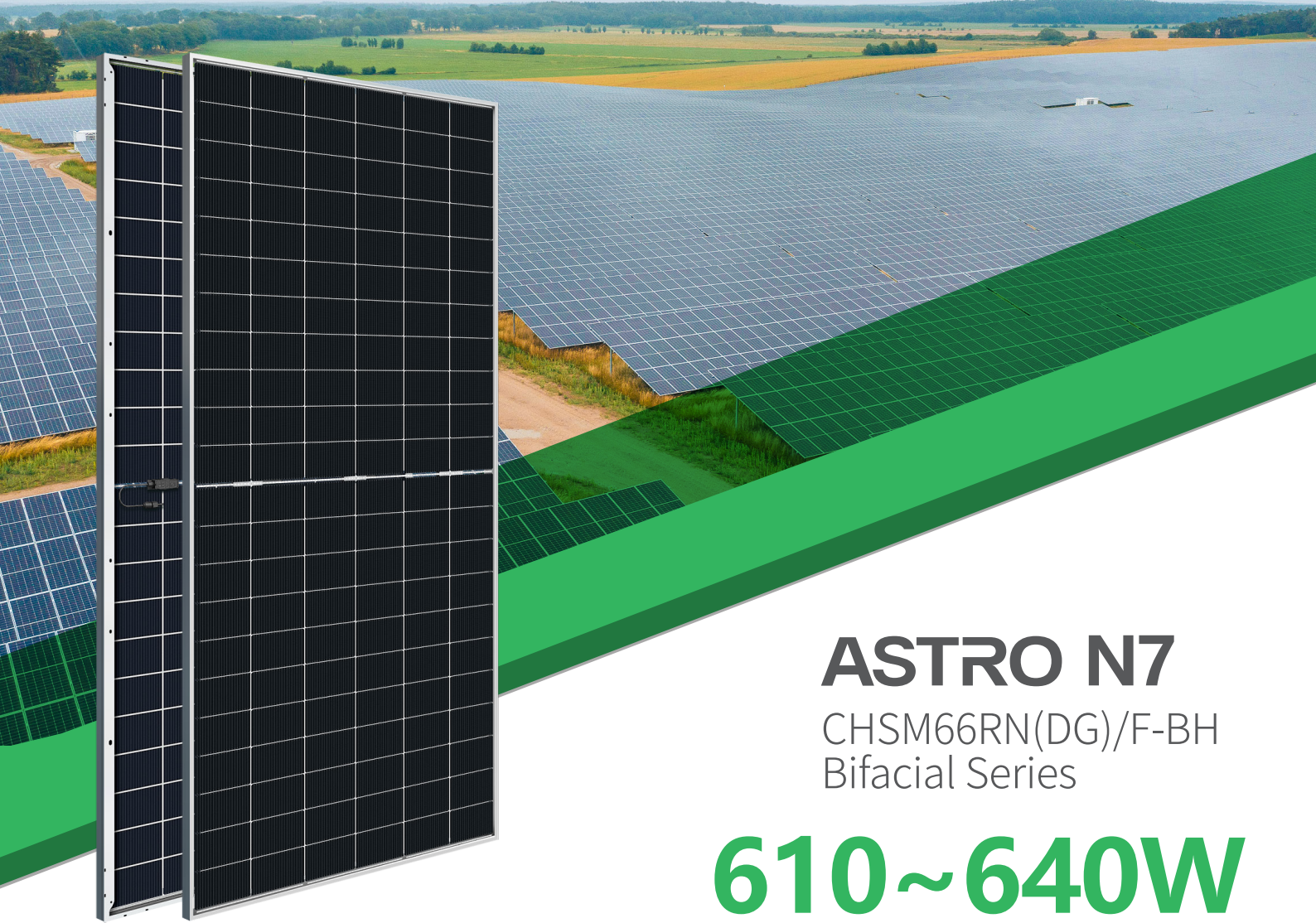




ASTRONERGY



ASTRO N7

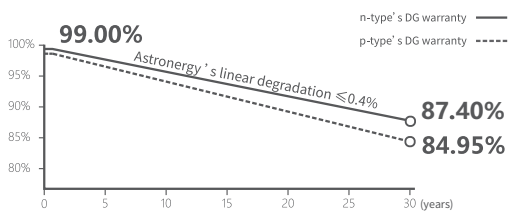
CHSM66RN(DG)/F-BH
Bifacial Series

610~640W



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/ZBB Design

Improving appearance and power generation



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



610~640W

POWER RANGE

0~+3%

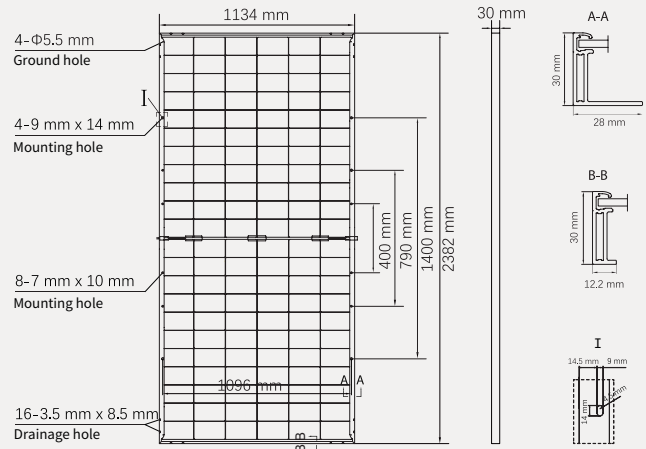
POWER SORTING

23.7%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)	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; 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	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/m², Cell Temperature 25° C, AM=1.5, Power measurement tolerance: ±3%

Rated output (Pmpp / Wp)	610	615	620	625	630	635	640
Rated voltage (Vmpp / V)	41.31	41.43	41.56	41.69	41.82	41.86	41.99
Rated current (Impp / A)	14.77	14.84	14.92	14.99	15.07	15.17	15.24
Open circuit voltage (Voc / V)	48.74	48.89	49.04	49.19	49.34	49.42	49.57
Short circuit current (Isc / A)	15.94	16.02	16.11	16.19	16.27	16.35	16.42
Module efficiency	22.6%	22.8%	23.0%	23.1%	23.3%	23.5%	23.7%

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

Rated output (Pmpp / Wp)	672.5	678.1	683.6	689.1	694.6	702.3	707.8
Rated voltage (Vmpp / V)	41.32	41.44	41.57	41.70	41.83	41.87	42.00
Rated current (Impp / A)	16.28	16.36	16.44	16.52	16.60	16.77	16.85
Open circuit voltage (Voc / V)	48.75	48.90	49.05	49.20	49.35	49.43	49.58
Short circuit current (Isc / A)	17.64	17.73	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 _{DC}

Curve

