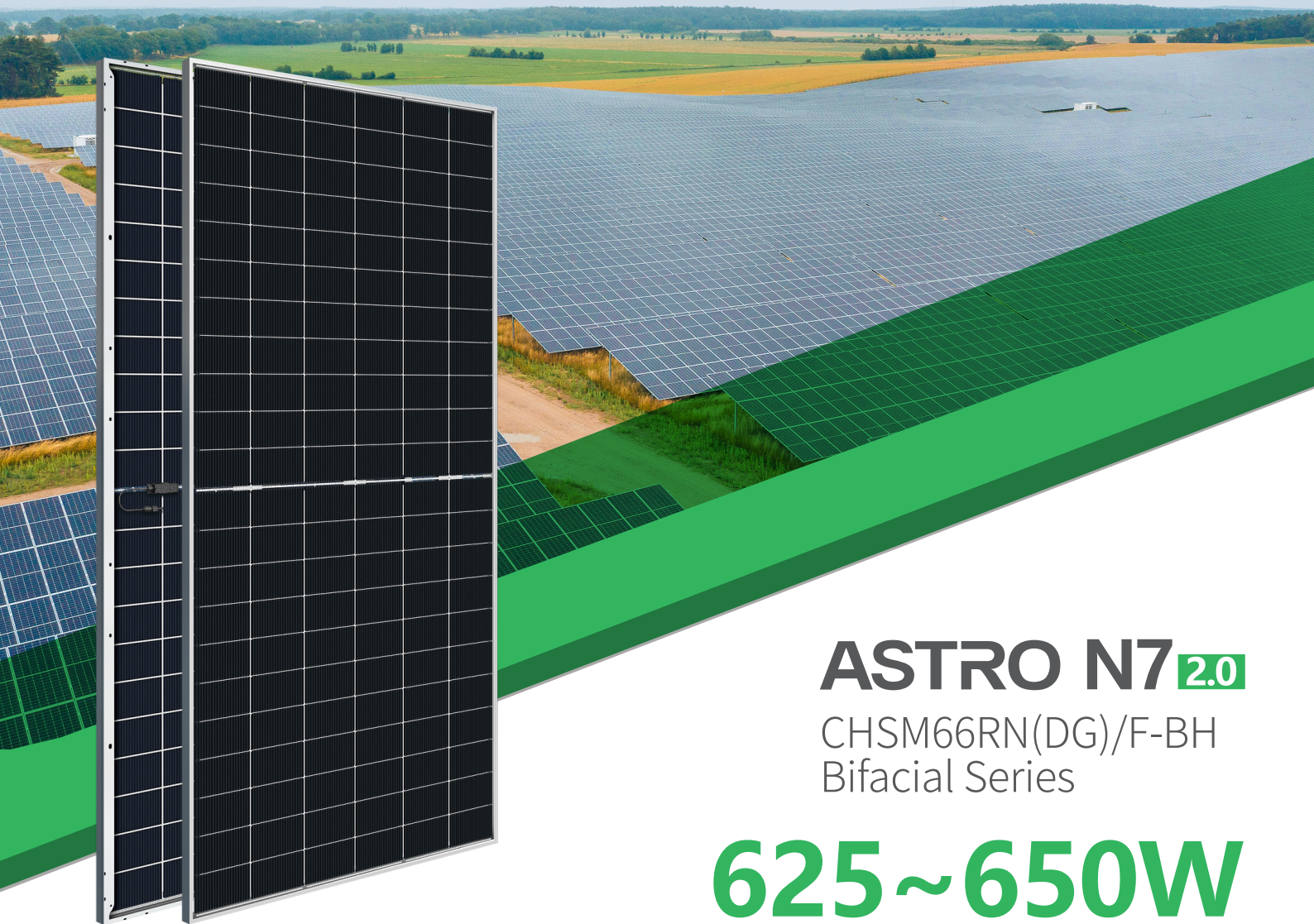




ASTRONERGY



ASTRO N7^{2.0}

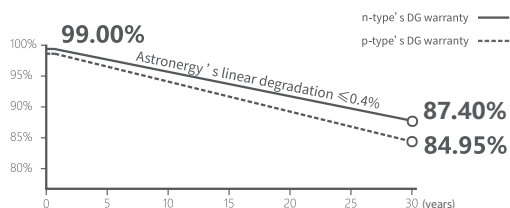
CHSM66RN(DG)/F-BH
Bifacial Series

625~650W



Warranty

- 15** 15-year Product Warranty
- 30** 30-year Linear Power Warranty



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

625~650W

POWER RANGE

0~+3%

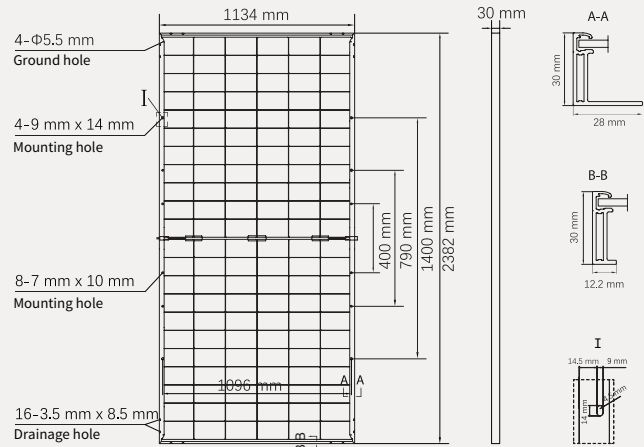
POWER SORTING

24.1%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	648 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%

	625	630	635	640	645	650
Rated output (Pmpp / Wp)	625	630	635	640	645	650
Rated voltage (Vmpp / V)	41.69	41.82	41.86	41.99	42.11	42.24
Rated current (Impp / A)	14.99	15.07	15.17	15.24	15.32	15.39
Open circuit voltage (Voc / V)	49.19	49.34	49.42	49.57	49.72	49.87
Short circuit current (Isc / A)	16.19	16.27	16.35	16.42	16.50	16.58
Module efficiency	23.1%	23.3%	23.5%	23.7%	23.9%	24.1%

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

	689.1	694.6	702.3	707.8	713.4	718.9
Rated output (Pmpp / Wp)	689.1	694.6	702.3	707.8	713.4	718.9
Rated voltage (Vmpp / V)	41.70	41.83	41.87	42.00	42.13	42.25
Rated current (Impp / A)	16.52	16.60	16.77	16.85	16.93	17.01
Open circuit voltage (Voc / V)	49.20	49.35	49.43	49.58	49.73	49.88
Short circuit current (Isc / A)	17.90	17.99	18.13	18.21	18.30	18.38

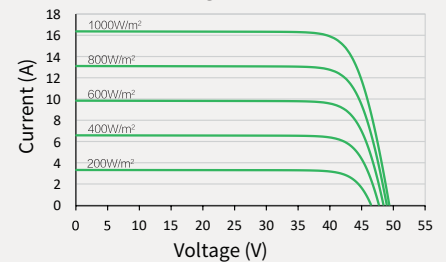
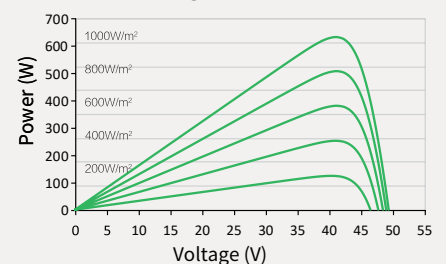
Temperature Ratings (STC)

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

Current-Voltage (635W)**Power-Voltage (635W)****Current-Voltage (635W)**