

ASTRONERGY

ASTRO N5

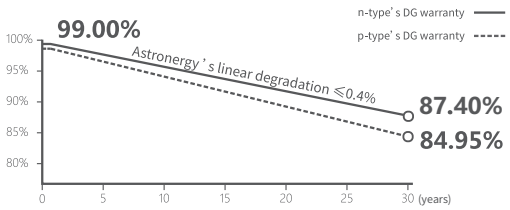
CHSM72N(DG)/F-BH
Bifacial Series

570~590W

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

Assist carbon neutrality

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

TOP PERFORMER PVEL member of group kiwa

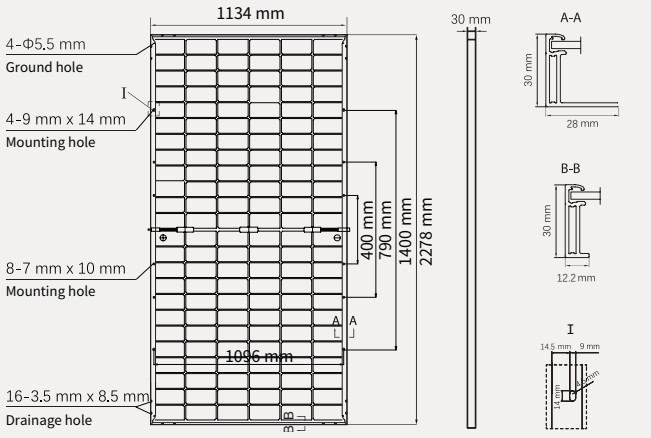
Tier 1 BloombergNEF

Underwritten by International Insurer

570~590W	0~+3%	22.84%	≤ 1.0%	≤ 0.4%
POWER RANGE	POWER SORTING	MAX MODULE EFFICIENCY	FIRST YEAR POWER DEGRADATION	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	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^2, Cell Temperature 25° C, AM=1.5

Rated output (Pmpp / Wp)	570	575	580	585	590
Rated voltage (Vmpp / V)	42.77	42.94	43.11	43.27	43.45
Rated current (Impp / A)	13.33	13.39	13.45	13.52	13.58
Open circuit voltage (Voc / V)	50.90	51.10	51.30	51.50	51.70
Short circuit current (Isc / A)	14.10	14.19	14.28	14.36	14.45
Module efficiency	22.07%	22.26%	22.45%	22.65%	22.84%

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

Rated output (Pmpp / Wp)	428.6	432.4	436.2	439.9	443.7
Rated voltage (Vmpp / V)	40.26	40.42	40.59	40.73	40.89
Rated current (Impp / A)	10.65	10.70	10.75	10.80	10.85
Open circuit voltage (Voc / V)	48.35	48.54	48.73	48.92	49.11
Short circuit current (Isc / A)	11.39	11.46	11.53	11.59	11.66

Electrical Specifications (Integrated power)

Pmpp gain	Pmpp / Wp	Vmpp / V	Impp / A	Voc / V	Isc / A
5%	609	43.11	14.12	51.30	14.99
10%	638	43.11	14.80	51.30	15.71
15%	667	43.12	15.47	52.31	16.42
20%	696	43.12	16.14	52.31	17.14
25%	725	43.12	16.81	52.31	17.85

Electrical characteristics with different rear power gain (reference to 580W)

Temperature Ratings (STC)

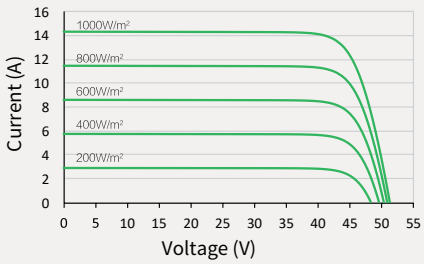
Temperature coefficient (Pmpp)	-0.29%/°C
Temperature coefficient (Isc)	+0.043%/°C
Temperature coefficient (Voc)	-0.25%/°C
Nominal module operating temperature (NMOT)	41±2°C

Operating Parameters

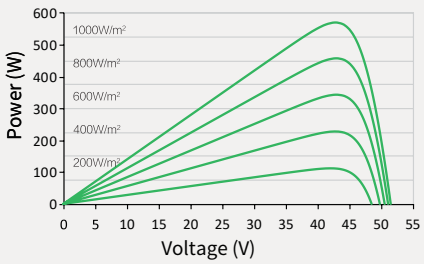
No. of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	30 A
Max. system voltage (IEC/UL)	1500V_{DC}

Curve

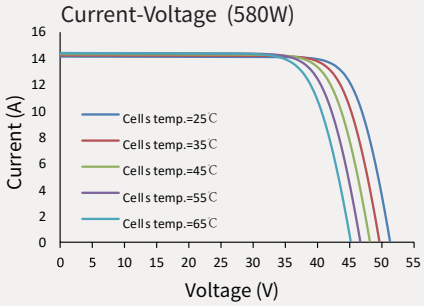
Current-Voltage (580W)



Power-Voltage (580W)



Current-Voltage (580W)



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