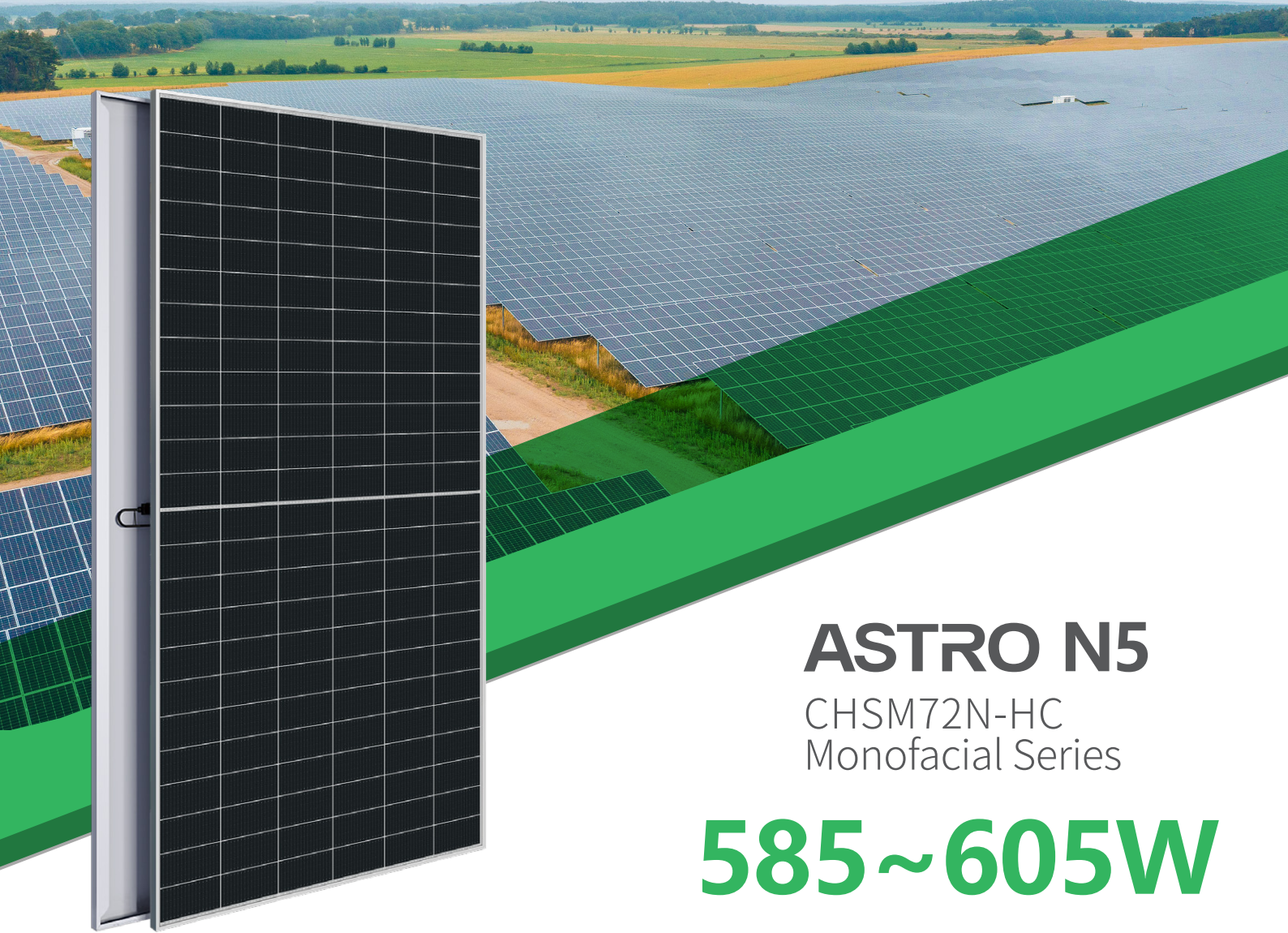




**ASTRONERGY**



# ASTRO N5

CHSM72N-HC  
Monofacial Series

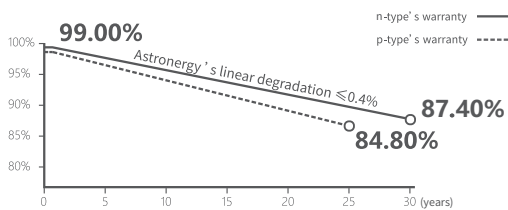
# 585~605W



## Warranty

**12** 12-year Product Warranty

**30** 30-year Linear Power Warranty



### n-type TOPCon 4.0

Novel upgrade, enhancing module efficiency



### SMBB Design

Enhancing current collection, minimizing power loss



### Better Temperature Coefficient

$\leq -0.29\%/^{\circ}\text{C}$ , adapting for high temperature



### 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



**585~605W**

POWER RANGE

**0~+3%**

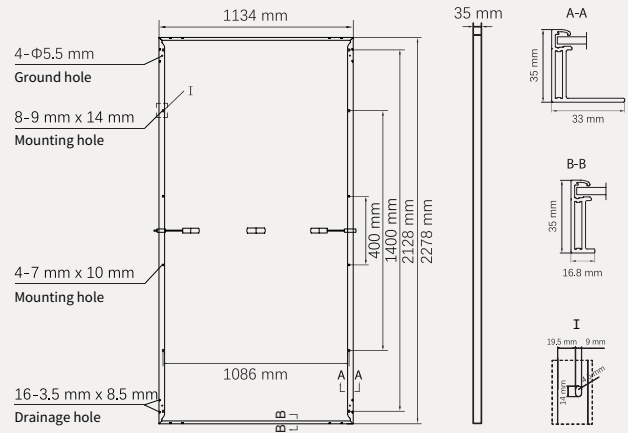
POWER SORTING

**23.4%**MAX MODULE  
EFFICIENCY**≤ 1.0%**FIRST YEAR  
POWER DEGRADATION**≤ 0.4%**YEAR 2-30  
POWER DEGRADATION

## Mechanical Specifications

Outer dimensions (L x W x H)	2278 x 1134 x 35 mm
Cell type	n-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

	585	590	595	600	605
Rated output (Pmpp / Wp)	585	590	595	600	605
Rated voltage (Vmpp / V)	42.75	42.88	43.00	43.13	43.25
Rated current (Impp / A)	13.68	13.76	13.84	13.91	13.99
Open circuit voltage (Voc / V)	51.30	51.45	51.60	51.75	51.90
Short circuit current (Isc / A)	14.40	14.50	14.60	14.69	14.79
Module efficiency	22.6%	22.8%	23.0%	23.2%	23.4%

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

	439.9	443.7	447.4	451.2	455.0
Rated output (Pmpp / Wp)	439.9	443.7	447.4	451.2	455.0
Rated voltage (Vmpp / V)	40.24	40.36	40.47	40.59	40.71
Rated current (Impp / A)	10.93	10.99	11.06	11.12	11.18
Open circuit voltage (Voc / V)	48.73	48.87	49.01	49.16	49.30
Short circuit current (Isc / A)	11.62	11.71	11.78	11.86	11.94

## Temperature Ratings (STC)

Temperature coefficient (Pmpp)	-0.29%/°C	No. of diodes	3
Temperature coefficient (Isc)	+0.043%/°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

