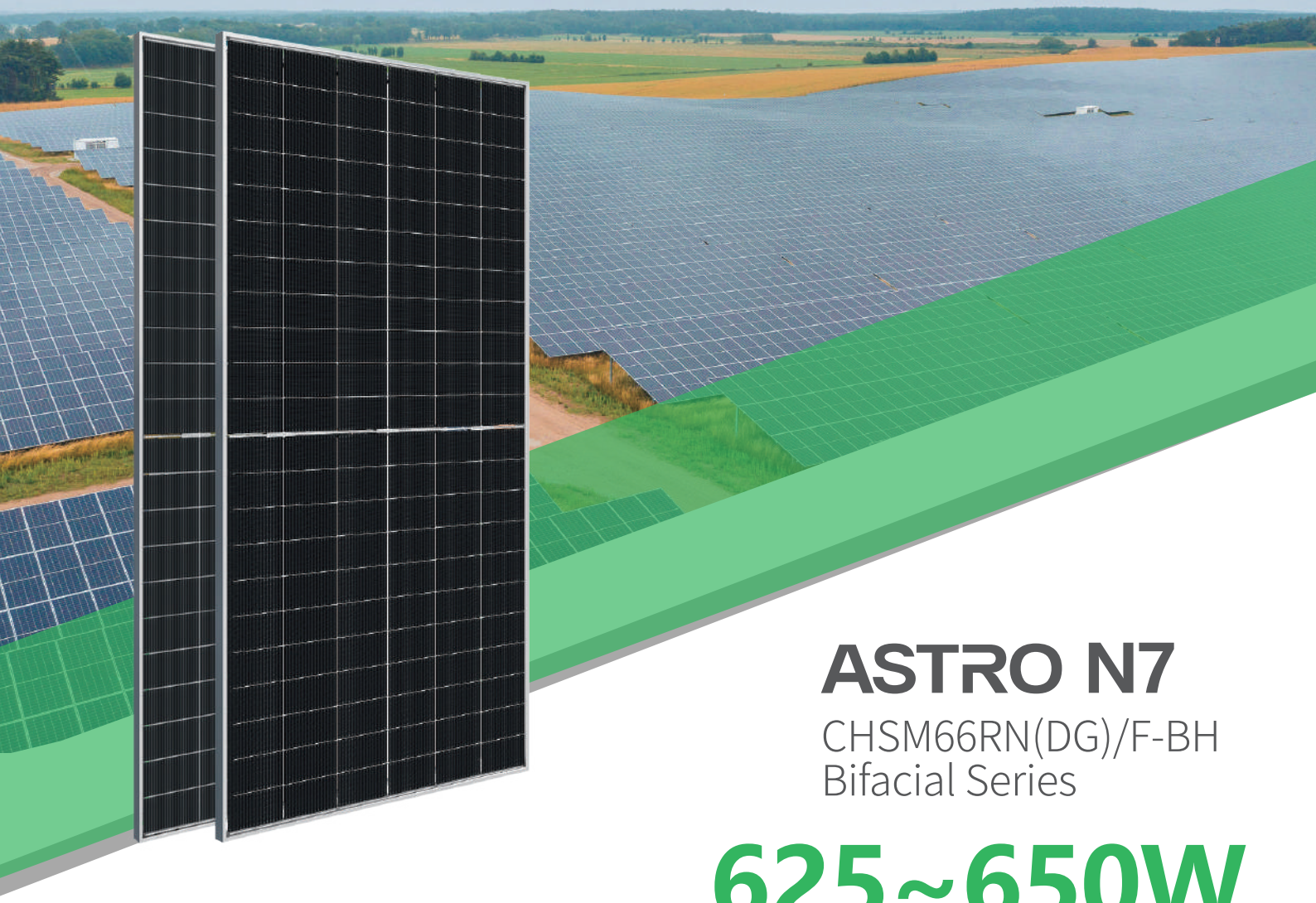
Special for Australian Market

ASTRONERGY



ASTRO N7

CHSM66RN(DG)/F-BH
Bifacial Series

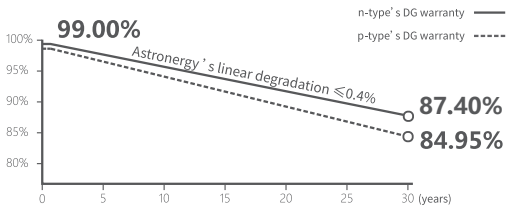
625~650W

Assist carbon neutrality

Warranty

15 15-year Product Warranty

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



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

Better Temperature Coefficient
≤ -0.29%/°C , adapting for high temperature

Low Voc Design
Increasing modules per string, lower BOS cost

Bifacial Power Generation
Maximizing bifaciality, boosting backside power output

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

TOP PERFORMER 2025 kiwa PV MODULE RELIABILITY SCORECARD

Tier 1 BloombergNEF

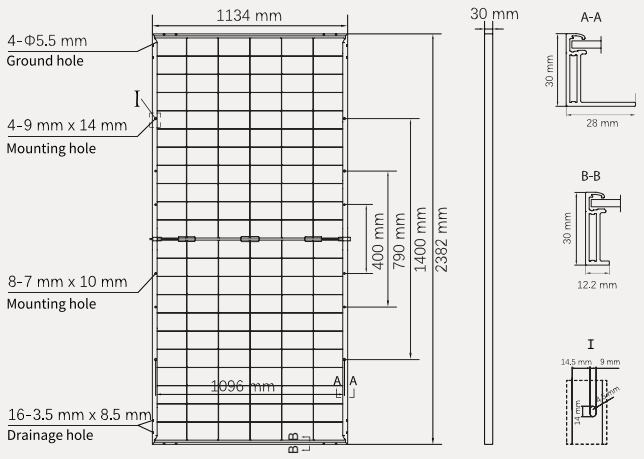
Underwritten by International Insurer

625~650W	0~+3%	24.1%	≤ 1.0%	≤ 0.4%
POWER RANGE	POWER SORTING	MAX MODULE EFFICIENCY	FIRST YEAR POWER DEGRADATION	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)	PV-HCB40 (Chint New Energy) or PV-KST4-EVO2A/xy,PV-KBT4-EVO2A/xy (Stäubli)
Module weight	31.65kg
Packing unit	36 pcs / box
Weight of packing unit (for 40'HQ container)	1231 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 CHSM66RN(DG)/F-BH-XXX(XXX=625~650)

STC: Irradiance 1000W/m^2, Cell Temperature 25° C, AM=1.5

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%

Tolerance: Pmpp ±3%, Voc ±3% and Isc ±4%.

BNPI & BSI: Bifaciality(Pmpp/Isc): 80±5%, Bifaciality(Voc): 98±5%

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
Isc aBSI(BSI)	19.99	20.09	20.31	20.40	20.50	20.59

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

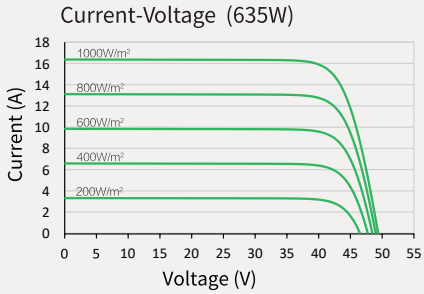
aBSI(BSI): Irradiance: front 1000W/m^2, rear 300W/m^2

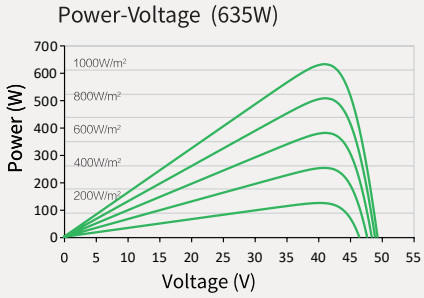
Tolerance: Pmpp ±3%, Voc ±3% and Isc ±4%.

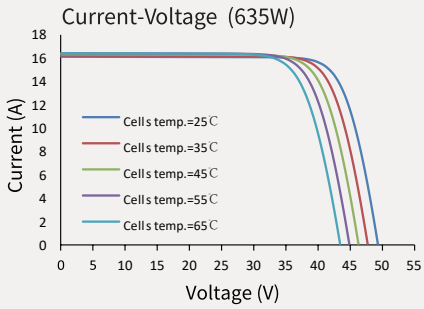
Electrical characteristics with 10% Bifacial Gains

Rated output (Pmpp / Wp)	688.00	693.00	698.50	704.00	709.50	715.00
Rated voltage (Vmpp / V)	41.69	41.82	41.86	41.99	42.11	42.24
Rated current (Impp / A)	16.49	16.58	16.69	16.77	16.85	16.93
Open circuit voltage (Voc / V)	49.19	49.34	49.42	49.57	49.72	49.87
Short circuit current (Isc / A)	17.81	17.90	17.98	18.07	18.15	18.23

Curve







Operating Parameters

No. of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	35 A
Max. system voltage (IEC/UL)	1500V_{DC}

Fire performance: Class A / Class C

Temperature Ratings (STC)

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

Module[T98]max[℃]: 70

Made in China, Made in Turkey.

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