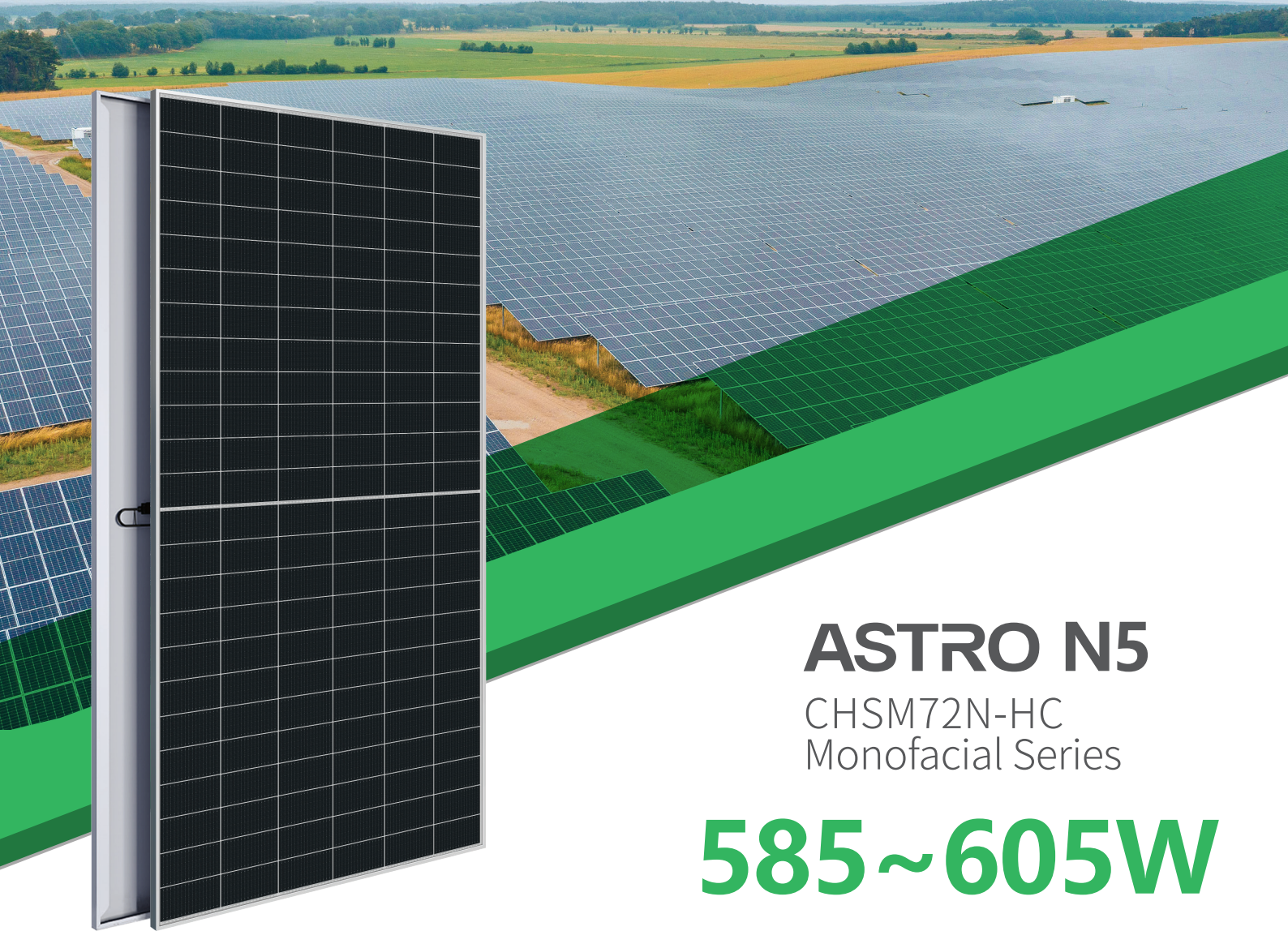




ASTRONERGY



# ASTRO N5

CHSM72N-HC  
Monofacial Series

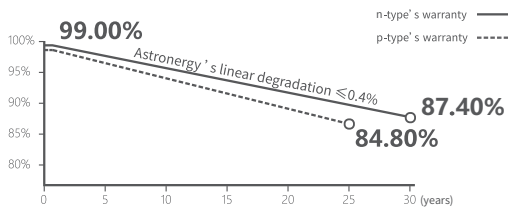
# 585~605W



## 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%**

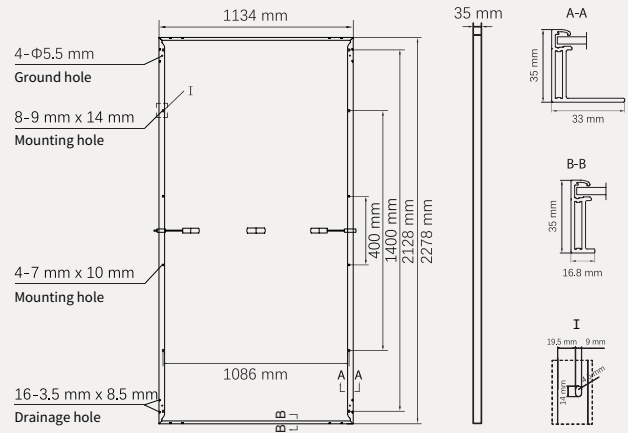
POWER SORTING

**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;<br>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)        | 43.18 | 43.34 | 43.51 | 43.68 | 43.85 |
| Rated current (Impp / A)        | 13.55 | 13.61 | 13.67 | 13.74 | 13.80 |
| Open circuit voltage (Voc / V)  | 52.03 | 52.22 | 52.42 | 52.62 | 52.81 |
| Short circuit current (Isc / A) | 14.20 | 14.27 | 14.33 | 14.39 | 14.46 |
| Module efficiency               | 22.6% | 22.8% | 23.0% | 23.2% | 23.4% |

## Temperature Ratings (STC)

|                                |            |
|--------------------------------|------------|
| Temperature coefficient (Pmpp) | -0.29%/°C  |
| Temperature coefficient (Isc)  | +0.043%/°C |
| Temperature coefficient (Voc)  | -0.25%/°C  |

## Operating Parameters

|                              |                     |
|------------------------------|---------------------|
| No. of diodes                | 3                   |
| Junction box IP rating       | IP 68               |
| Max. series fuse rating      | 25 A                |
| Max. system voltage (IEC/UL) | 1500V <sub>DC</sub> |

## Curve

