



ASTRONERGY

# ASTRO N5

Create Sustainable and Efficient Green Energy

CHSM72N(DG)/F-BH  
Bifacial Series (182)

## 550~565W

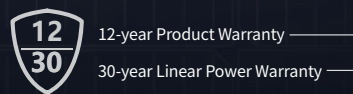
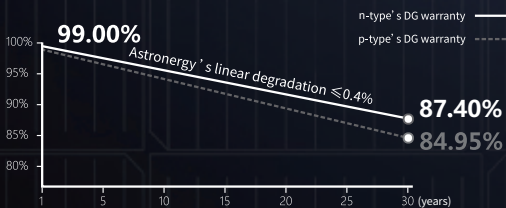
TOPCon / Half-cut

Low temperature coefficient (Pmpp)

Non-destructive cutting

Bifacial gain

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



**550~565W**

POWER RANGE

**0~+5W**

POWER SORTING

**21.9%**MAX MODULE  
EFFICIENCY**≤ 1.0%**FIRST YEAR  
POWER DEGRADATION**≤ 0.4%**YEAR 2-30  
POWER DEGRADATION

## Electrical Specifications

**STC:** Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25° C, AM=1.5

Type	CHSM72N(DG)/F -BH-550	CHSM72N(DG)/F -BH-555	CHSM72N(DG)/F -BH-560	CHSM72N(DG)/F -BH-565
Rated output (Pmpp / Wp)	550	555	560	565
Rated voltage (Vmpp / V)	42.10	42.27	42.44	42.61
Rated current (Impp / A)	13.06	13.13	13.20	13.26
Open circuit voltage (Voc / V)	50.10	50.30	50.50	50.70
Short circuit current (Isc / A)	13.76	13.84	13.93	14.02
Module efficiency	21.3%	21.5%	21.7%	21.9%

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

Rated output (Pmpp / Wp)	413.6	417.4	421.1	424.9
Rated voltage (Vmpp / V)	39.63	39.79	39.94	40.10
Rated current (Impp / A)	10.44	10.49	10.54	10.60
Open circuit voltage (Voc / V)	47.59	47.78	47.97	48.16
Short circuit current (Isc / A)	11.11	11.18	11.25	11.32

Power Sorting: 0~+5W

Measurement tolerance +/- 3.5%

## Electrical Specifications (Integrated power)

Pmpp gain	Pmpp / Wp	Vmpp / V	Impp / A	Voc / V	Isc / A
5%	588	42.39	13.87	50.45	14.64
10%	616	42.39	14.53	50.45	15.34
15%	644	42.40	15.19	50.46	16.03
20%	672	42.40	15.85	50.46	16.73
25%	700	42.40	16.51	50.46	17.43

Electrical characteristics with different rear power gain (reference to 560W)

Measurement tolerance +/- 3.5%

## Temperature Ratings (STC)

Temperature coefficient (Pmpp)	-0.30%/°C	No. of diodes	3
Temperature coefficient (Isc)	+0.043%/°C	Junction box IP rating	IP 68
Temperature coefficient (Voc)	-0.24%/°C	Max. series fuse rating	30 A
Nominal module operating temperature (NMOT)	41±2°C	Max. system voltage (IEC/UL)	1500V <sub>DC</sub>
Fire performance	Class A		

## Operating Parameters

## 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)	PV-HCB40 (Astronergy) or PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy (Stäubli)
Module weight	32.1 kg
Packing unit	36 pcs / box (Subject to sales contract)
Weight of packing unit (for 40'HQ container)	1215 kg
Modules per 40' HQ container	720 pcs

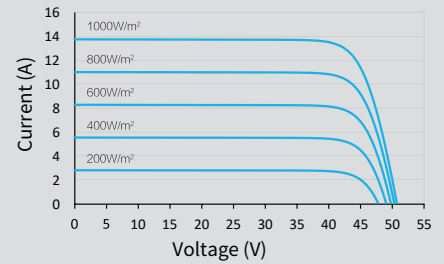
① Refer to Astronergy crystalline installation manual or contact technical department.  
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

Made in Zhejiang, Jiangsu and Anhui of China.

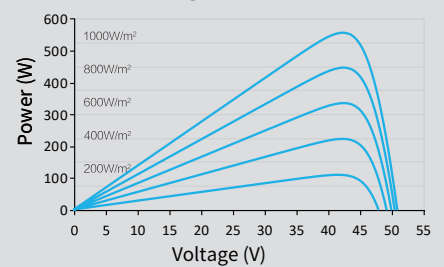
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## Curve

Current-Voltage (560W)



Power-Voltage (560W)



Current-Voltage (560W)

