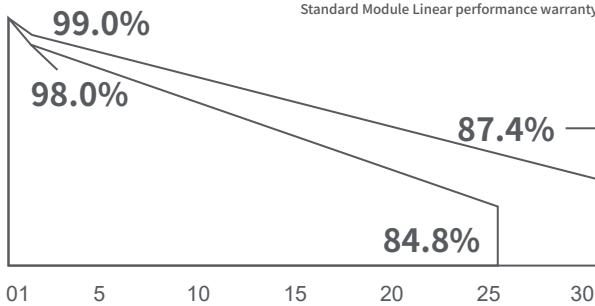


Superior power warranty

CHGMN54D Linear performance warranty
Standard Module Linear performance warranty



N-TOPCon Technology

CHGMN54D

N-type Mono Double Glass
Bifacial All Black PV Module

415-435W

435W
Maximum
Power Output

22.30%
Maximum
Module Efficiency

0~+5W
Positive power
tolerance



Excellent Power Output

Ultra efficient N-type cell technology, the module with higher power and better reliability



Excellent Temperature Coefficient

The product has excellent temperature coefficient, outstanding outdoor power generation performance and longer lifespan



Significant Rearside Power Generation Gain

The rearside of the module effectively utilizes the reflected and scattered light in the environment, the high rearside power gain can reduce the LCOE



No LETID/LID

While achieving efficiency gains in N-type photovoltaic cells, virtually no LID loss



Excellent Irradiance Response

Superior weak-light power generation performance in environments such as early morning, evening, and cloudy conditions.



Aesthetic appearance

108pcs half cells, all black appearance



IEC61215(2016), IEC61730(2016)
ISO14001:2015 Environment Management System
ISO9001:2015: Quality Management System
ISO45001:2018: Occupational health and safety management systems

1.0%
1st year
degradation

0.4%
Linear
attenuation

15 Year
Product
warranty

30 Year
Power
warranty

Electrical Properties | STC*

Peak Power (Pmax/W)	415	420	425	430	435
MPP Voltage (Vmp/V)	31.69	32.02	32.35	32.68	33.01
MPP Current (Imp/A)	13.11	13.12	13.14	13.16	13.18
Open Circuit Voltage (Voc/V)	38.45	38.48	38.54	38.60	38.72
Short Circuit Current (Isc/A)	13.78	13.78	13.79	13.80	13.89
Module Efficiency (%)	21.30	21.50	21.80	22.00	22.30

*STC (Standard Test Conditions): Irradiance 1000 W/m², cell Temperature 25°C, AM 1.5

Mechanical Properties

Cell Type	n-type half cell
Number of Cells	108pcs(12*9)
Module Dimension	1722mm*1134mm*30mm
Weight	21.5kg
Front / Rear Glass	1.6mm/1.6mm
Frame	Anodized Aluminum Alloy
Junction Box	IP68
Output cables	4.0mm ² , +300mm/-300mm or Customized Length

Electrical Properties | NMOT*

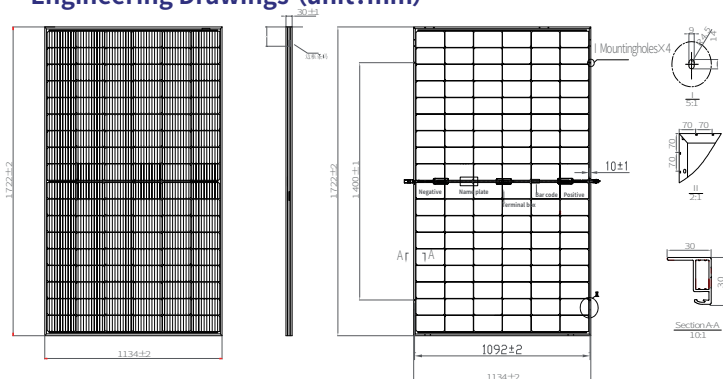
Peak Power (Pmax/W)	313	316	319	322	325
MPP Voltage (Vmp/V)	29.83	30.06	30.27	30.50	30.83
MPP Current (Imp/A)	10.50	10.51	10.53	10.57	10.54
Open Circuit Voltage (Voc/V)	36.38	36.41	36.47	36.51	36.82
Short Circuit Current (Isc/A)	11.10	11.11	11.12	11.13	11.19

*NMOT (Nominal Module Operating Temperature): Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s

Temperature Coefficient

Temperature coefficients of Pmax	-0.29% / °C
Temperature coefficients of Voc	-0.25% / °C
Temperature coefficients of Isc	+0.045% / °C
Nominal Module Operating Temperature	42±2 °C

Engineering Drawings (unit:mm)



Bifacial Output - Rearside power gain (for 430W)

Power gain	10%	15%	20%	25%	30%
Peak Power (Pmax/W)	473.0	494.5	516.0	537.5	559.0
MPP Voltage (Vmp/V)	32.69	32.68	32.78	32.78	32.78
MPP Current (Imp/A)	14.46	15.13	15.74	16.41	17.05
Open Circuit Voltage (Voc/V)	38.61	38.60	38.70	38.71	38.70
Short Circuit Current (Isc/A)	15.17	15.87	16.56	17.25	17.94

Operating Properties

Operating Temperature (°C)	-40°C~+85°C
Maximum System Voltage (V)	1500V DC (IEC)
Maximum Series Fuse Rating (A)	30A
Power Tolerance	0~+5W
Bifaciality	80%±5%
Static load	Snow load 5400Pa, Wind load 2400Pa
Packaging Configuration	36 pcs/pallet, 26 pallet/vehicle 936 piece/vehicle

Characteristic Curves:CHGMN54D

