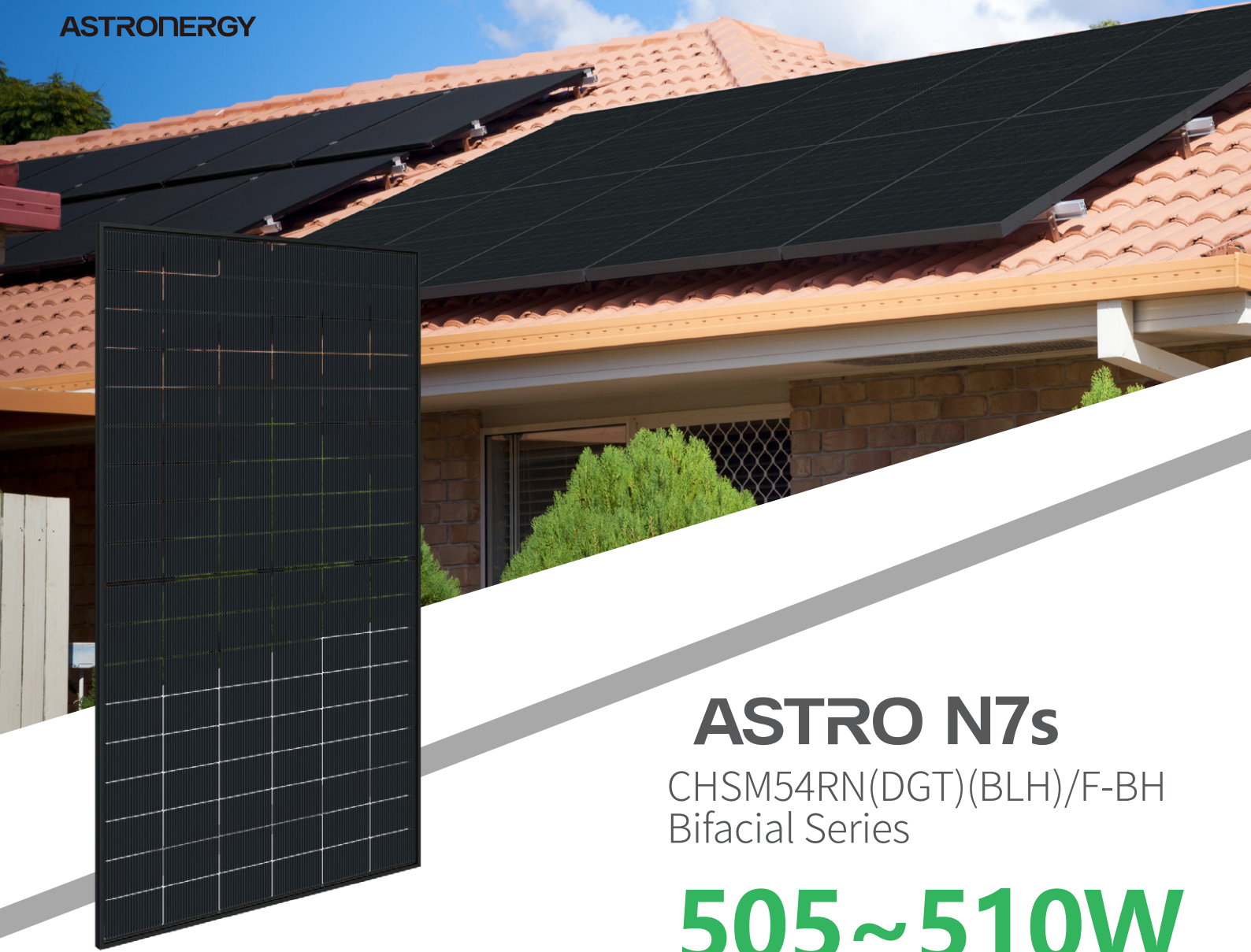




ASTRONERGY



# ASTRO N7s

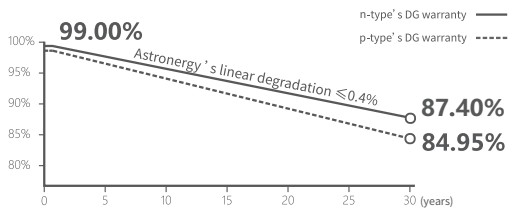
CHSM54RN(DGT)(BLH)/F-BH  
Bifacial Series

# 505~510W

## Warranty

**30** 30-year Product Warranty  
(Specified for rooftop market)

**30** 30-year Linear Power Warranty  
(Only to the front-side of modules)



## Key Features

- High efficiency n-type TOPCon cells
- Elegant Zero Busbar design
- Dual glass for improved durability
- Manufacturing with AI technology
- Suitable for residential systems
- Easy to install and transport



**CE** ISO 9001:2015:ISO Quality Management System  
ISO 14001:2015:ISO Environment Management System  
ISO 45001:Occupational Health and Safety



**Tier 1**  
BloombergNEF



**505~510W**

POWER RANGE

**±5W**

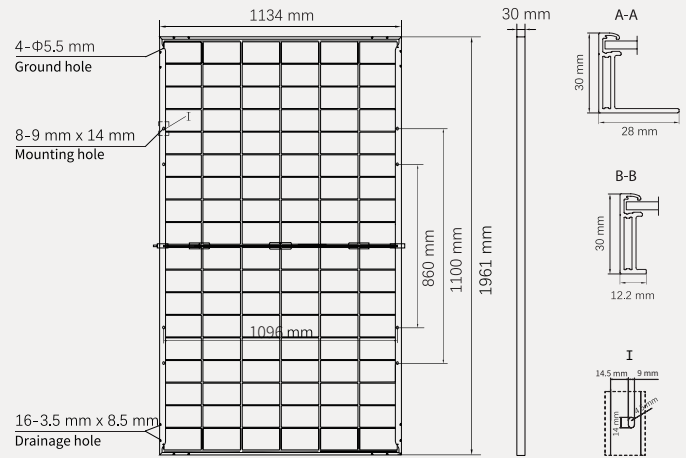
POWER SORTING

**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 or 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 <sup>2</sup> / 12 AWG
① Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Connector type (IEC/UL)	PV-HCB40 (Chint New Energy) or PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy (Stäubli)
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 CHSM54RN(DGT)(BLH)/F-BH-XXX(XXX=505~510)

**STC:** Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25° C, AM=1.5

Rated output (P <sub>mpp</sub> / W <sub>p</sub> )	505	510
Rated voltage (V <sub>mpp</sub> / V)	33.83	33.96
Rated current (I <sub>mpp</sub> / A)	14.93	15.02
Open circuit voltage (V <sub>oc</sub> / V)	40.70	40.87
Short circuit current (I <sub>sc</sub> / A)	15.74	15.83
Module efficiency	22.7%	22.9%

Tolerance: P<sub>mpp</sub> ±3%, V<sub>oc</sub> ±3% and I<sub>sc</sub> ±4%.**BNPI:** Irradiance: front 1000W/m<sup>2</sup>, rear 135W/m<sup>2</sup>, Cell Temperature 25° C, AM=1.5

Rated output (P <sub>mpp</sub> / W <sub>p</sub> )	555	560
Rated voltage (V <sub>mpp</sub> / V)	33.83	33.97
Rated current (I <sub>mpp</sub> / A)	16.40	16.49
Open circuit voltage (V <sub>oc</sub> / V)	40.71	40.87
Short circuit current (I <sub>sc</sub> / A)	17.45	17.54

Bifaciality(φP<sub>mpp</sub>/φI<sub>sc</sub>) : 80±5%, Bifaciality(φV<sub>oc</sub>) : 98±5%

### Electrical characteristics with 10% Bifacial Gains

Rated output (P <sub>mpp</sub> / W <sub>p</sub> )	556	561
Rated voltage (V <sub>mpp</sub> / V)	33.82	33.96
Rated current (I <sub>mpp</sub> / A)	16.42	16.52
Open circuit voltage (V <sub>oc</sub> / V)	40.71	40.87
Short circuit current (I <sub>sc</sub> / A)	17.32	17.42

## Operating Parameters

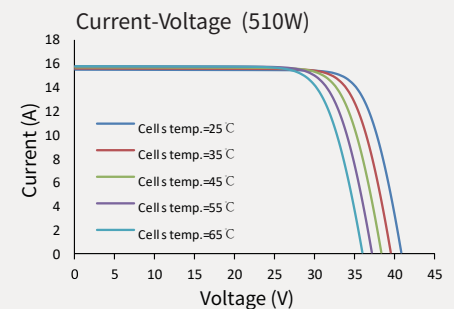
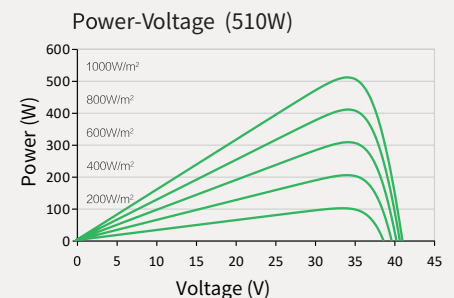
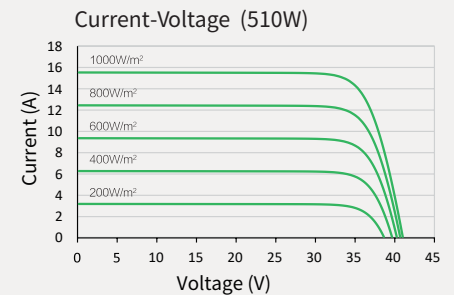
No. of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	30 A
Max. system voltage (IEC/UL)	1500V <sub>DC</sub>

Fire performance: Class C

## Temperature Ratings (STC)

Temperature coefficient (P <sub>mpp</sub> )	-0.29%/°C
Temperature coefficient (I <sub>sc</sub> )	+0.043%/°C
Temperature coefficient (V <sub>oc</sub> )	-0.25%/°C

## Curve



Made in China, Made in Turkey.

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