(special for rooftop market)



**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)

**84.80%**

Designed for the Australian Market



## ELECTRICAL SPECIFICATIONS

STC rated output ( $P_{mpp}$ )	370 Wp	375 Wp	380 Wp
Rated voltage ( $V_{mpp}$ ) at STC	33.98 V	34.28 V	34.51 V
Rated current ( $I_{mpp}$ ) at STC	10.89 A	10.94 A	11.01 A
Open circuit voltage ( $V_{oc}$ ) at STC	40.75 V	41.05 V	41.34 V
Short circuit current ( $I_{sc}$ ) at STC	11.35 A	11.42 A	11.49 A
Module efficiency	20.3%	20.6%	20.9%
Rated output ( $P_{mpp}$ ) at NMOT	275.9 Wp	279.6 Wp	283.4 Wp
Rated voltage ( $V_{mpp}$ ) at NMOT	31.68 V	31.96 V	32.18 V
Rated current ( $I_{mpp}$ ) at NMOT	8.71 A	8.75 A	8.81 A
Open circuit voltage ( $V_{oc}$ ) at NMOT	38.31 V	38.59 V	38.87 V
Short circuit current ( $I_{sc}$ ) at NMOT	9.13 A	9.19 A	9.24 A
Temperature coefficient ( $P_{mpp}$ )	- 0.35%/°C		
Temperature coefficient ( $I_{sc}$ )	+ 0.050%/°C		
Temperature coefficient ( $V_{oc}$ )	- 0.27%/°C		
Nominal module operating temperature (NMOT)	41±2°C		
Maximum system voltage (IEC/UL)	1000V <sub>DC</sub>		
Number of diodes	3		
Junction box IP rating	IP 68		
Maximum series fuse rating	20 A		

Power Sorting: 0~+5W

\* Measurement tolerance +/- 3%

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)	1755 x 1038 x 35 mm
Frame technology	Aluminum, black anodized
Front glass thickness	3.2 mm
Cable length (IEC/UL)	Portrait: 300 mm Landscape: 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)	PV-HCB40 or PV-KST4/XY,PV-KBT4/XY,PV-KST4-EVO2/XY-UR,PVKBT4-EVO2/XY-UR(optional)

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

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

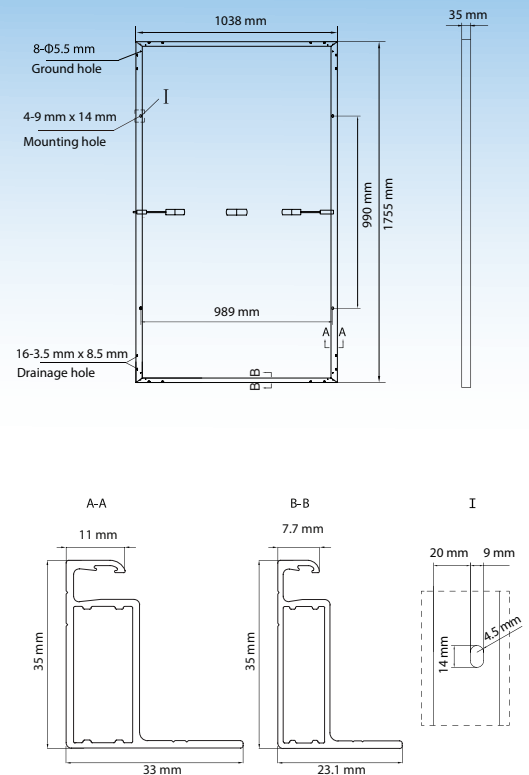
## PACKING SPECIFICATIONS

① Module Weight	19.4 kg
② Packing unit	31 pcs / box
Weight of packing unit (for 40'HQ container)	632 kg
Number of modules per 40'HQ container	806 pcs

① Tolerance +/- 1.0kg

② Subject to sales contract

## MODULE DIMENSION DETAILS



## CURVE

