

N-TOPCon Technology

CHGMN78D4

N-type Mono High Efficiency
Double Glass Bifacial PV Module

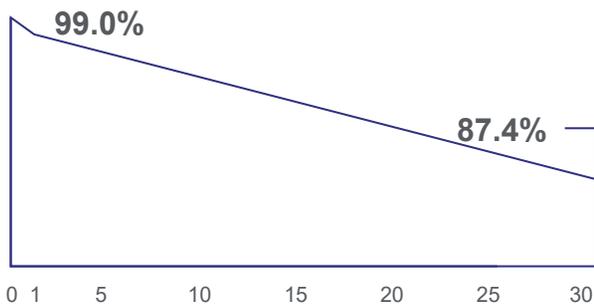
715-740W

740W
Maximum Power Output

23.0%
Maximum Module Efficiency

0~+5W
Positive power tolerance

CHGMN78D4 Linear performance warranty



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



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%
2-30th annual degradation

15 Year
material and workmanship warranty

30 Year
linear warranty

Electrical Properties | STC*

| | | | | | | |
|-------------------------------|-------|-------|-------|-------|-------|-------|
| Peak Power (Pmax/W) | 715 | 720 | 725 | 730 | 735 | 740 |
| MPP Voltage (Vmp/V) | 48.21 | 48.32 | 48.43 | 48.57 | 48.71 | 48.84 |
| MPP Current (Imp/A) | 14.83 | 14.90 | 14.97 | 15.03 | 15.09 | 15.15 |
| Open Circuit Voltage (Voc/V) | 57.32 | 57.52 | 57.72 | 57.92 | 58.12 | 58.32 |
| Short Circuit Current (Isc/A) | 15.72 | 15.79 | 15.86 | 15.92 | 15.98 | 16.04 |
| Module Efficiency (%) | 22.3 | 22.4 | 22.6 | 22.7 | 22.9 | 23.0 |

*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 | 156pcs(2*78) |
| Module Dimension | 2465mm*1303mm*33mm |
| Weight | 39.0kg |
| Front / Rear Glass | 2.0mm/2.0mm |
| Frame | Anodized Aluminum Alloy |
| Junction Box | IP68 |
| Output cables | 4.0mm 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

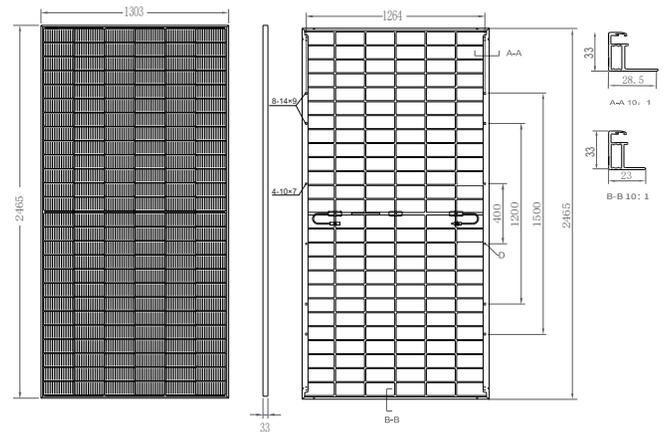
| | |
|--------------------------------|--|
| Operating Temperature (°C) | -40°C~+85°C |
| Maximum System Voltage (V) | 1500V DC (IEC) |
| Maximum Series Fuse Rating (A) | 35A |
| Power Tolerance | 0~+5W |
| Bifaciality | 80%±5% |
| Static load | Snow load 5400Pa, Wind load 2400Pa |
| Packaging Configuration | 33 pcs/pallet, 132 pcs/20 GP 33 pcs/pallet, 264 pcs/40 GP 33 pcs/pallet, 264 pcs/40 HQ |

Electrical Properties | BNPI*

| | | | | | | |
|-------------------------------|-------|-------|-------|-------|-------|-------|
| Peak Power (Pmax/W) | 792 | 798 | 803 | 809 | 814 | 820 |
| MPP Voltage (Vmp/V) | 48.23 | 48.33 | 48.43 | 48.59 | 48.72 | 48.84 |
| MPP Current (Imp/A) | 16.42 | 16.51 | 16.58 | 16.65 | 16.71 | 16.79 |
| Open Circuit Voltage (Voc/V) | 57.34 | 57.54 | 57.74 | 57.94 | 58.14 | 58.34 |
| Short Circuit Current (Isc/A) | 17.42 | 17.50 | 17.57 | 17.64 | 17.71 | 17.77 |

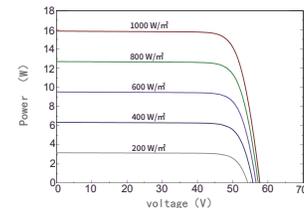
*BNPI: Irradiance: front 1000w/m², rear 135W/m², Cell Temperature 25°C, AM=1.5

Engineering Drawings (unit: mm)

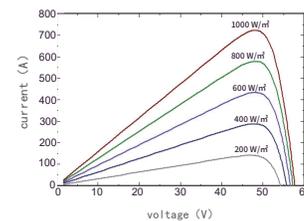


For specific dimensions and tolerance ranges, please refer to the corresponding component drawings.

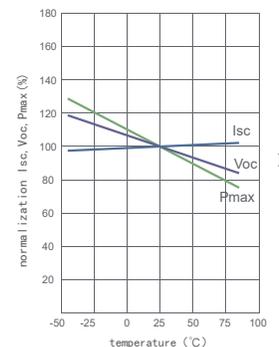
Characteristic Curves: CHGMN78D4



Current and voltage curves under different irradiances



Power and voltage curves under different irradiances



Temperature Curves of Isc, Voc, Pmax under Different Temperatures