



ASTRONERGY



# ASTRO N5

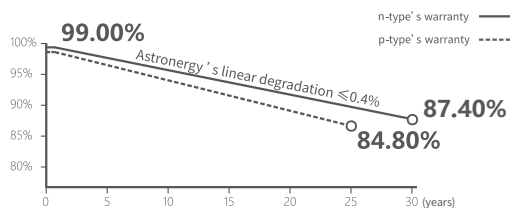
CHSM72N(DG)/F-HC  
Monofacial Series(182)

## 565~585W

### Warranty

**15** 15-year Product Warranty

**30** 30-year Linear Power Warranty



### Key Features

- TOPCon / Half-cut
- Low temperature coefficient (Pmpp)
- 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:Occupational Health and Safety  
The first solar company which passed the Nord IEC/TS 62941 certification audit



Tier 1  
BloombergNEF



**565~585W**

POWER RANGE

**0~+3%**

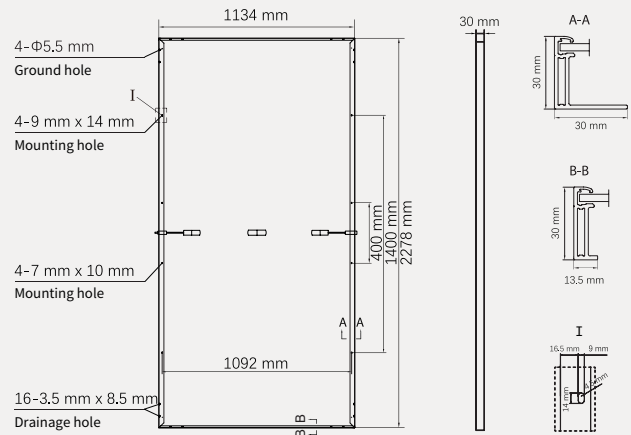
POWER SORTING

**22.6%**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 30 mm                                  |
| Cell type                                    | n-type mono-crystalline                              |
| No. of cells                                 | 144 (6*24)                                           |
| Frame technology                             | Aluminum, silver anodized                            |
| Front / Back glass                           | 2.0+2.0 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                                | 32.1 kg                                              |
| Packing unit                                 | 36 pcs / box                                         |
| Weight of packing unit (for 40'HQ container) | 1207 kg                                              |
| Modules per 40' HQ container                 | 720 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

|                                                   |       |       |       |       |       |
|---------------------------------------------------|-------|-------|-------|-------|-------|
| Rated output (P <sub>mpp</sub> / W <sub>p</sub> ) | 565   | 570   | 575   | 580   | 585   |
| Rated voltage (V <sub>mpp</sub> / V)              | 43.57 | 43.70 | 43.82 | 43.95 | 44.08 |
| Rated current (I <sub>mp</sub> / A)               | 12.97 | 13.04 | 13.12 | 13.20 | 13.27 |
| Open circuit voltage (V <sub>oc</sub> / V)        | 51.85 | 52.00 | 52.15 | 52.30 | 52.45 |
| Short circuit current (I <sub>sc</sub> / A)       | 13.69 | 13.79 | 13.89 | 13.98 | 14.06 |
| Module efficiency                                 | 21.9% | 22.1% | 22.3% | 22.5% | 22.6% |

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

|                                                   |       |       |       |       |       |
|---------------------------------------------------|-------|-------|-------|-------|-------|
| Rated output (P <sub>mpp</sub> / W <sub>p</sub> ) | 424.9 | 428.6 | 432.4 | 436.2 | 439.9 |
| Rated voltage (V <sub>mpp</sub> / V)              | 41.01 | 41.13 | 41.25 | 41.37 | 41.49 |
| Rated current (I <sub>mp</sub> / A)               | 10.36 | 10.42 | 10.48 | 10.54 | 10.60 |
| Open circuit voltage (V <sub>oc</sub> / V)        | 49.25 | 49.39 | 49.54 | 49.68 | 49.82 |
| Short circuit current (I <sub>sc</sub> / A)       | 11.05 | 11.13 | 11.21 | 11.29 | 11.35 |

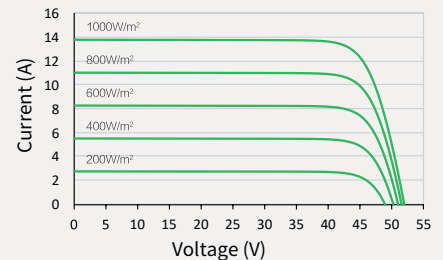
## Temperature Ratings (STC)

|                                             |            |                              |                     |
|---------------------------------------------|------------|------------------------------|---------------------|
| Temperature coefficient (P <sub>mpp</sub> ) | -0.29%/°C  | No. of diodes                | 3                   |
| Temperature coefficient (I <sub>sc</sub> )  | +0.043%/°C | Junction box IP rating       | IP 68               |
| Temperature coefficient (V <sub>oc</sub> )  | -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> |

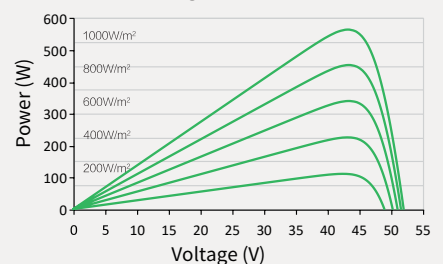
## Operating Parameters

## Curve

Current-Voltage (575W)



Power-Voltage (575W)



Current-Voltage (575W)

