



ASTRONERGY
A CHNT COMPANY

ASTRO 5 Semi

Create Sustainable and Efficient Green Energy

CHSM72M-HC
Monofacial Series (182)

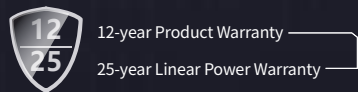
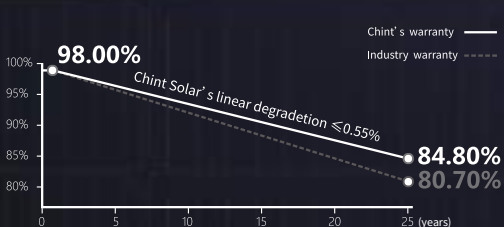
535~550W

PERC+ / Multi-busbar / Half-cut

Non-destructive cutting

PID resistance

Lower 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



535~550W

POWER RANGE

0~+5W

POWER TOLERANCE

21.3%

MAX MODULE EFFICIENCY

≤ 2.0%

FIRST YEAR POWER DEGRADATION

≤ 0.55%

YEAR 2-25 POWER DEGRADATION

Electrical Specifications

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

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

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
Rated voltage (V _{mpp} / V)	38.77	38.92	39.08	39.24
Rated current (I _{mpp} / A)	10.31	10.37	10.42	10.48
Open circuit voltage (V _{oc} / V)	46.78	46.97	47.16	47.34
Short circuit current (I _{sc} / A)	11.04	11.13	11.20	11.27

Temperature Ratings (STC)

Temperature coefficient (P _{mpp})	-0.35%/°C	No. of diodes	3
Temperature coefficient (I _{sc})	+0.045%/°C	Junction box IP rating	IP 68
Temperature coefficient (V _{oc})	-0.27%/°C	Max. series fuse rating	25 A
Nominal module operating temperature (NMOT)	41±2°C	Max. system voltage (IEC/UL)	1500V _{DC}

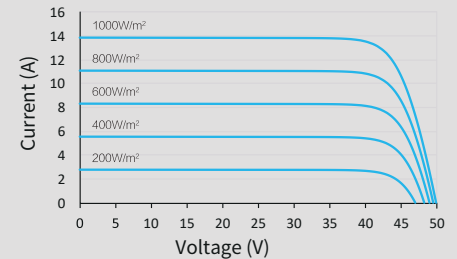
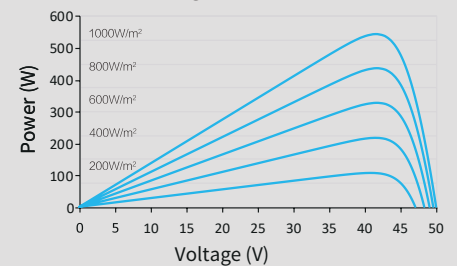
Operating Parameters

Mechanical Specifications

Outer dimensions (L x W x H)	2278 x 1134 x 30 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 (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)
Connector type (IEC/UL)	HCB40 / MC4-EVO2 (optional)
Module weight	26.6 kg
Packing unit	36 pcs / box (Subject to sales contract)
Weight of packing unit (for 40' HQ container)	1017 kg
Modules per 40' HQ container	720 pcs

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

Curve

Current-Voltage (545W)**Power-Voltage (545W)****Current-Voltage (545W)**