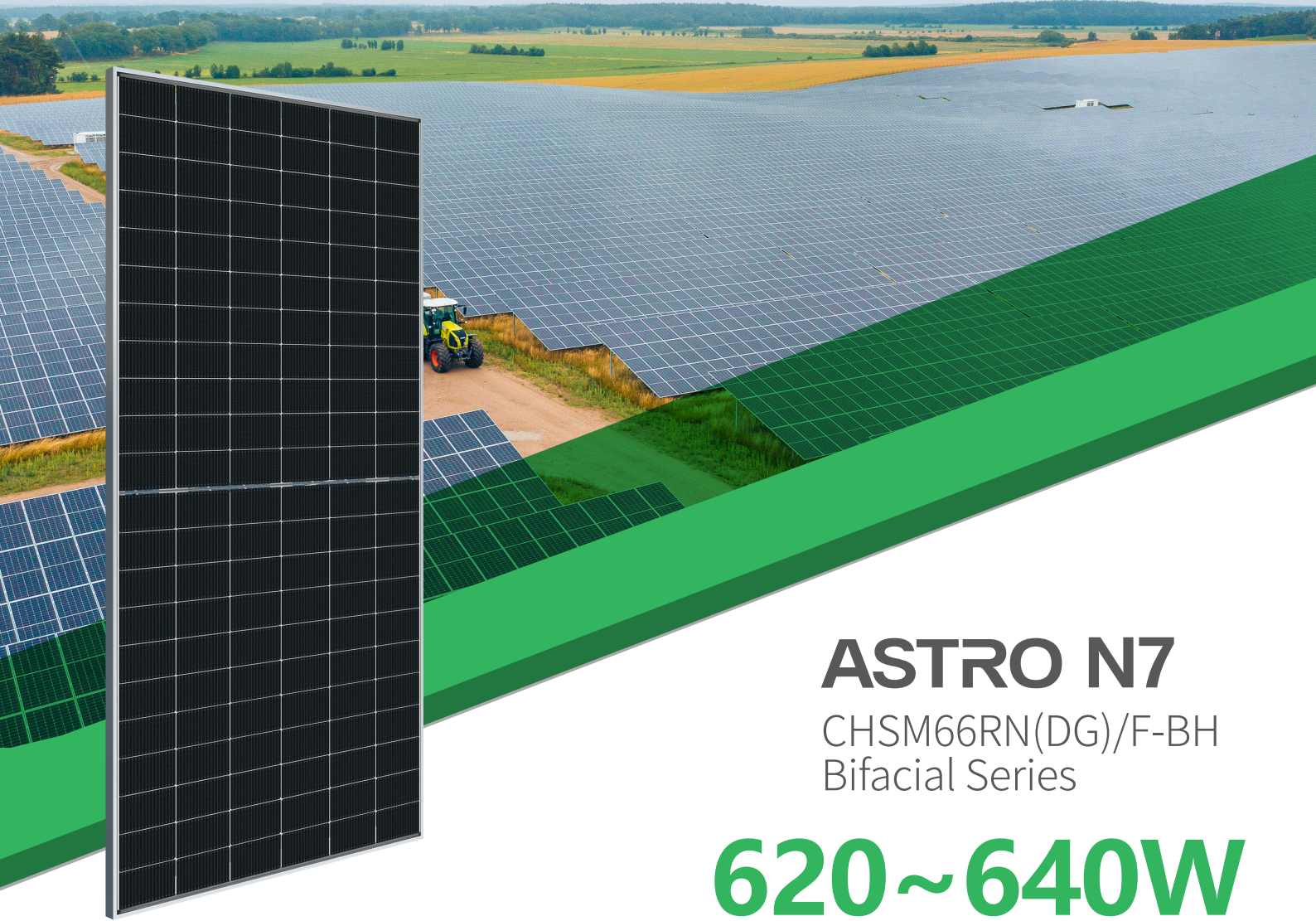




ASTRONERGY



# ASTRO N7

CHSM66RN(DG)/F-BH  
Bifacial Series

## 620~640W



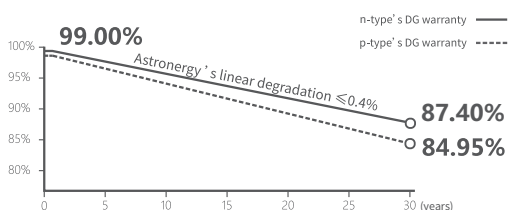
### Warranty

15

15-year Product Warranty

30

30-year Linear Power Warranty



#### n-type TOPCon 4.0+/5.0

Novel upgrade, enhancing module efficiency



#### SMBB Design

Enhancing current collection, minimizing power loss



#### Low Voc Design

Increasing modules per string, lower BOS cost



#### Bifacial Power Generation

Maximizing bifaciality, boosting backside power output



IEC 61215, IEC 61730  
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



620~640W

POWER RANGE

0~+3%

POWER SORTING

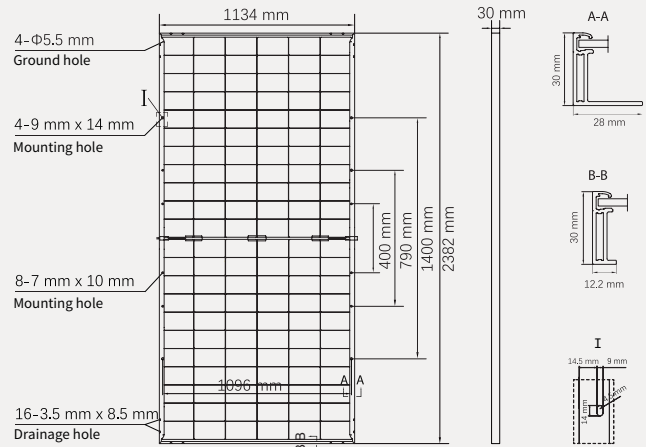
23.7%

MAX MODULE  
EFFICIENCY $\leq 1.0\%$ FIRST YEAR  
POWER DEGRADATION $\leq 0.4\%$ YEAR 2-30  
POWER DEGRADATION

## Mechanical Specifications

|                                              |                                                         |
|----------------------------------------------|---------------------------------------------------------|
| Outer dimensions (L x W x H)                 | 2382 x 1134 x 30 mm                                     |
| Cell type                                    | n-type mono-crystalline                                 |
| No. of cells                                 | 132 (6*22)                                              |
| Frame technology                             | Aluminum, silver anodized                               |
| Front / Back glass                           | 2.0+2.0 mm                                              |
| Cable length (Including connector)           | Portrait: ( + )350 mm,( - )250 mm;<br>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)                      | HCB40 (Standard) / MC4-EVO2A (Optional)                 |
| Module weight                                | 31.65 kg                                                |
| Packing unit                                 | 36 pcs / box                                            |
| Weight of packing unit (for 40'HQ container) | 1190 kg                                                 |
| Modules per 40' HQ container                 | 720 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<sup>2</sup>, Cell Temperature 25° C, AM=1.5, Power measurement tolerance: ±3%

|                                 |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|
| Rated output (Pmpp / Wp)        | 620   | 625   | 630   | 635   | 640   |
| Rated voltage (Vmpp / V)        | 41.56 | 41.69 | 41.82 | 41.86 | 41.99 |
| Rated current (Impp / A)        | 14.92 | 14.99 | 15.07 | 15.17 | 15.24 |
| Open circuit voltage (Voc / V)  | 49.04 | 49.19 | 49.34 | 49.42 | 49.57 |
| Short circuit current (Isc / A) | 16.11 | 16.19 | 16.27 | 16.35 | 16.42 |
| Module efficiency               | 23.0% | 23.1% | 23.3% | 23.5% | 23.7% |

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

|                                 |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|
| Rated output (Pmpp / Wp)        | 683.6 | 689.1 | 694.6 | 702.3 | 707.8 |
| Rated voltage (Vmpp / V)        | 41.57 | 41.70 | 41.83 | 41.87 | 42.00 |
| Rated current (Impp / A)        | 16.44 | 16.52 | 16.60 | 16.77 | 16.85 |
| Open circuit voltage (Voc / V)  | 49.05 | 49.20 | 49.35 | 49.43 | 49.58 |
| Short circuit current (Isc / A) | 17.81 | 17.90 | 17.99 | 18.13 | 18.21 |

## Temperature Ratings (STC)

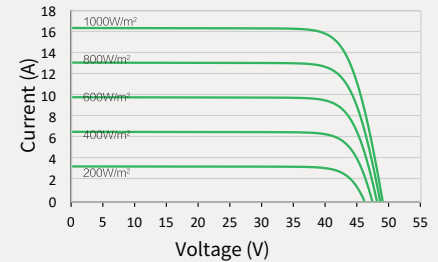
|                                |            |
|--------------------------------|------------|
| Temperature coefficient (Pmpp) | -0.29%/°C  |
| Temperature coefficient (Isc)  | +0.043%/°C |
| Temperature coefficient (Voc)  | -0.25%/°C  |

## Operating Parameters

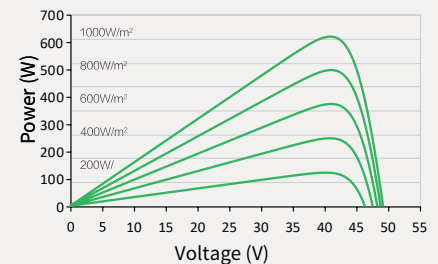
|                              |                     |
|------------------------------|---------------------|
| Operating Temperature        | -40°C ~+85°C        |
| Bifaciality (Pmpp)           | 80±5%               |
| Junction box IP rating       | IP 68               |
| Max. series fuse rating      | 35 A                |
| Max. system voltage (IEC/UL) | 1500V <sub>DC</sub> |

## Curve

Current-Voltage (625W)



Power-Voltage (625W)



Current-Voltage (625W)

