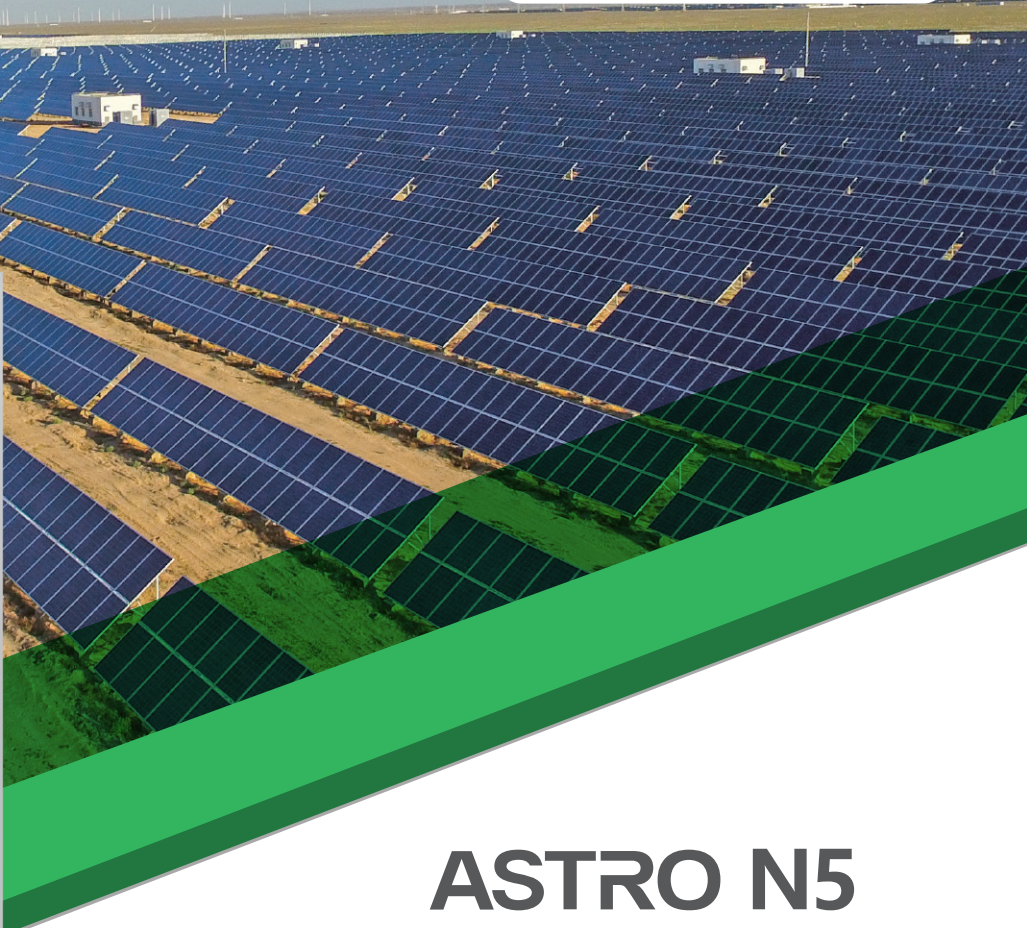




ASTRONERGY

ENERGYNAT  
TRADE

Import and distribution of top PV components



# ASTRO N5

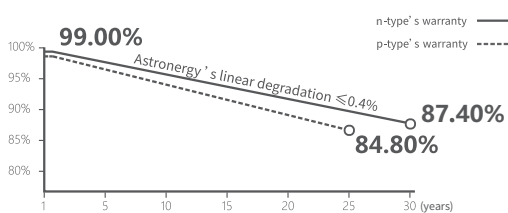
CHSM72N-HC  
Monofacial Series(182)

# 565~585W

## Warranty

**12** 12-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



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



**565~585W**

POWER RANGE

**0~+5W**

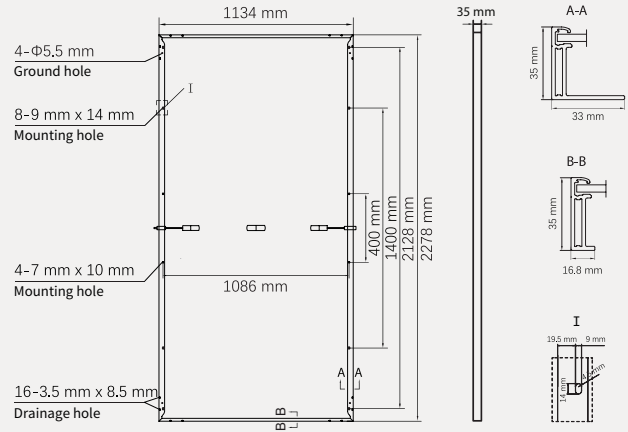
POWER SORTING

**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 35 mm
Cell type	n-type mono-crystalline
No. of cells	144 (6*24)
Frame technology	Aluminum, silver anodized
Front glass thickness	3.2 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	26.9 kg
Packing unit	31 pcs / box (Subject to sales contract)
Weight of packing unit (for 40'HQ container)	893 kg
Modules per 40' HQ container	620 pcs

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)	42.25	42.38	42.50	42.63	42.75
Rated current (Impp / A)	13.37	13.45	13.53	13.61	13.68
Open circuit voltage (Voc / V)	50.70	50.85	51.00	51.15	51.30
Short circuit current (Isc / A)	14.00	14.10	14.20	14.30	14.40
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)	39.77	39.89	40.00	40.12	40.24
Rated current (Impp / A)	10.68	10.75	10.81	10.87	10.93
Open circuit voltage (Voc / V)	48.16	48.30	48.44	48.59	48.73
Short circuit current (Isc / A)	11.30	11.38	11.46	11.54	11.62

## Temperature Ratings (STC)

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	25 A
Nominal module operating temperature (NMOT)	41±2°C	Max. system voltage (IEC/UL)	1500V <sub>DC</sub>

## Operating Parameters

## Curve

