



ASTRONERGY
A CHINT COMPANY

ASTRO N5

Create Sustainable and Efficient Green Energy

CHSM72N-HC
Monofacial Series (182)

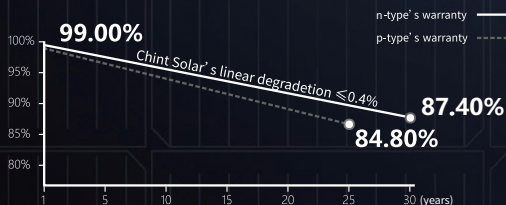
555~570W

TOPCon / Multi-busbar / Half-cut

Non-destructive cutting

PID resistance

Lower BOS cost & LCOE



12-year Product Warranty

30-year Linear Power Warranty



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



555~570W

POWER RANGE

0~+5W

POWER
TOLERANCE

22.1%

MAX MODULE
EFFICIENCY

≤ 1.0%

FIRST YEAR
POWER DEGRADATION

≤ 0.4%

YEAR 2-30
POWER DEGRADATION

Electrical Specifications

STC: Irradiance 1000W/m², Cell Temperature 25° C, AM=1.5

Rated output (P _{mpp} / W _p)	555	560	565	570
Rated voltage (V _{mpp} / V)	41.75	41.92	42.08	42.25
Rated current (I _{mpp} / A)	13.29	13.36	13.43	13.49
Open circuit voltage (V _{oc} / V)	50.10	50.30	50.50	50.70
Short circuit current (I _{sc} / A)	13.88	13.97	14.06	14.14
Module efficiency	21.5%	21.7%	21.9%	22.1%

NMOT: Irradiance 800W/m², Ambient Temperature 20° C, AM=1.5, Wind Speed 1m/s

Rated output (P _{mpp} / W _p)	417.4	421.1	424.9	428.6
Rated voltage (V _{mpp} / V)	39.30	39.45	39.61	39.77
Rated current (I _{mpp} / A)	10.62	10.67	10.73	10.78
Open circuit voltage (V _{oc} / V)	47.59	47.78	47.97	48.16
Short circuit current (I _{sc} / A)	11.21	11.28	11.35	11.42

Temperature Ratings (STC)

Temperature coefficient (P _{mpp})	-0.30%/°C	No. of diodes	3
Temperature coefficient (I _{sc})	+0.043%/°C	Junction box IP rating	IP 68
Temperature coefficient (V _{oc})	-0.24%/°C	Max. series fuse rating	25 A
Nominal module operating temperature (NMOT)	41±2°C	Max. system voltage (IEC/UL)	1500V _{DC}

Operating Parameters

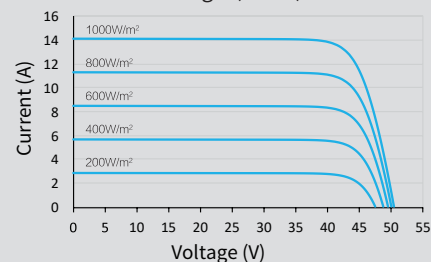
Mechanical Specifications

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 glass thickness	3.2 mm
Cable length (IEC/UL)	Portrait: 300 mm; Landscape: 1400 mm
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 / MC4-EVO2 (optional)
Module weight	26.6 kg
Packing unit	36 pcs / box (Subject to sales contract)
Weight of packing unit (for 40' HQ container)	1017 kg
Modules per 40' HQ container	720 pcs

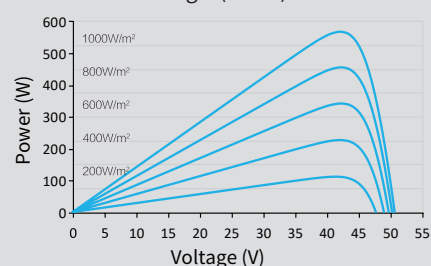
① Refer to Astronergy crystalline installation manual or contact technical department.
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

Curve

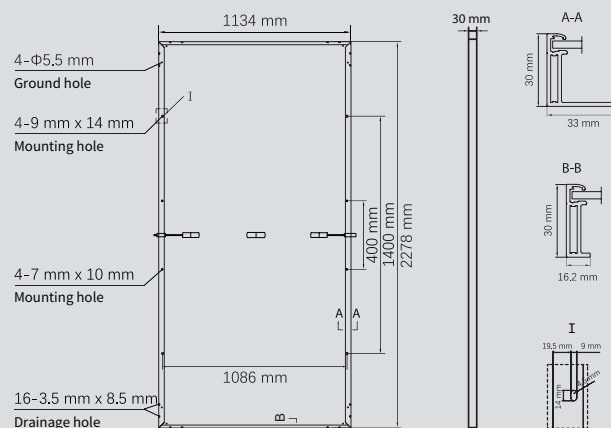
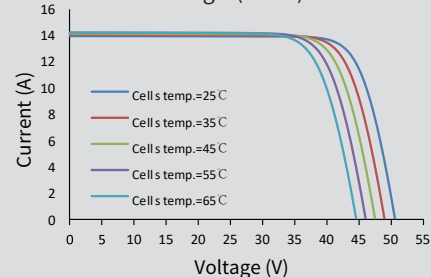
Current-Voltage (565W)



Power-Voltage (565W)



Current-Voltage (565W)





ASTRONERGY

ASTRO N5

Create Sustainable and Efficient Green Energy

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

555~575W

TOPCon / Half-cut

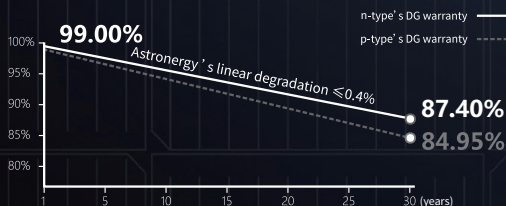
Low temperature coefficient (Pmpp)

Non-destructive cutting

PID resistance

Bifacial gain

Low BOS cost & LCOE



12-year Product Warranty

30-year Linear Power Warranty



ISO 9001:2015:ISO Quality Management System
ISO 14001:2015:ISO Environment Management System
ISO 45001:2018:Occupational Health and Safety
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Tier 1
BloombergNEF



555~575W

POWER RANGE

0~+5W

POWER SORTING

22.3%

MAX MODULE
EFFICIENCY

≤ 1.0%

FIRST YEAR
POWER DEGRADATION

≤ 0.4%

YEAR 2-30
POWER DEGRADATION

Electrical Specifications

STC: Irradiance 1000W/m², Cell Temperature 25° C, AM=1.5

	555	560	565	570	575
Rated output (P _{mpp} / Wp)	555	560	565	570	575
Rated voltage (V _{mpp} / V)	42.27	42.44	42.61	42.77	42.94
Rated current (I _{mpp} / A)	13.13	13.20	13.26	13.33	13.39
Open circuit voltage (V _{oc} / V)	50.30	50.50	50.70	50.90	51.10
Short circuit current (I _{sc} / A)	13.84	13.93	14.02	14.10	14.19
Module efficiency	21.5%	21.7%	21.9%	22.1%	22.3%

NMOT: Irradiance 800W/m², Ambient Temperature 20° C, AM=1.5, Wind Speed 1m/s

	417.4	421.1	424.9	428.6	432.4
Rated output (P _{mpp} / Wp)	417.4	421.1	424.9	428.6	432.4
Rated voltage (V _{mpp} / V)	39.79	39.94	40.10	40.26	40.42
Rated current (I _{mpp} / A)	10.49	10.54	10.60	10.65	10.70
Open circuit voltage (V _{oc} / V)	47.78	47.97	48.16	48.35	48.54
Short circuit current (I _{sc} / A)	11.18	11.25	11.32	11.39	11.46

Electrical Specifications (Integrated power)

Pmpp gain	Pmpp / Wp	Vmpp / V	I _{mpp} / A	V _{oc} / V	I _{sc} / A
5%	593	42.61	13.92	50.7	14.72
10%	622	42.61	14.59	50.7	15.42
15%	650	42.61	15.25	50.71	16.12
20%	678	42.61	15.91	50.71	16.82
25%	706	42.61	16.57	50.71	17.52

Electrical characteristics with different rear power gain (reference to 565W)

Temperature Ratings (STC)

Temperature coefficient (P _{mpp})	-0.30%/°C	No. of diodes	3
Temperature coefficient (I _{sc})	+0.043%/°C	Junction box IP rating	IP 68
Temperature coefficient (V _{oc})	-0.24%/°C	Max. series fuse rating	30 A
Nominal module operating temperature (NMOT)	41 ± 2°C	Max. system voltage (IEC/UL)	1500V _{DC}

Operating Parameters

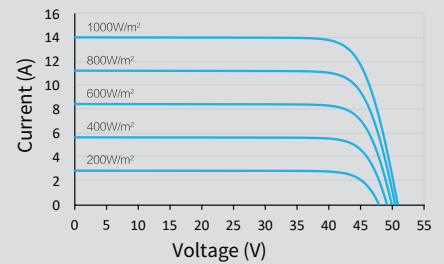
Mechanical Specifications

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 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 (Subject to sales contract)
Weight of packing unit (for 40' HQ container)	1215 kg
Modules per 40' HQ container	720 pcs

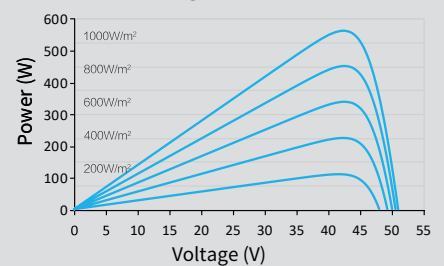
 ① Refer to Astronergy crystalline installation manual or contact technical department.
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

Curve

Current-Voltage (565W)



Power-Voltage (565W)



Current-Voltage (565W)

