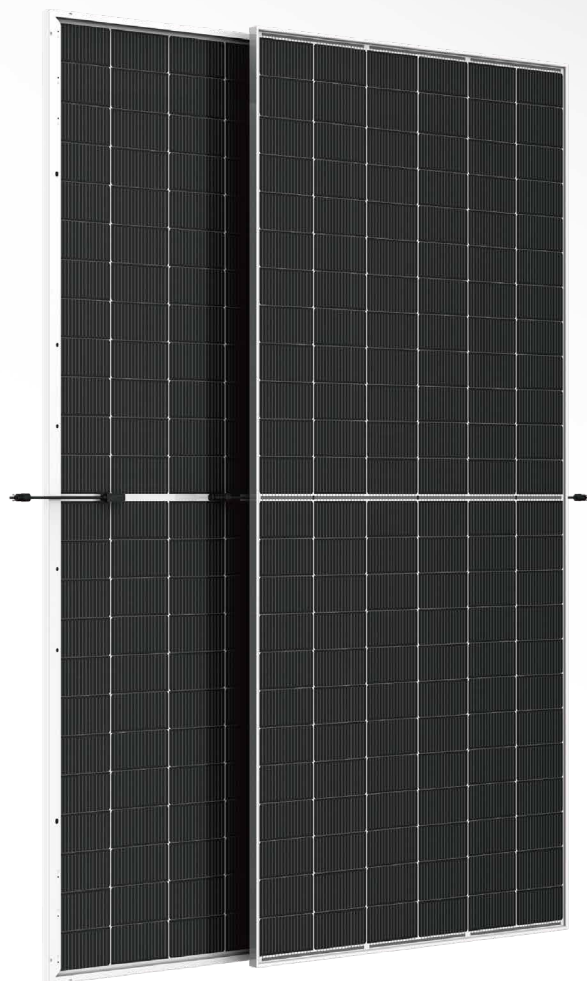
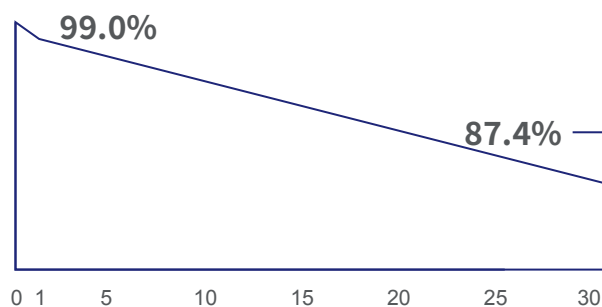




CHGMN72D1
Linear performance warranty



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

CHG ENSOL Efficient PV Module

N-TOPCon Technology

CHGMN72D1

N-type Mono High Efficiency
Double Glass Bifacial PV Module

585-610W

610W

Maximum
Power Output

23.61%

Maximum
Module Efficiency

0~+5W

Positive power
tolerance



Excellent Power Output

Adopting large-sized, highly efficient cell technology and leading manufacturing processes to effectively enhanced product power



Excellent Temperature Coefficient

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



Ultra-multi-busbar Technology

Better light utilization and current collection capability, effectively improving product power output and reliability



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.



High Profitability

Effectively reducing the system's BOS costs, achieving lower cost of electricity, and increasing project return

1.0%
1st year
degradation

0.4%
2-30th annual
degradation

15 Year
material and
workmanship
warranty

30 Year
linear
warranty

Electrical Properties | STC*

Peak Power (Pmax/W)	585	590	595	600	605	610
MPP Voltage (Vmp/V)	44.28	44.49	44.64	44.78	44.91	45.05
MPP Current (Imp/A)	13.21	13.26	13.33	13.40	13.47	13.54
Open Circuit Voltage (Voc/V)	52.72	52.92	53.12	53.32	53.52	53.72
Short Circuit Current (Isc/A)	13.84	13.89	13.96	14.03	14.10	14.17
Module Efficiency (%)	22.65	22.84	23.03	23.23	23.42	23.61

*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	144pcs(2*72)
Module Dimension	2278mm*1134mm*30mm
Weight	31.4kg
Front/back Glass (thickness)	2.0mm high-transmittance coated / 2.0mm heat-strengthened
Frame	Anodized Aluminum Alloy
Junction Box	IP68
Output cables	TUV 1x4.0mm ² , +300mm/-200mm or Customized Length

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

Operating Properties

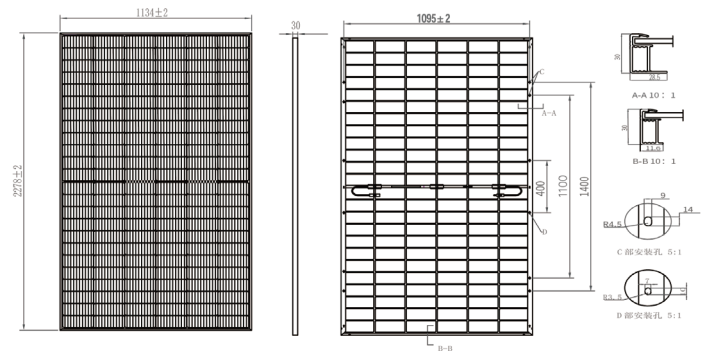
Operating Temperature (°C)	-40°C~+85°C
Maximum System Voltage (V)	1500V DC (IEC)
Maximum Series Fuse Rating (A)	30A
Power Tolerance	0~+5W
Bifaciality	80%±5%
Static load	Snow load 5400Pa Wind load 2400Pa
Packaging Configuration	36pcs/pallet, 720pcs/13m flatcar 36pcs/pallet, 936pcs/17.5m flatcar

Electrical Properties | BNPI*

Peak Power (Pmax/W)	648	654	659	665	670	676
MPP Voltage (Vmp/V)	44.29	44.49	44.65	44.78	44.91	45.06
MPP Current (Imp/A)	14.63	14.70	14.76	14.85	14.92	15.00
Open Circuit Voltage (Voc/V)	52.74	52.94	53.14	53.34	53.54	53.74
Short Circuit Current (Isc/A)	15.33	15.39	15.47	15.55	15.62	15.70

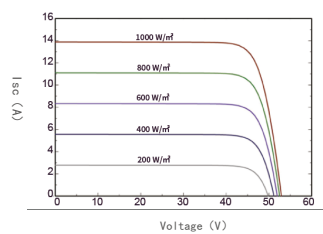
*Bifacial Test Conditions (BNPI): Front-side irradiance 1000W/m², back-side irradiance 135W/m², temperature 25°C, AM1.5

Engineering Drawings (unit:mm)

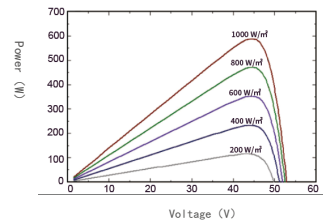


For specific dimensions and tolerance ranges, please refer to the corresponding component drawings.

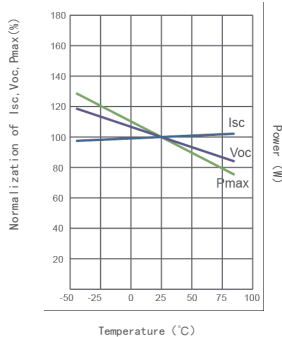
Characteristic Curves: CHGMN72D1



Current and Voltage
Curves under Different
Irradiations



Power and Voltage
Curves under Different
Irradiations



Temperature Curves
of Isc, Voc, Pmax
under Different
Temperatures