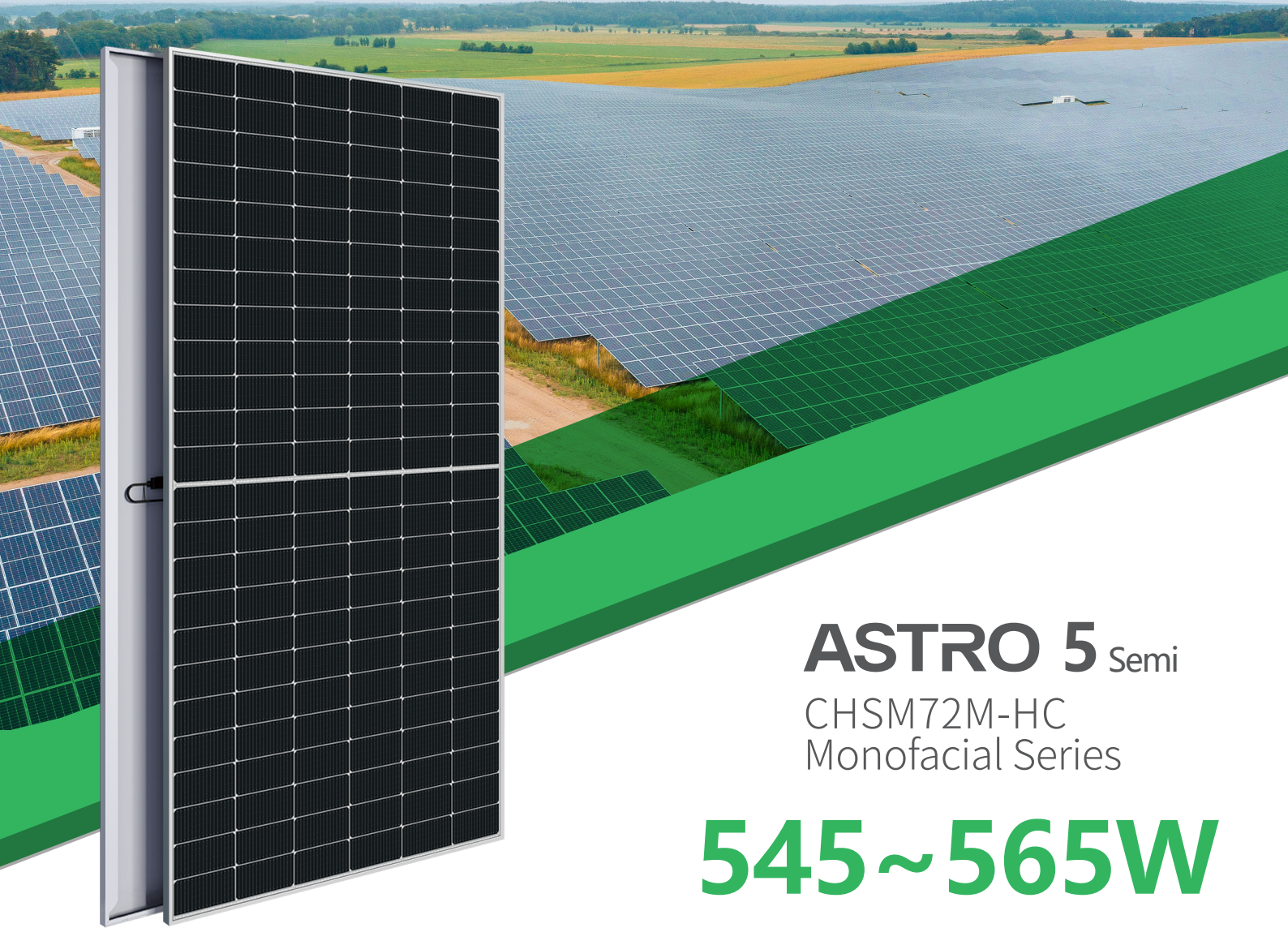




ASTRONERGY



ASTRO 5 Semi CHSM72M-HC Monofacial Series

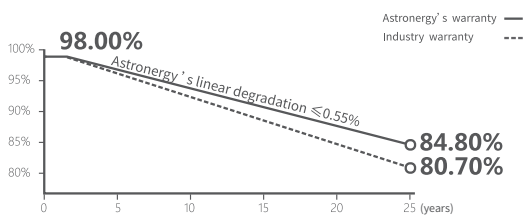
545~565W



Warranty

12 12-year Product Warranty

25 25-year Linear Power Warranty



PERC+ Technology

Upgraded PERC, empowering PV module



SMBB Design

Enhancing current collection, minimizing power loss



Gallium-doped Silicon Wafer

Low hot spot temperature, reduced LETID&LID



Non-destructive cutting

Improved cell bending strength, ensuring mechanical performance



IEC 61215, IEC 61730
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



545~565W

POWER RANGE

0~+3%

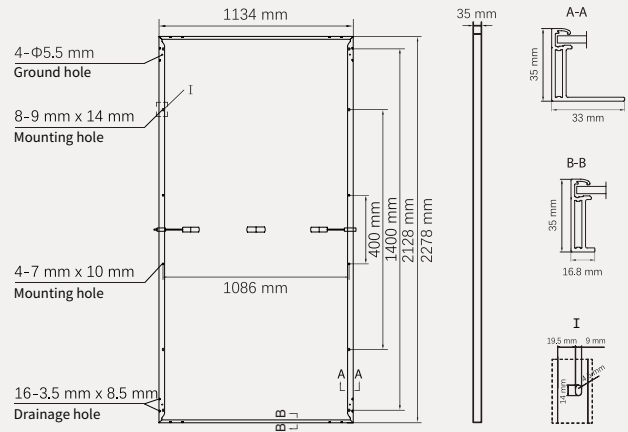
POWER SORTING

21.9%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 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
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/m², Cell Temperature 25° C, AM=1.5

	545	550	555	560	565
Rated output (Pmpp / Wp)	545	550	555	560	565
Rated voltage (Vmpp / V)	41.93	42.10	42.27	42.44	42.61
Rated current (Impp / A)	13.00	13.06	13.13	13.20	13.26
Open circuit voltage (Voc / V)	49.90	50.10	50.30	50.50	50.70
Short circuit current (Isc / A)	13.81	13.90	13.98	14.07	14.16
Module efficiency	21.1%	21.3%	21.5%	21.7%	21.9%

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

	407.3	411.0	414.8	418.5	422.2
Rated output (Pmpp / Wp)	407.3	411.0	414.8	418.5	422.2
Rated voltage (Vmpp / V)	39.08	39.24	39.39	39.55	39.71
Rated current (Impp / A)	10.42	10.48	10.53	10.58	10.63
Open circuit voltage (Voc / V)	47.16	47.34	47.53	47.72	47.91
Short circuit current (Isc / A)	11.20	11.27	11.35	11.42	11.49

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

Curve

