



ASTRONERGY



ASTRO 5^{Semi} CHSM72M-HC Monofacial Series(182)

535~555W

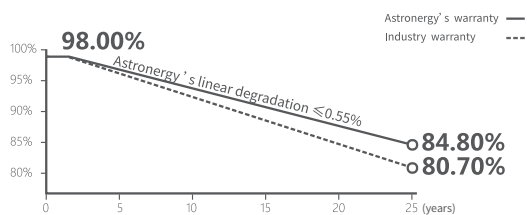
Warranty

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



535~555W

POWER RANGE

0~+5W

POWER SORTING

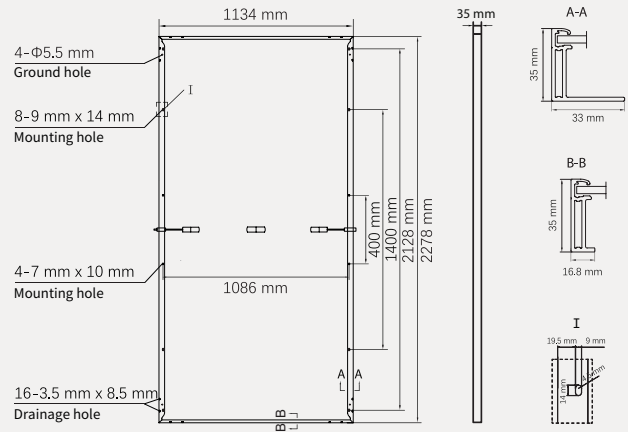
21.5%

MAX MODULE
EFFICIENCY $\leq 2.0\%$ FIRST YEAR
POWER DEGRADATION $\leq 0.55\%$ 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 ² / 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 (Subject to sales contract)
Weight of packing unit (for 40'HQ container)	893 kg
Modules per 40' HQ container	620 pcs

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/m², Cell Temperature 25° C, AM=1.5

Rated output (P _{mpp} / W _p)	535	540	545	550	555
Rated voltage (V _{mpp} / V)	41.60	41.76	41.93	42.10	42.27
Rated current (I _{mp} / A)	12.86	12.93	13.00	13.06	13.13
Open circuit voltage (V _{oc} / V)	49.50	49.70	49.90	50.10	50.30
Short circuit current (I _{sc} / A)	13.61	13.72	13.81	13.90	13.98
Module efficiency	20.7%	20.9%	21.1%	21.3%	21.5%

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

Rated output (P _{mpp} / W _p)	399.8	403.5	407.3	411.0	414.8
Rated voltage (V _{mpp} / V)	38.77	38.92	39.08	39.24	39.39
Rated current (I _{mp} / A)	10.31	10.37	10.42	10.48	10.53
Open circuit voltage (V _{oc} / V)	46.78	46.97	47.16	47.34	47.53
Short circuit current (I _{sc} / A)	11.04	11.13	11.20	11.27	11.35

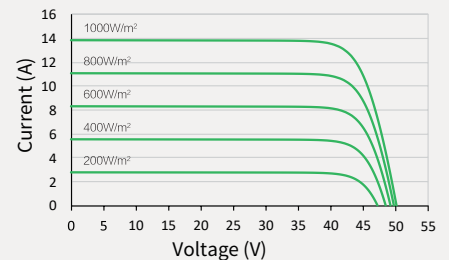
Temperature Ratings (STC)

Temperature coefficient (P _{mpp})	-0.34%/°C	No. of diodes	3
Temperature coefficient (I _{sc})	+0.04%/°C	Junction box IP rating	IP 68
Temperature coefficient (V _{oc})	-0.25%/°C	Max. series fuse rating	25 A
Nominal module operating temperature (NMOT)	41±2°C	Max. system voltage (IEC/UL)	1500V _{DC}

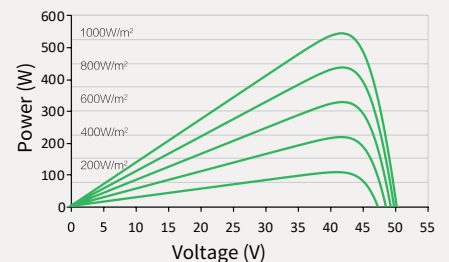
Operating Parameters

Curve

Current-Voltage (550W)



Power-Voltage (550W)



Current-Voltage (550W)

