



ASTRONERGY

preliminary

ASTRO 5 Semi

Create Sustainable and Efficient Green Energy

CHSM72M-HC Monofacial Series (182)

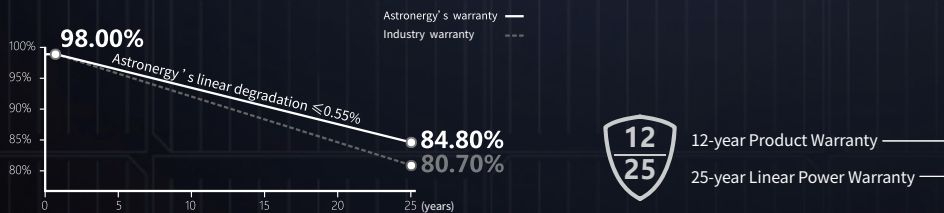
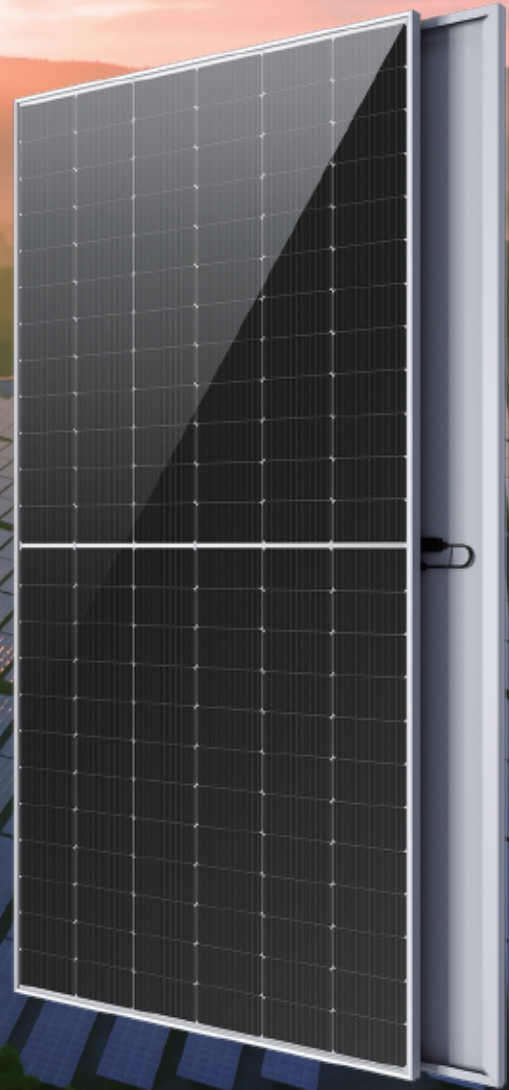
540~555W

PERC+ / Multi-busbar / 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 45001:2018:Occupational Health and Safety
The first solar company which passed the Nord IEC/TS 62941 certification audit.



Tier 1
BloombergNEF



540~555W

POWER RANGE

0~+5W

POWER SORTING

21.5%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 (Pmpp / Wp)	540	545	550	555
Rated voltage (Vmpp / V)	41.76	41.93	42.10	42.27
Rated current (Impp / A)	12.93	13.00	13.06	13.13
Open circuit voltage (Voc / V)	49.70	49.90	50.10	50.30
Short circuit current (Isc / A)	13.72	13.81	13.90	13.98
Module efficiency	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 (Pmpp / Wp)	403.5	407.3	411.0	414.8
Rated voltage (Vmpp / V)	38.92	39.08	39.24	39.39
Rated current (Impp / A)	10.37	10.42	10.48	10.53
Open circuit voltage (Voc / V)	46.97	47.16	47.34	47.53
Short circuit current (Isc / A)	11.13	11.20	11.27	11.35

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 _{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	2.8 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	2400 Pa (front) / 2400 Pa (back)
Connector type (IEC/UL)	HCB40 (Standard) / MC4-EVO2A (Optional)
Module weight	23.6 kg
Packing unit	36 pcs / box (Subject to sales contract)
Weight of packing unit (for 40' HQ container)	909 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

