



ASTRONERGY

ASTRO 6 Twins

Create Sustainable and Efficient Green Energy

CHSM60M(DG)/F-BH
Bifacial Series (210)

585~600W

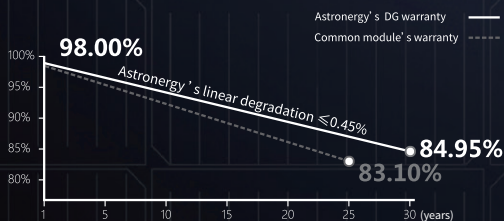
PERC+ / Multi-busbar / Half-cut

Non-destructive cutting

PID resistance

Bifacial gain

Low BOS cost & LCOE



12-year Product Warranty

30-year Linear Power Warranty



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



585~600W

POWER RANGE

0~+5W

POWER SORTING

21.2%

MAX MODULE
EFFICIENCY

≤ 2.0%

FIRST YEAR
POWER DEGRADATION

≤ 0.45%

YEAR 2-30
POWER DEGRADATION

Electrical Specifications

STC: Irradiance 1000W/m², Cell Temperature 25° C, AM=1.5

Rated output (P _{mpp} / Wp)	585	590	595	600
Rated voltage (V _{mpp} / V)	34.00	34.20	34.40	34.61
Rated current (I _{mpp} / A)	17.21	17.26	17.30	17.34
Open circuit voltage (V _{oc} / V)	41.10	41.30	41.50	41.70
Short circuit current (I _{sc} / A)	18.26	18.31	18.36	18.41
Module efficiency	20.7%	20.8%	21.0%	21.2%

NMOT: Irradiance 800W/m², Ambient Temperature 20° C, AM=1.5, Wind Speed 1m/s

Rated output (P _{mpp} / Wp)	437.2	440.9	444.6	448.4
Rated voltage (V _{mpp} / V)	31.68	31.81	31.97	32.13
Rated current (I _{mpp} / A)	13.81	13.86	13.91	13.96
Open circuit voltage (V _{oc} / V)	38.40	38.60	38.80	39.00
Short circuit current (I _{sc} / A)	14.65	14.70	14.75	14.80

Electrical Specifications (Integrated power)

P _{mpp} gain	P _{mpp} / Wp	V _{mpp} / V	I _{mpp} / A	V _{oc} / V	I _{sc} / A
5%	619	34.20	18.12	41.30	19.23
10%	649	34.20	18.99	41.30	20.14
15%	678	34.21	19.85	41.31	21.06
20%	708	34.21	20.71	41.31	21.97
25%	737	34.22	21.58	41.32	22.89

Electrical characteristics with different rear power gain (reference to 590W)

Temperature Ratings (STC)

Temperature coefficient (P _{mpp})	-0.34%/°C	No. of diodes	3
Temperature coefficient (I _{sc})	+0.04%/°C	Junction box IP rating	IP 68
Temperature coefficient (V _{oc})	-0.25%/°C	Max. series fuse rating	35 A
Nominal module operating temperature (NMOT)	41 ± 2°C	Max. system voltage (IEC/UL)	1500V _{DC}

Operating Parameters

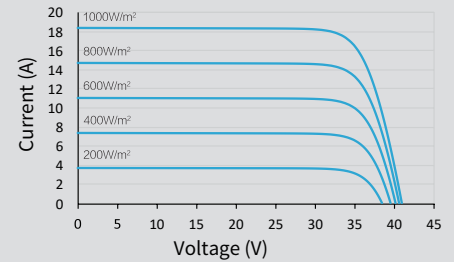
Mechanical Specifications

Outer dimensions (L x W x H)	2172 x 1303 x 35 mm
Cell type	P type mono-crystalline
No. of cells	120 (6*20)
Frame technology	Aluminum, silver anodized
Front / Back glass	2.0+2.0 mm
Cable length (Including connector)	Portrait: (+)410 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)	HC840 (Standard) / MC4-EVO2A (Optional)
Module weight	34.6 kg
Packing unit	31 pcs / box (Subject to sales contract)
Weight of packing unit (for 40' HQ container)	1121 kg
Modules per 40' HQ container	527 pcs

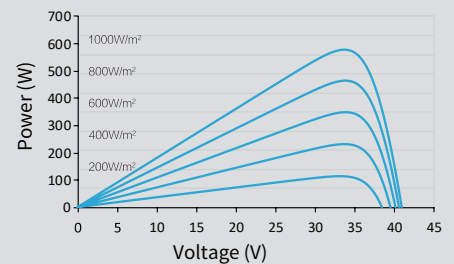
① Refer to Astronergy crystalline installation manual or contact technical department.
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

Curve

Current-Voltage (590W)



Power-Voltage (590W)



Current-Voltage (590W)

