



ASTRONERGY



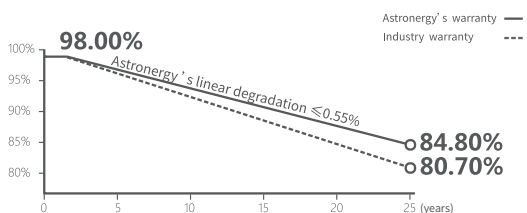
# ASTRO 5 Semi CHSM72M-HC Monofacial Series

## 545 ~ 560W

### Warranty

**12** 12-year Product Warranty

**25** 25-year Linear Power Warranty



### Key Features

- PERC+ / Half-cut
- Non-destructive cutting
- PID resistance
- Low BOS cost & LCOE



ISO 9001:2015:ISO Quality Management System  
 ISO 14001:2015:ISO Environment Management System  
 ISO 45001:Occupational Health and Safety  
 The first solar company which passed the Nord IEC/TS 62941 certification audit



Tier 1  
BloombergNEF



**545~560W**

POWER RANGE

**0~+3%**

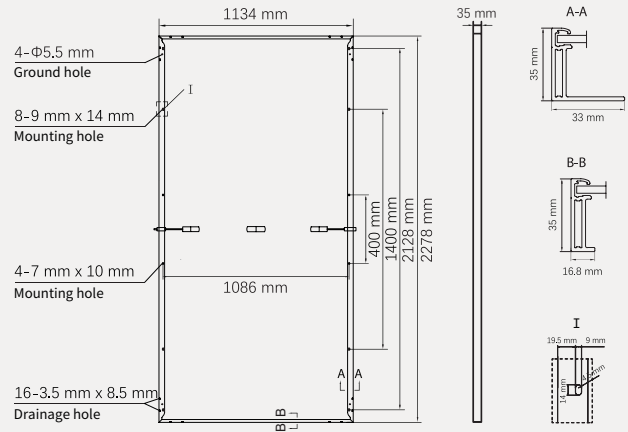
POWER SORTING

**21.7%**MAX MODULE  
EFFICIENCY**≤ 2.0%**FIRST YEAR  
POWER DEGRADATION**≤ 0.55%**YEAR 2-25  
POWER DEGRADATION

## Mechanical Specifications

Outer dimensions (L x W x H)	2278 x 1134 x 35 mm
Cell type	P type mono-crystalline
No. of cells	144 (6*24)
Frame technology	Aluminum, silver anodized
Front glass thickness	3.2 mm
Cable length (Including connector)	Portrait: (+)350 mm, (-)250 mm; Customized length
Cable diameter (IEC/UL)	4 mm <sup>2</sup> / 12 AWG
① Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Connector type (IEC/UL)	HCB40 (Standard) / MC4-EVO2A (Optional)
Module weight	26.9 kg
Packing unit	31 pcs / box
Weight of packing unit (for 40'HQ container)	885 kg
Modules per 40' HQ container	620 pcs (Subject to sales contract)

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



## Electrical Specifications

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

	545	550	555	560
Rated output (Pmpp / Wp)	545	550	555	560
Rated voltage (Vmpp / V)	41.93	42.10	42.27	42.44
Rated current (Impp / A)	13.00	13.06	13.13	13.20
Open circuit voltage (Voc / V)	49.90	50.10	50.30	50.50
Short circuit current (Isc / A)	13.81	13.90	13.98	14.07
Module efficiency	21.1%	21.3%	21.5%	21.7%

**NMOT:** Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20° C, AM=1.5, Wind Speed 1m/s

	407.3	411.0	414.8	418.5
Rated output (Pmpp / Wp)	407.3	411.0	414.8	418.5
Rated voltage (Vmpp / V)	39.08	39.24	39.39	39.55
Rated current (Impp / A)	10.42	10.48	10.53	10.58
Open circuit voltage (Voc / V)	47.16	47.34	47.53	47.72
Short circuit current (Isc / A)	11.20	11.27	11.35	11.42

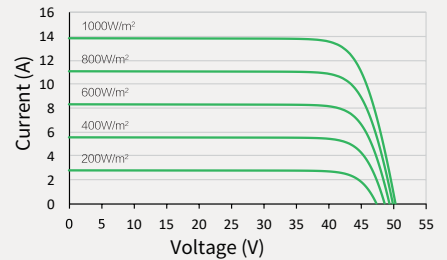
## Temperature Ratings (STC)

Temperature coefficient (Pmpp)	-0.34%/°C	No. of diodes	3
Temperature coefficient (Isc)	+0.04%/°C	Junction box IP rating	IP 68
Temperature coefficient (Voc)	-0.25%/°C	Max. series fuse rating	25 A
Nominal module operating temperature (NMOT)	41±2°C	Max. system voltage (IEC/UL)	1500V <sub>DC</sub>

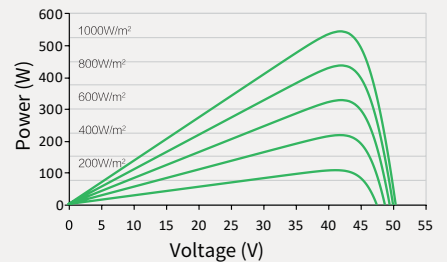
## Operating Parameters

## Curve

Current-Voltage (555W)



Power-Voltage (555W)



Current-Voltage (555W)

