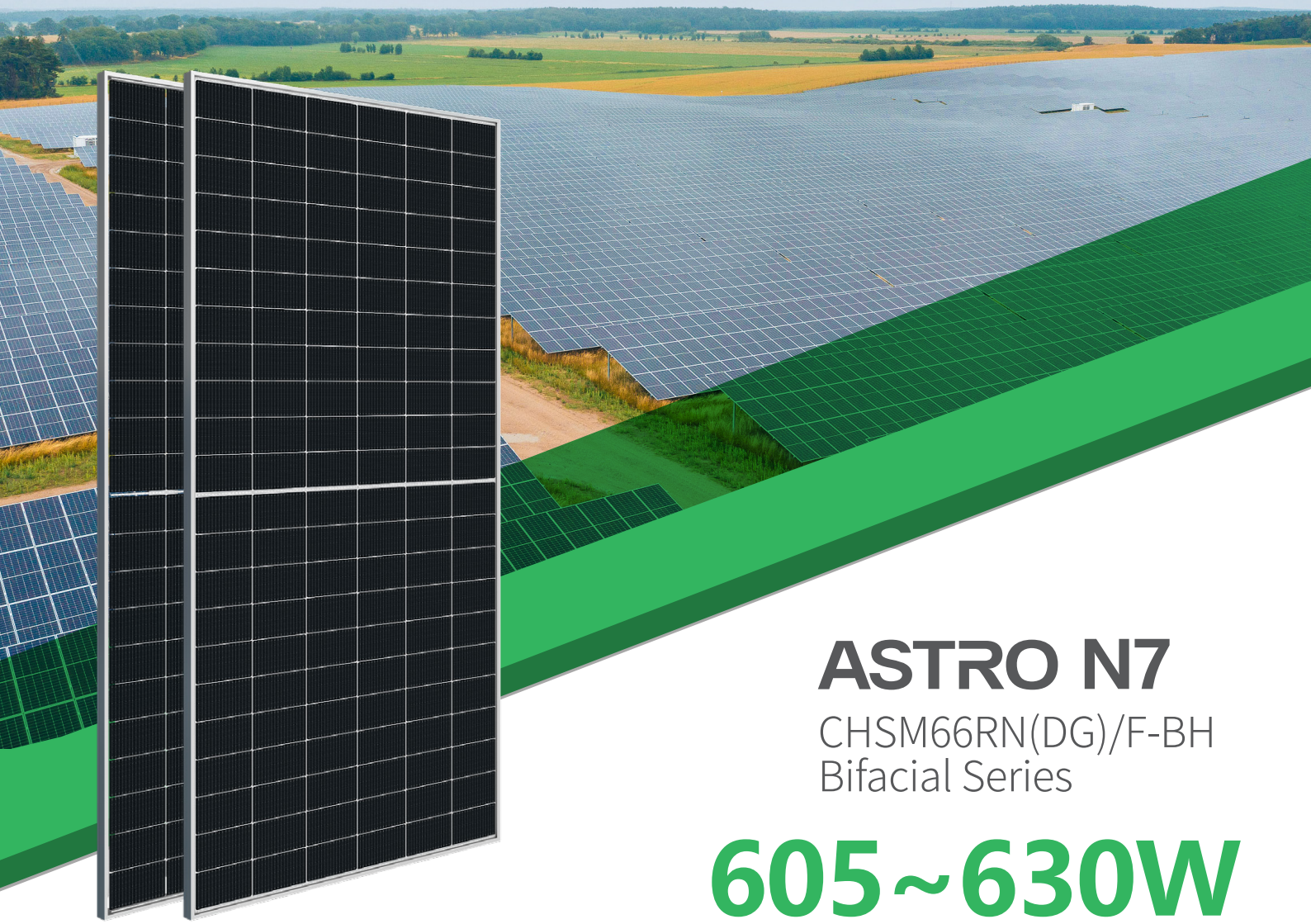
Special for Europe Market

ASTRONERGY



ASTRO N7

CHSM66RN(DG)/F-BH
Bifacial Series

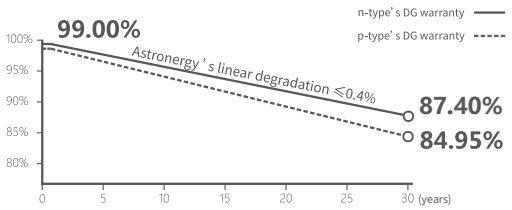
605~630W

Assist carbon neutrality

Warranty

15 15-year Product Warranty

30 30-year Linear Power Warranty



n-type TOPCon 4.0
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

Top Performer 2024 kiwa PVEL PV Module Reliability Scorecard

Tier 1 BloombergNEF

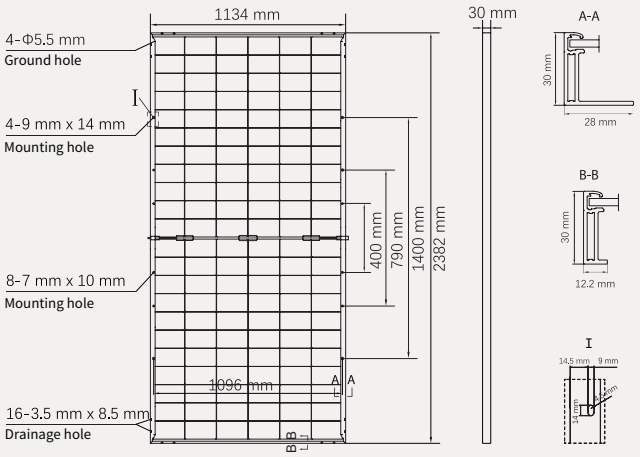
Underwritten by International Insurer

605~630W	0~+3%	23.3%	≤ 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)	HCB40 (Standard) / MC4-EVO2A (Optional)
Module weight	32.8 kg
Packing unit	36 pcs / box
Weight of packing unit (for 40'HQ container)	1231 kg
Modules per 40' HQ container	612 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^2, Cell Temperature 25° C, AM=1.5

Rated output (Pmpp / Wp)	605	610	615	620	625	630
Rated voltage (Vmpp / V)	41.18	41.31	41.43	41.56	41.69	41.82
Rated current (Impp / A)	14.69	14.77	14.84	14.92	14.99	15.07
Open circuit voltage (Voc / V)	48.59	48.74	48.89	49.04	49.19	49.34
Short circuit current (Isc / A)	15.86	15.94	16.02	16.11	16.19	16.27
Module efficiency	22.4%	22.6%	22.8%	23.0%	23.1%	23.3%

NMOT: Irradiance 800W/m^2, Ambient Temperature 20° C, AM=1.5, Wind Speed 1m/s

Rated output (Pmpp / Wp)	455.0	458.7	462.5	466.2	470.0	473.8
Rated voltage (Vmpp / V)	38.76	38.88	39.00	39.12	39.24	39.36
Rated current (Impp / A)	11.74	11.80	11.86	11.92	11.98	12.04
Open circuit voltage (Voc / V)	46.15	46.30	46.44	46.58	46.72	46.86
Short circuit current (Isc / A)	12.80	12.87	12.94	13.00	13.07	13.13

Electrical Specifications (Integrated power)

Pmpp gain	Pmpp / Wp	Vmpp / V	Impp / A	Voc / V	Isc / A
5%	646	41.43	15.59	48.89	16.83
10%	677	41.43	16.33	48.89	17.63
15%	707	41.43	17.07	48.89	18.43
20%	738	41.43	17.81	48.89	19.23
25%	769	41.43	18.55	48.89	20.03

Electrical characteristics with different rear power gain (reference to 615W)

Temperature Ratings (STC)

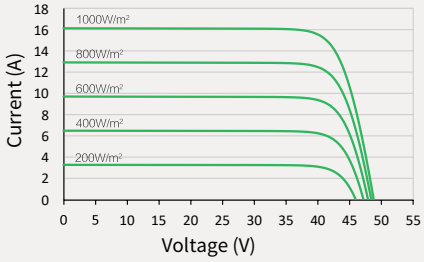
Temperature coefficient (Pmpp)	-0.29%/°C
Temperature coefficient (Isc)	+0.043%/°C
Temperature coefficient (Voc)	-0.25%/°C
Nominal module operating temperature (NMOT)	41±2°C

Operating Parameters

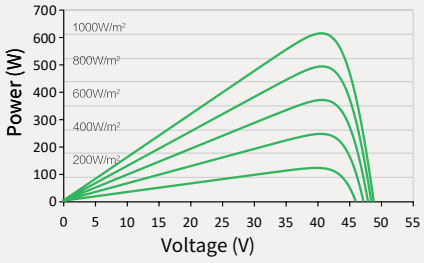
No. of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	35 A
Max. system voltage (IEC/UL)	1500V_{DC}

Curve

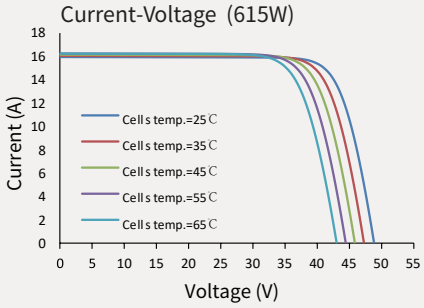
Current-Voltage (615W)



Power-Voltage (615W)



Current-Voltage (615W)



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