



ASTRONERGY

ASTRO N5

Create Sustainable and Efficient Green Energy

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

555~575W

TOPCon / Half-cut

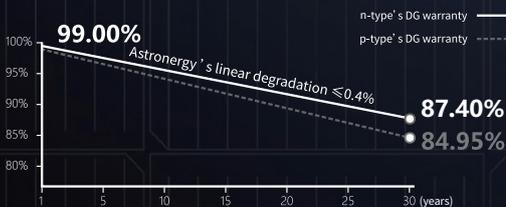
Low temperature coefficient (Pmpp)

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:Occupational Health and Safety
The first solar company which passed the Nord IEC/TS 62941 certification audit.



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 (Pmpp / Wp) | 555 | 560 | 565 | 570 | 575 |
| Rated voltage (Vmpp / V) | 42.27 | 42.44 | 42.61 | 42.77 | 42.94 |
| Rated current (Impp / A) | 13.13 | 13.20 | 13.26 | 13.33 | 13.39 |
| Open circuit voltage (Voc / V) | 50.30 | 50.50 | 50.70 | 50.90 | 51.10 |
| Short circuit current (Isc / 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 (Pmpp / Wp) | 417.4 | 421.1 | 424.9 | 428.6 | 432.4 |
| Rated voltage (Vmpp / V) | 39.79 | 39.94 | 40.10 | 40.26 | 40.42 |
| Rated current (Impp / A) | 10.49 | 10.54 | 10.60 | 10.65 | 10.70 |
| Open circuit voltage (Voc / V) | 47.78 | 47.97 | 48.16 | 48.35 | 48.54 |
| Short circuit current (Isc / A) | 11.18 | 11.25 | 11.32 | 11.39 | 11.46 |

Electrical Specifications (Integrated power)

| Pmpp gain | Pmpp / Wp | Vmpp / V | Impp / A | Voc / V | Isc / 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)

Operating Parameters

| | | | |
|---|------------|------------------------------|---------------------|
| 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 | 30 A |
| Nominal module operating temperature (NMOT) | 41±2°C | Max. system voltage (IEC/UL) | 1500V _{DC} |

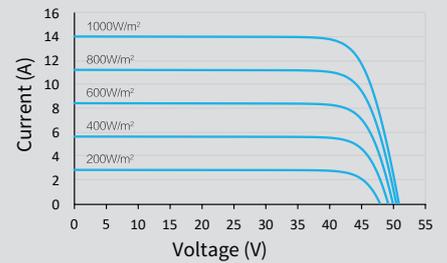
Mechanical Specifications

| | |
|---|--|
| 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 |

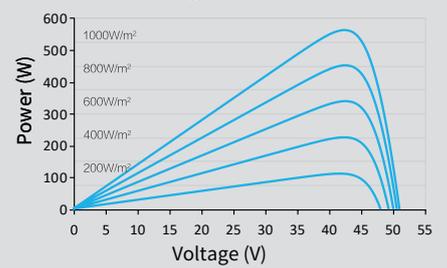
① Refer to Astronergy crystalline installation manual or contact technical department.
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

Curve

Current-Voltage (565W)



Power-Voltage (565W)



Current-Voltage (565W)

