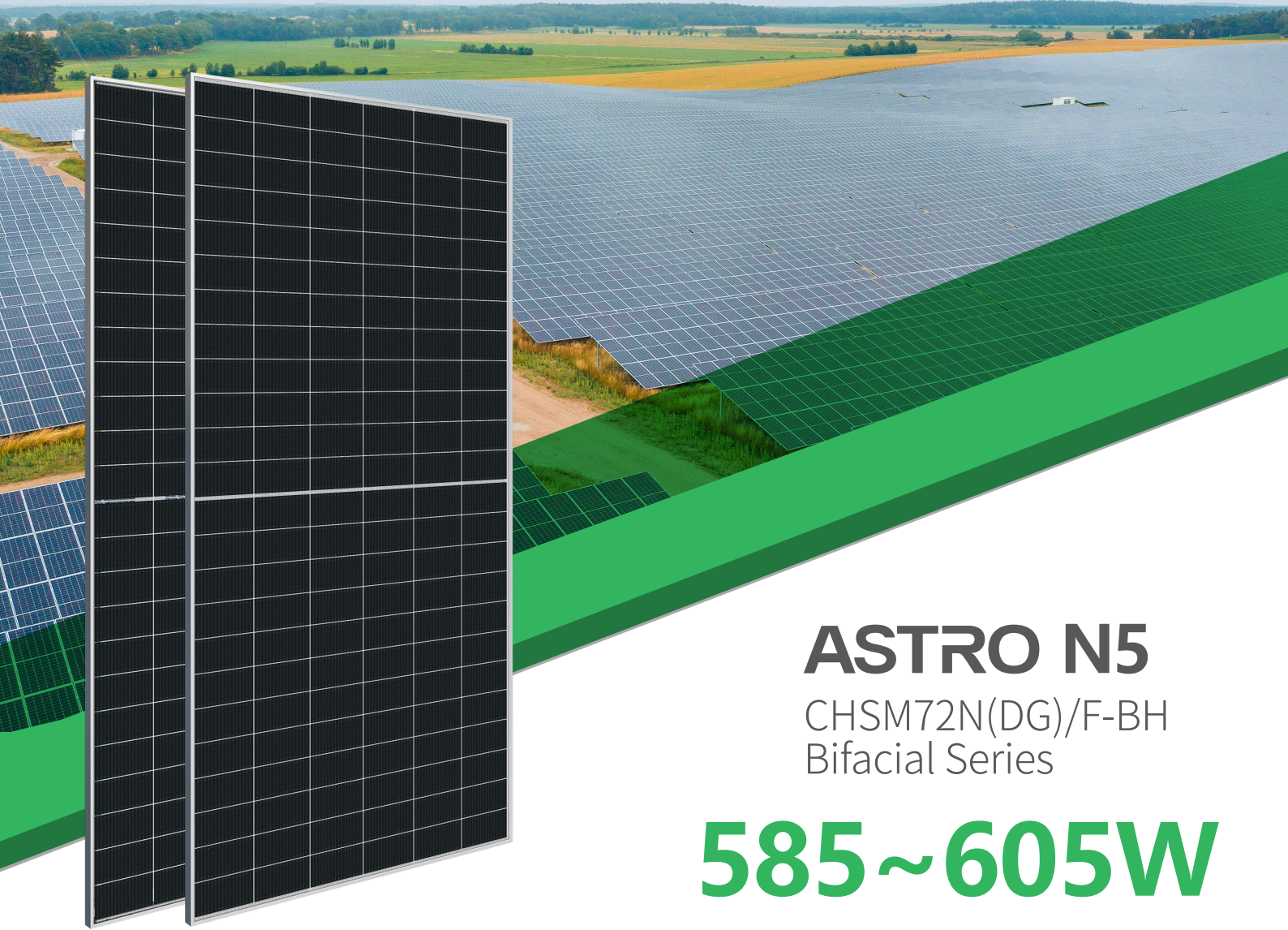




ASTRONERGY



ASTRO N5

CHSM72N(DG)/F-BH
Bifacial Series

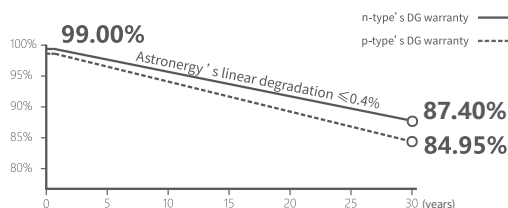
585~605W



Warranty

15 15-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

≤ -0.29%/°C, adapting for high temperature



Bifacial Power Generation

Maximizing bifaciality, boosting backside power output



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%

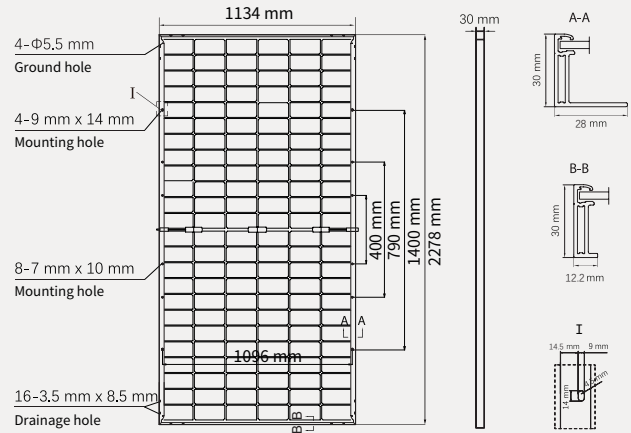
POWER SORTING

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 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 ² / 12 AWG
① Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Connector type (IEC/UL)	HCB40 (Standard) / MC4-EVO2A (Optional)
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/m², Cell Temperature 25° C, AM=1.5, Power measurement tolerance: ±3%

Rated output (P _{mpp} / W _p)	585	590	595	600	605
Rated voltage (V _{mpp} / V)	43.88	44.05	44.21	44.38	44.55
Rated current (I _{mp} / A)	13.33	13.40	13.46	13.52	13.58
Open circuit voltage (V _{oc} / V)	52.42	52.62	52.81	53.01	53.20
Short circuit current (I _{sc} / 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/m², rear 135W/m², Cell Temperature 25° C, AM=1.5

Rated output (P _{mpp} / W _p)	646.8	652.4	657.9	663.4	669.0
Rated voltage (V _{mpp} / V)	43.89	44.06	44.23	44.40	44.56
Rated current (I _{mp} / A)	14.74	14.81	14.88	14.94	15.01
Open circuit voltage (V _{oc} / V)	52.44	52.63	52.83	53.02	53.22
Short circuit current (I _{sc} / A)	15.62	15.69	15.76	15.83	15.90

Temperature Ratings (STC)

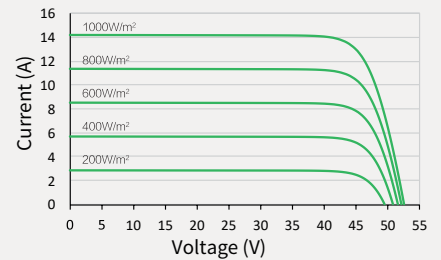
Temperature coefficient (P _{mpp})	-0.29%/°C
Temperature coefficient (I _{sc})	+0.043%/°C
Temperature coefficient (V _{oc})	-0.25%/°C

Operating Parameters

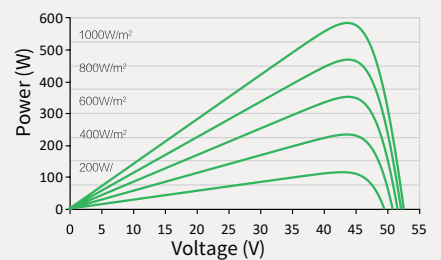
Operating Temperature	-40°C ~+85°C
Bifaciality (P _{mpp})	80±5%
Junction box IP rating	IP 68
Max. series fuse rating	30 A
Max. system voltage (IEC/UL)	1500V _{DC}

Curve

Current-Voltage (590W)



Power-Voltage (590W)



Current-Voltage (590W)

