ASTRONERGY

ASTRO N7s 2.0

CHSM54RN(DG)/F-BH
Bifacial Series

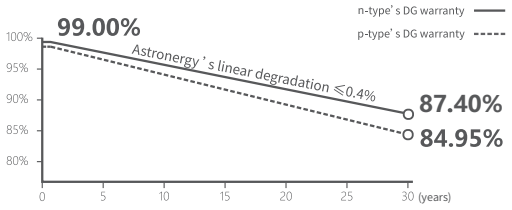
510~530W

Assist carbon neutrality

Warranty

25 25-year Product Warranty

30 30-year Linear Power Warranty



n-type TOPCon 5.0
Newly upgraded cell technology, ultra-high product energy 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

TOP PERFORMER 2025 kiwa PV MODULE RELIABILITY SCORECARD

Tier 1 BloombergNEF

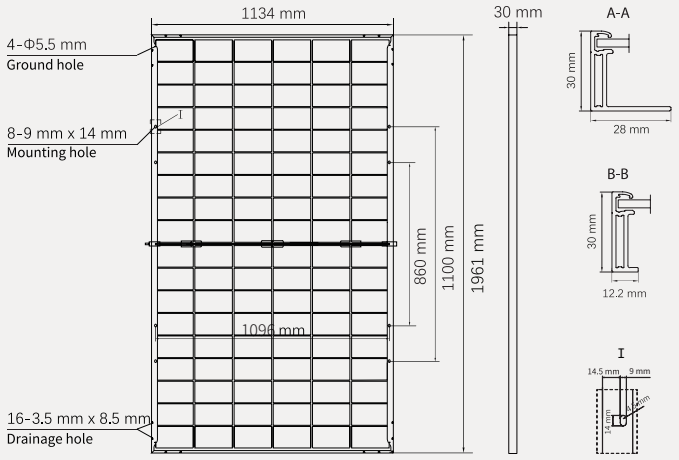
Underwritten by International Insurer

510~530W	0~+3%	23.8%	≤ 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)	1961 x 1134 x 30 mm
Cell type	n-type mono-crystalline
No. of cells	108 (6*18)
Frame technology	Aluminum, black 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/m^2, Cell Temperature 25° C, AM=1.5, Power measurement tolerance: ±3%

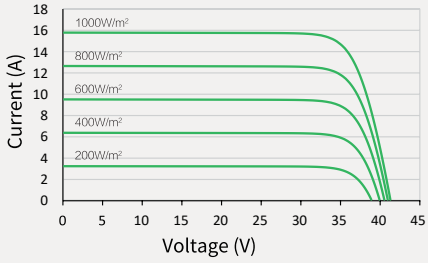
Rated output (Pmpp / Wp)	510	515	520	525	530
Rated voltage (Vmpp / V)	34.29	34.42	34.44	34.52	34.60
Rated current (Impp / A)	14.87	14.96	15.10	15.21	15.32
Open circuit voltage (Voc / V)	41.21	41.37	41.39	41.49	41.59
Short circuit current (Isc / A)	15.70	15.79	15.82	15.93	16.04
Module efficiency	22.9%	23.2%	23.4%	23.6%	23.8%

BNPI: Irradiance: front 1000W/m^2, rear 135W/m^2, Cell Temperature 25° C, AM=1.5

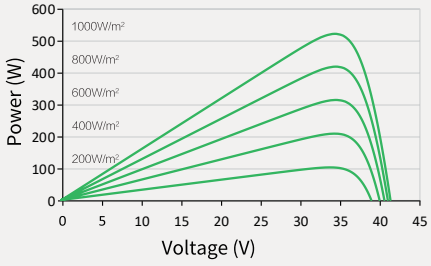
Rated output (Pmpp / Wp)	562.0	567.5	573.0	578.6	584.1
Rated voltage (Vmpp / V)	34.30	34.43	34.45	34.53	34.61
Rated current (Impp / A)	16.39	16.48	16.64	16.75	16.87
Open circuit voltage (Voc / V)	41.22	41.38	41.40	41.50	41.60
Short circuit current (Isc / A)	17.47	17.57	17.62	17.74	17.87

Curve

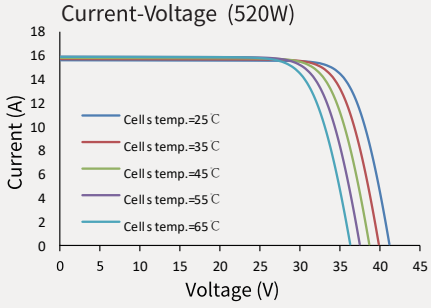
Current-Voltage (520W)



Power-Voltage (520W)



Current-Voltage (520W)



Temperature Ratings (STC)

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

Operating Parameters

Operating Temperature	-40°C ~+85°C
Bifaciality (Pmpp)	80±5%
Junction box IP rating	IP 68
Max. series fuse rating	30 A
Max. system voltage (IEC/UL)	1500V_{DC}

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