



ASTRONERGY



ASTRO N7s

CHSM54RN(DG)/F-BH
Bifacial Series

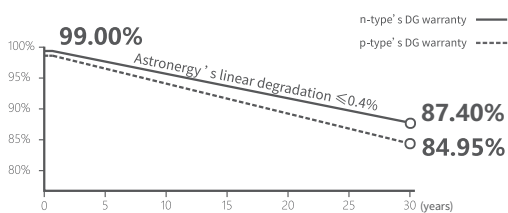
495~515W



Warranty

25 25-year Product Warranty

30 30-year Linear Power Warranty



n-type TOPCon 4.0

Novel upgrade, enhancing module efficiency



ZBB Design

Zero-busbar integrated interconnection



Bifacial Power Generation

Maximizing bifaciality, boosting backside power output



Integrated Appearance

Streamlined design without busbars or harpoon-like ribbons, perfect for upscale zero-carbon buildings



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



495~515W

POWER RANGE

0~+3%

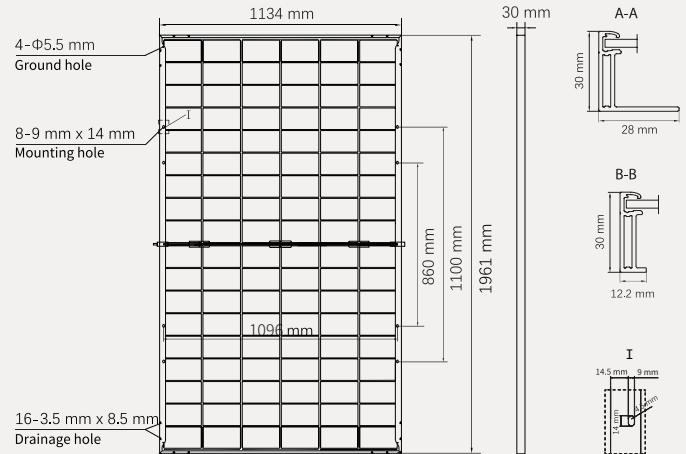
POWER SORTING

23.2%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)	1961 x 1134 x 30 mm
Cell type	n-type mono-crystalline
No. of cells	108 (6*18)
Frame technology	Aluminum, black or silver anodized
Front / Back glass	2.0+2.0 mm
Cable length (Including connector)	Landscape: 1200 mm; or Customized length
Cable diameter (IEC/UL)	4 mm ² / 12 AWG
① Maximum mechanical test load	6000 Pa (front) / 4000 Pa (back)
Connector type (IEC/UL)	MC4-EVO2A (Standard) / HCB40 (Optional)
Module weight	26.9 kg
Packing unit	36 pcs / box
Weight of packing unit (for 40'HQ container)	1016 kg
Modules per 40' HQ container	864 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

Rated output (Pmpp / Wp)	495	500	505	510	515
Rated voltage (Vmpp / V)	33.88	34.02	34.15	34.29	34.42
Rated current (Impp / A)	14.61	14.70	14.79	14.87	14.96
Open circuit voltage (Voc / V)	40.72	40.89	41.05	41.21	41.37
Short circuit current (Isc / A)	15.43	15.52	15.61	15.70	15.79
Module efficiency	22.3%	22.5%	22.7%	22.9%	23.2%

BNPI: Irradiance: front 1000W/m², rear 135W/m², Cell Temperature 25° C, AM=1.5

Rated output (Pmpp / Wp)	545.5	551.0	556.5	562.0	567.5
Rated voltage (Vmpp / V)	33.89	34.03	34.16	34.30	34.43
Rated current (Impp / A)	16.10	16.19	16.29	16.39	16.48
Open circuit voltage (Voc / V)	40.73	40.90	41.06	41.22	41.38
Short circuit current (Isc / A)	17.17	17.27	17.37	17.47	17.57

Temperature Ratings (STC)

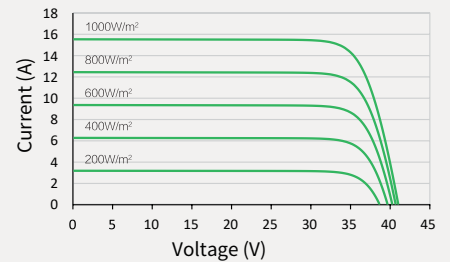
Temperature coefficient (Pmpp)	-0.29%/°C
Temperature coefficient (Isc)	+0.043%/°C
Temperature coefficient (Voc)	-0.25%/°C

Operating Parameters

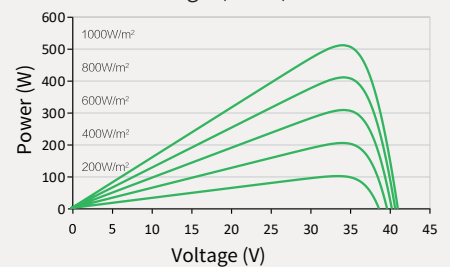
Bifaciality (Pmpp)	80±5%
Junction box IP rating	IP 68
Max. series fuse rating	30 A
Max. system voltage (IEC/UL)	1500V _{DC}

Curve

Current-Voltage (510W)



Power-Voltage (510W)



Current-Voltage (510W)

