



ASTRONERGY



ASTRO N7s

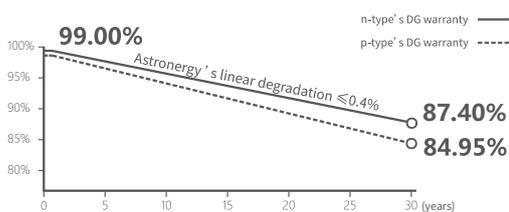
CHSM54RN(DGT)(BLH)/F-BH
Bifacial Series

490~510W



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



Moderate Dimension

Distributed PV station preferred, balancing efficiency and space



All-black Technology

Sleek crystalline black appearance, seamlessly blending into rooftops



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



490~510W

POWER RANGE

0~+3%

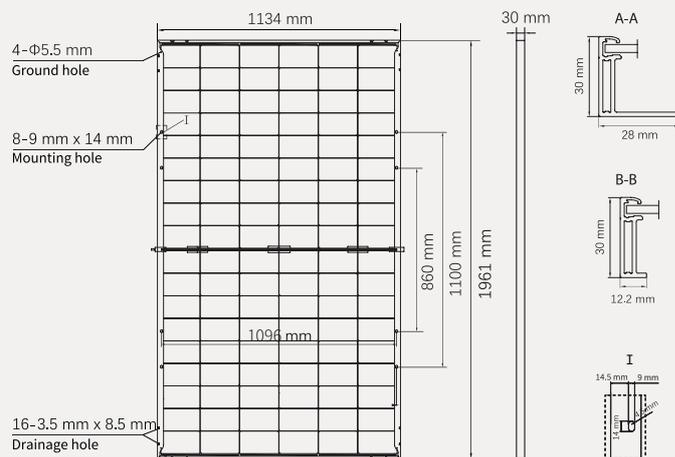
POWER SORTING

22.9%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 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	27.4 kg
Packing unit	36 pcs / box
Weight of packing unit (for 40'HQ container)	1035 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

	490	495	500	505	510
Rated output (Pmpp / Wp)	490	495	500	505	510
Rated voltage (Vmpp / V)	33.42	33.56	33.69	33.83	33.96
Rated current (Impp / A)	14.66	14.75	14.84	14.93	15.02
Open circuit voltage (Voc / V)	40.22	40.38	40.54	40.70	40.87
Short circuit current (Isc / A)	15.47	15.56	15.65	15.74	15.83
Module efficiency	22.0%	22.3%	22.5%	22.7%	22.9%

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

	540	545	550	555	560
Rated output (Pmpp / Wp)	540	545	550	555	560
Rated voltage (Vmpp / V)	33.43	33.56	33.70	33.83	33.97
Rated current (Impp / A)	16.15	16.24	16.32	16.40	16.49
Open circuit voltage (Voc / V)	40.22	40.39	40.55	40.71	40.87
Short circuit current (Isc / A)	17.20	17.28	17.37	17.45	17.54

Temperature Ratings (STC)

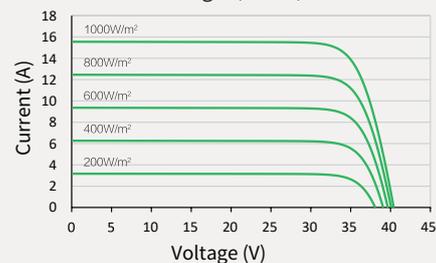
Temperature coefficient (Pmpp)	-0.29%/°C
Temperature coefficient (Isc)	+0.043%/°C
Temperature coefficient (Voc)	-0.25%/°C

Operating Parameters

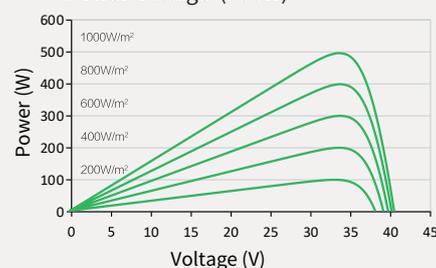
Bifaciality (Pmpp)	80±5%
Junction box IP rating	IP 68
Max. series fuse rating	30 A
Max. system voltage (IEC/UL)	1500V _{DC}

Curve

Current-Voltage (500W)



Power-Voltage (500W)



Current-Voltage (500W)

