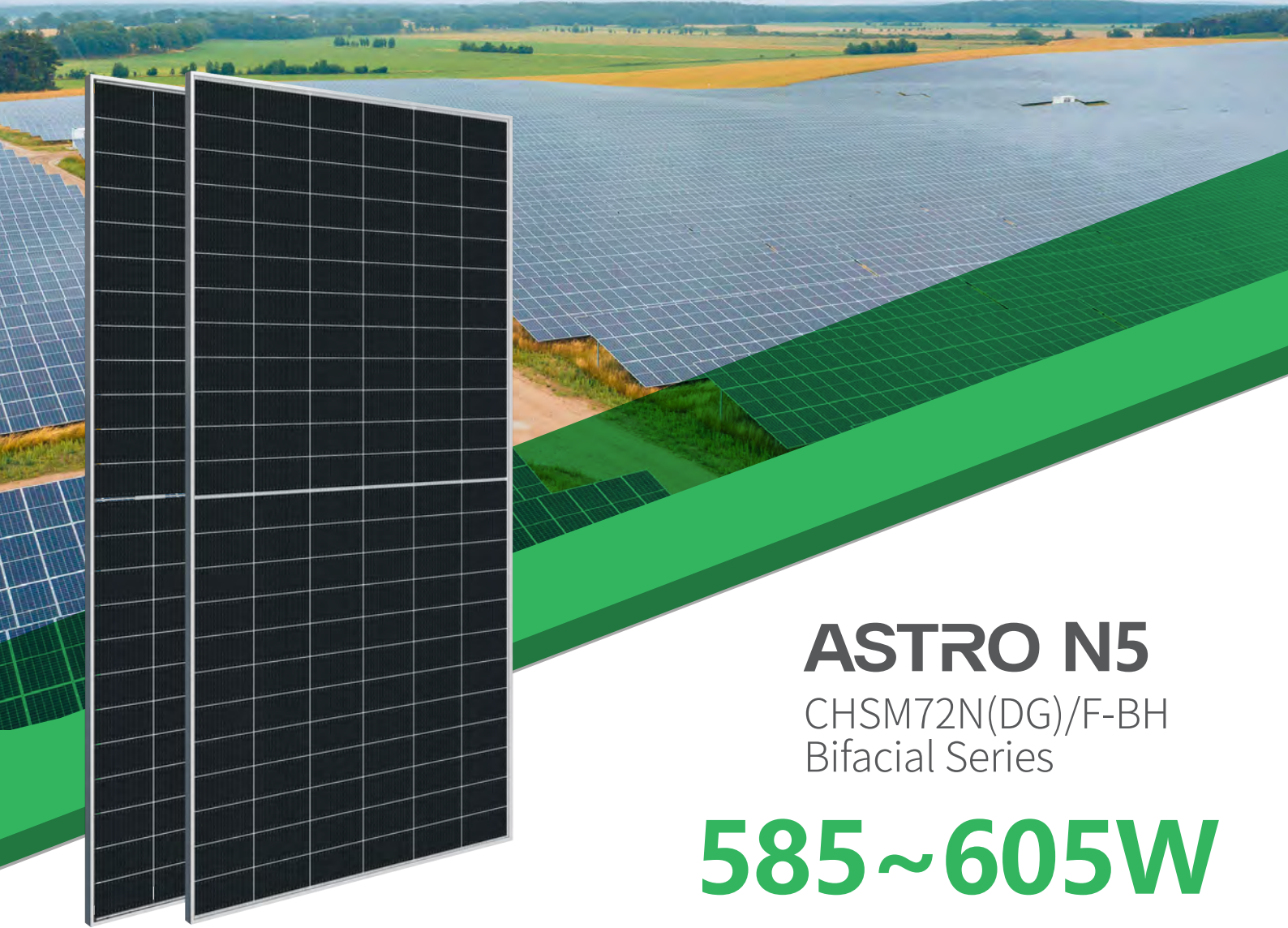




**ASTRONERGY**

**SCANOFFICE  
SOLAR**

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# ASTRO N5

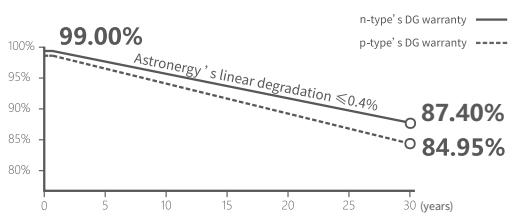
CHSM72N(DG)/F-BH  
Bifacial Series

# 585~605W



## Warranty

**15** 15-year Product Warranty      **30** 30-year Linear Power Warranty



- TOPCon 4.0**  
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
- Bifacial Power Generation**  
Maximizing bifaciality, boosting backside power output

**585~605W**

POWER RANGE

**0~+3%**

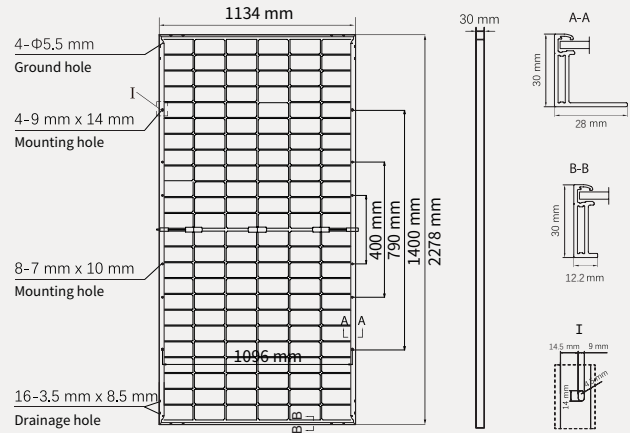
POWER SORTING

**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 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)	1400 mm
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)	Staubli EVO2A
Module weight	31.1 kg
Packing unit	36 pcs / box
Weight of packing unit (for 40'HQ container)	1171 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, Power measurement tolerance: ±3%

	585	590	595	600	605
Rated output (Pmpp / Wp)	585	590	595	600	605
Rated voltage (Vmpp / V)	43.88	44.05	44.21	44.38	44.55
Rated current (Impp / A)	13.33	13.40	13.46	13.52	13.58
Open circuit voltage (Voc / V)	52.42	52.62	52.81	53.01	53.20
Short circuit current (Isc / A)	14.07	14.13	14.20	14.26	14.33
Module efficiency	22.6%	22.8%	23.0%	23.2%	23.4%

**BNPI:** Irradiance: front 1000W/m<sup>2</sup>, rear 135W/m<sup>2</sup>, Cell Temperature 25° C, AM=1.5

	646.8	652.4	657.9	663.4	669.0
Rated output (Pmpp / Wp)	646.8	652.4	657.9	663.4	669.0
Rated voltage (Vmpp / V)	43.89	44.06	44.23	44.40	44.56
Rated current (Impp / A)	14.74	14.81	14.88	14.94	15.01
Open circuit voltage (Voc / V)	52.44	52.63	52.83	53.02	53.22
Short circuit current (Isc / A)	15.62	15.69	15.76	15.83	15.90

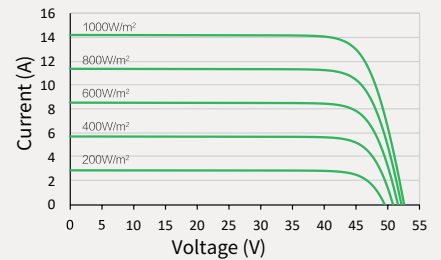
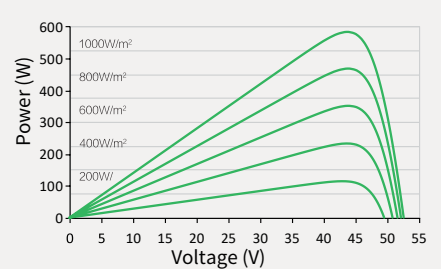
## Temperature Ratings (STC)

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

## Operating Parameters

Operating Temperature	-40° C ~+85° C
Bifaciality (Pmpp)	80±5%
Junction box IP rating	IP 68
Max. series fuse rating	30 A
Max. system voltage (IEC/UL)	1500V <sub>DC</sub>

## Curve

**Current-Voltage (590W)****Power-Voltage (590W)****Current-Voltage (590W)**