



ASTRONERGY

ASTRO N5s

Create Sustainable and Efficient Green Energy

CHSM54N-HC Monofacial Series (182)

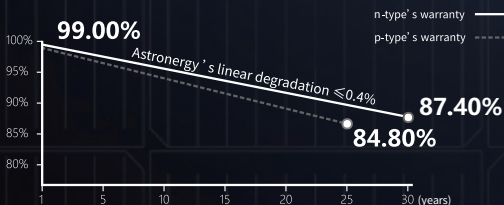
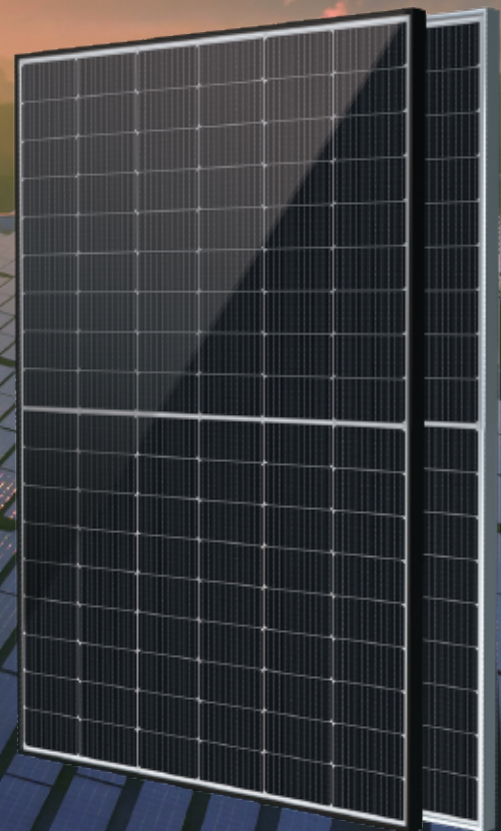
410~425W

TOPCon / Half-cut

Low temperature coefficient (Pmpp)

Non-destructive cutting

Low BOS cost & LCOE



25-year Product Warranty (special for rooftop market)
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



410~425W

POWER RANGE

0~+5W

POWER SORTING

21.8%MAX MODULE
EFFICIENCY**≤ 1.0%**FIRST YEAR
POWER DEGRADATION**≤ 0.4%**YEAR 2-30
POWER DEGRADATION

Electrical Specifications

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

Type	CHSM54N -HC-410	CHSM54N -HC-415	CHSM54N -HC-420	CHSM54N -HC-425
Rated output (Pmpp / Wp)	410	415	420	425
Rated voltage (Vmpp / V)	31.60	31.76	31.93	32.10
Rated current (Impp / A)	12.98	13.06	13.15	13.24
Open circuit voltage (Voc / V)	37.60	37.80	38.00	38.20
Short circuit current (Isc / A)	13.65	13.76	13.87	13.98
Module efficiency	21.0%	21.3%	21.5%	21.8%

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

Rated output (Pmpp / Wp)	308.3	312.1	315.8	319.6
Rated voltage (Vmpp / V)	29.74	29.90	30.06	30.21
Rated current (Impp / A)	10.37	10.44	10.51	10.58
Open circuit voltage (Voc / V)	35.72	35.91	36.10	36.29
Short circuit current (Isc / A)	11.02	11.11	11.20	11.28

Power Sorting: 0~+5W

Measurement tolerance +/- 3%

Temperature Ratings (STC)

Temperature coefficient (Pmpp)	-0.30%/°C	No. of diodes	3
Temperature coefficient (Isc)	+0.043%/°C	Junction box IP rating	IP 68
Temperature coefficient (Voc)	-0.24%/°C	Max. series fuse rating	25 A
Nominal module operating temperature (NMOT)	41±2°C	Max. system voltage (IEC/UL)	1000V _{DC} or 1500V _{DC}
Fire performance	Class C		

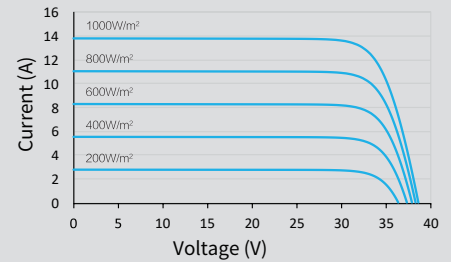
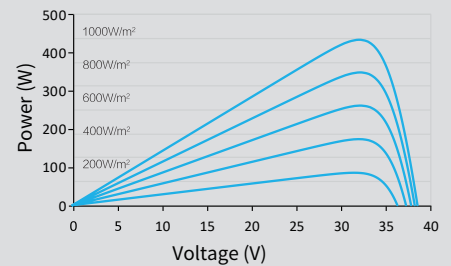
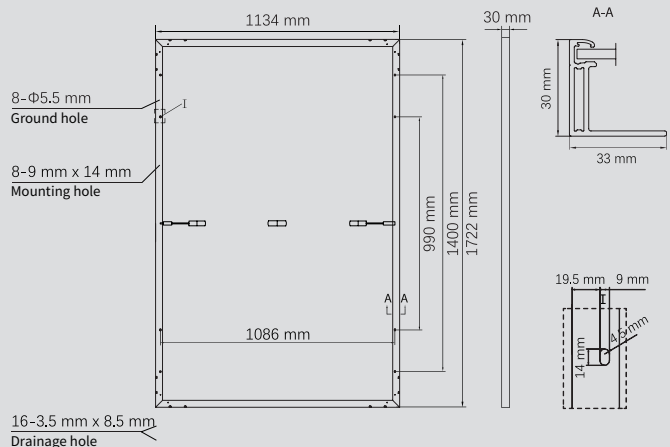
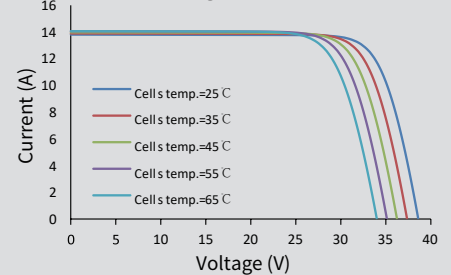
Operating Parameters

Mechanical Specifications

Outer dimensions (L x W x H)	1722 x 1134 x 30 mm
Cell type	n-type mono-crystalline
No. of cells	108 (6*18)
Frame technology	Aluminum, black or silver anodized
Front glass thickness	3.2 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 (Astronergy) or PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy (Stäubli)
Module weight	21.3 kg
Packing unit	36 pcs / box (Subject to sales contract)
Weight of packing unit (for 40' HQ container)	811 kg
Modules per 40' HQ container	936 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 (425W)**Power-Voltage (425W)****Current-Voltage (425W)**

Made in Zhejiang, Jiangsu and Anhui of China.

© Chint New Energy Technology Co., Ltd. Reserves the right of final interpretation. please contact our company to use the latest version for contract.
<http://www.astronergy.com.au>

202212