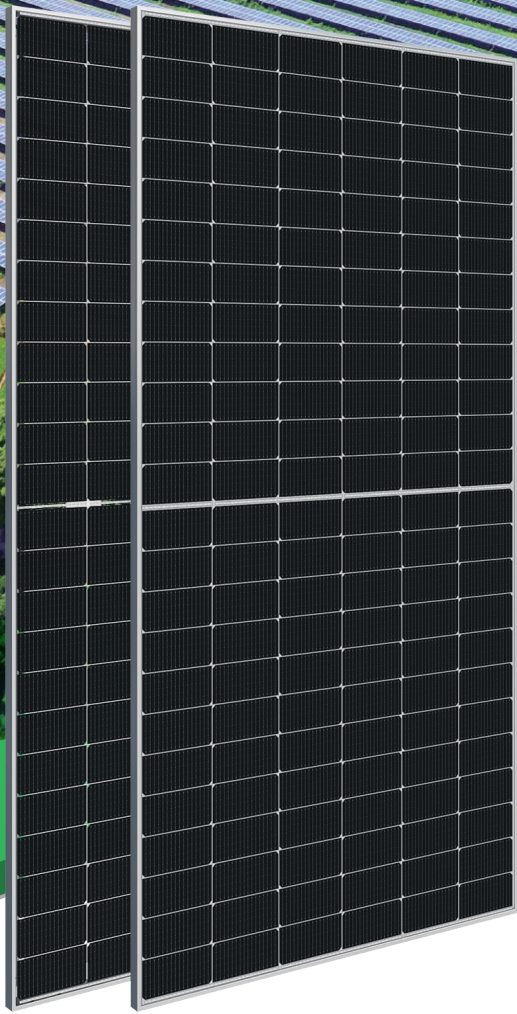
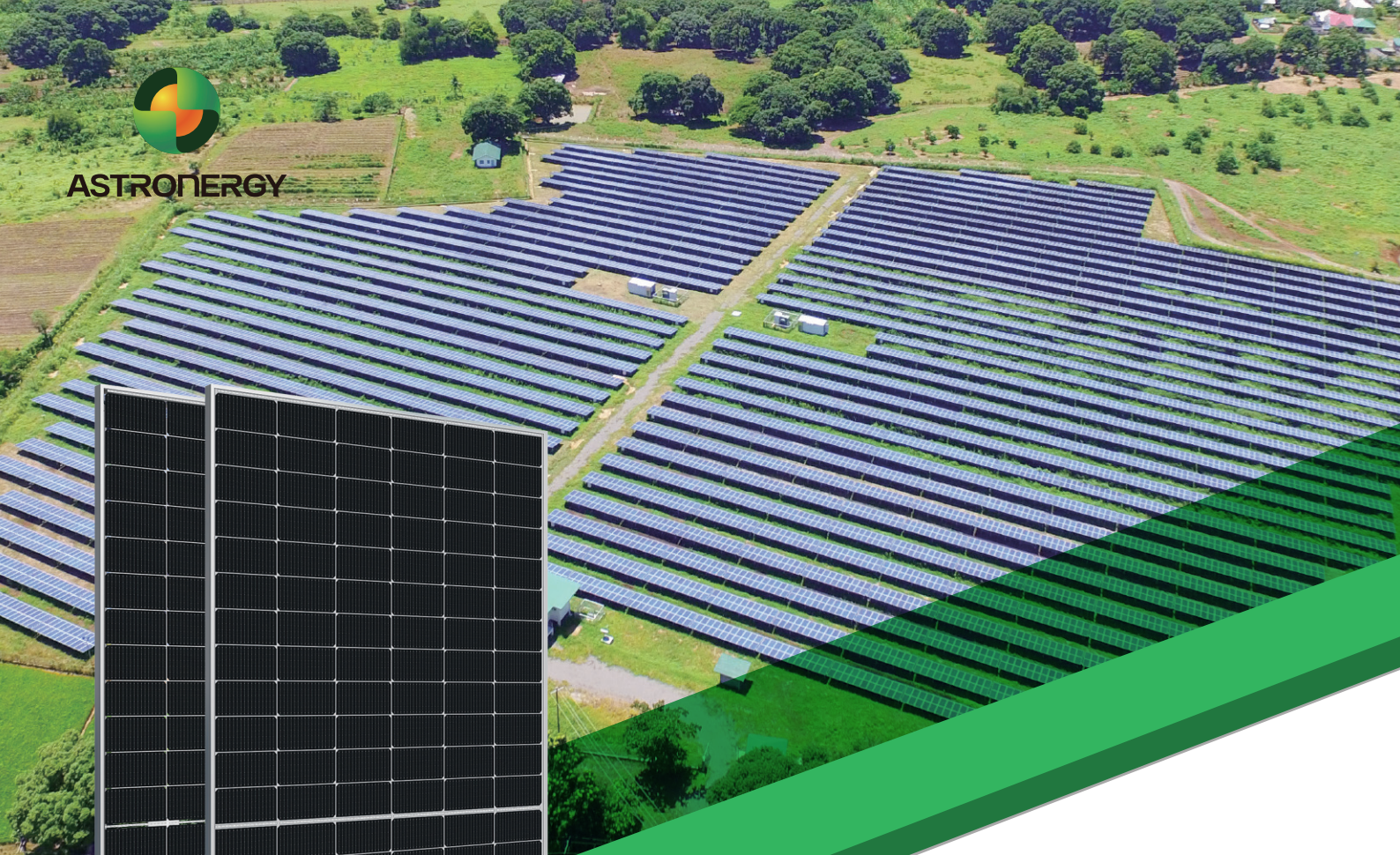




ASTRONERGY



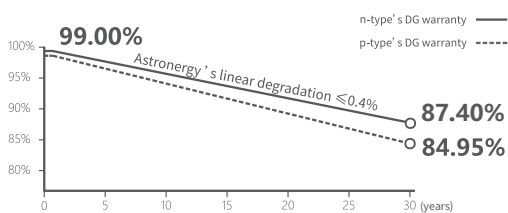
# ASTRO N5

CHSM72N(DG)/F-BH  
Bifacial 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
- Bifacial gain



**565~585W**

POWER RANGE

**0~+3%**

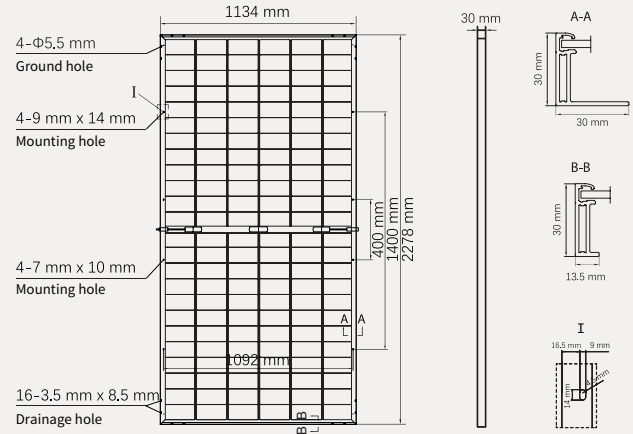
POWER SORTING

**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; 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

	565	570	575	580	585
Rated output (Pmpp / Wp)	565	570	575	580	585
Rated voltage (Vmpp / V)	42.61	42.77	42.94	43.11	43.27
Rated current (Impp / A)	13.26	13.33	13.39	13.45	13.52
Open circuit voltage (Voc / V)	50.70	50.90	51.10	51.30	51.50
Short circuit current (Isc / A)	14.02	14.10	14.19	14.28	14.36
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

	424.9	428.6	432.4	436.2	439.9
Rated output (Pmpp / Wp)	424.9	428.6	432.4	436.2	439.9
Rated voltage (Vmpp / V)	40.10	40.26	40.42	40.59	40.73
Rated current (Impp / A)	10.60	10.65	10.70	10.75	10.80
Open circuit voltage (Voc / V)	48.16	48.35	48.54	48.73	48.92
Short circuit current (Isc / A)	11.32	11.39	11.46	11.53	11.59

## Electrical Specifications (Integrated power)

Pmpp gain	Pmpp / Wp	Vmpp / V	Impp / A	Voc / V	Isc / A
5%	604	42.94	14.06	51.10	14.10
10%	633	42.94	14.73	51.10	15.55
15%	661	42.95	15.40	51.11	16.25
20%	690	42.95	16.07	51.11	16.96
25%	719	42.95	16.73	51.11	17.67

Electrical characteristics with different rear power gain (reference to 575W)

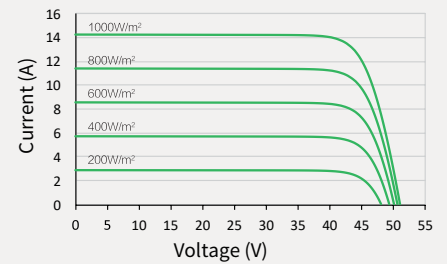
## Temperature Ratings (STC)

## Operating Parameters

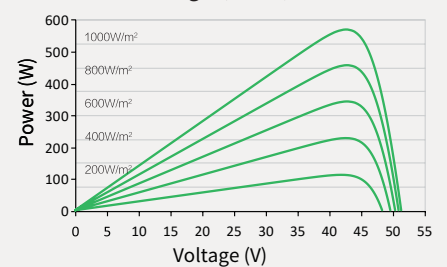
Temperature coefficient (Pmpp)	-0.29%/°C	No. of diodes	3
Temperature coefficient (Isc)	+0.043%/°C	Junction box IP rating	IP 68
Temperature coefficient (Voc)	-0.25%/°C	Max. series fuse rating	30 A
Nominal module operating temperature (NMOT)	41±2°C	Max. system voltage (IEC/UL)	1500V <sub>DC</sub>

## Curve

Current-Voltage (575W)



Power-Voltage (575W)



Current-Voltage (575W)

