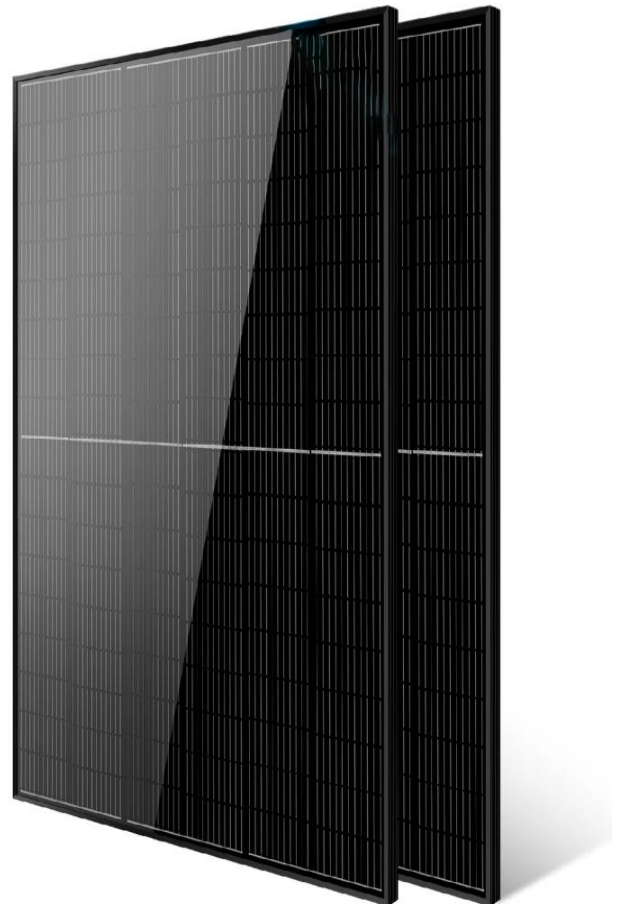


# GEP-JfMcNH Double Glass N-type -MONO-108

435-450W



### N-Technology

N-type modules using Tunnel Oxide Passivating Contacts (TOPCon) technology.



### Bifacial power

Bifacial power generation gain increases with backside exposure to light, significantly reducing LCOE.



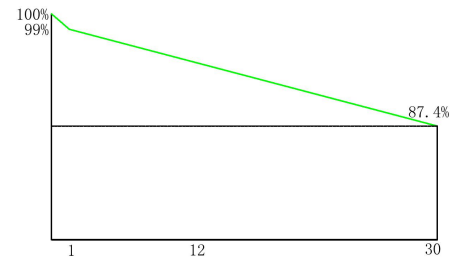
### MBB Technology

Better light trapping and current collection to improve module power output and reliability.



### Load capacity

The complete assembly is certified to a maximum test static load of 5400Pa on the front and 2400Pa on the back.



12-year material workmanship warranty

30-year linear warranty

1% First year power degradation

0.4% Linear power decay

- IEC61215:2021 / IEC61730:2023
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environmental Management System
- ISO45001:2018: Occupational Health and Safety Management System



# GEP-JfMcNH

## MECHANICAL CHARACTERISTICS

Solar Cell	N-type monocrystalline
Number of cells	108 ( 54×2 )
Dimension	1722×1134×30 mm
Weight	24.6 kg
Front Glass	2.0 mm , High-transmittance coated glass
Back Glass	2.0 mm , Half-tempered glass
Frame	Anodized aluminum alloy
Safety Protection Level	Class II
IEC Fire Performance	Class A
Connector type	PV-ZPJ030A
Connector manufacturer	The 40th Institute of China Electronic Technology Group Corporation

## PACKAGING CONFIGURATION

Pallet Dimensions	1750×1130×1251 mm
Packing	40HC: 36pieces per pallet, 26 pallets per truck, 936 pieces per container

## ELECTRICAL SPECIFICATIONS (STC)

Model number	GEP-JfMc435NH	GEP-JfMc440NH	GEP-JfMc445NH	GEP-JfMc450NH
Maximum Power [Pmax /W]	435±3%	440±3%	445±3%	450±3%
Maximum Power Voltage [Vmp/V]	33.28	33.50	33.72	33.92
Maximum Power Cuurent [Imp/A]	13.09	13.15	13.21	13.27
Open-circuit Voltage[Voc /V]	39.47±3%	39.59±3%	39.70±3%	39.81±3%
Short Circuit Current[Isc/A]	14.22±3%	14.28±3%	14.34±3%	14.40±3%
Module efficiency(%)	22.3	22.5	22.8	23.0
Power Tolerance (W)	0 ~ + 5			
Temprature Coefficient (Pmax)	-0.30%/°C			
Temprature Coefficient (Voc)	-0.25%/°C			
Temprature Coefficient (Isc)	0.046%/°C			

## ELECTRICAL SPECIFICATIONS(BNPI)

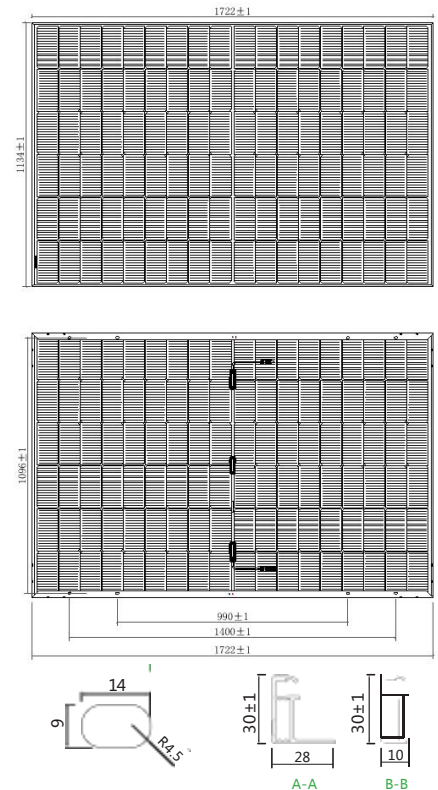
	475±3%	480±3%	485±3%	490±3%
Maximum Power [Pmax /W]				
Open-circuit Voltage[Voc /V]	39.47±3%	39.59±3%	39.70±3%	39.81±3%
Short Circuit Current[Isc/A]	15.64±3%	15.71±3%	15.77±3%	15.84±3%
Bifacial test conditions (BNPI)	Light intensity: front 1000W/m <sup>2</sup> , back 135W/m <sup>2</sup> , ambient temperature 25°C, atmospheric quality 1.5			

## OPERATING PARAMETERS

Operational Temperature	-40°C ~ +85°C(T98max:70°C)
Maximum System Voltage	1500VDC (IEC)
Maximum Series Fuse Rating	30 A
Bifacity	φVoc: 100±3 % , φIsc: 80±5 % , φPmax: 80±5 %

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.

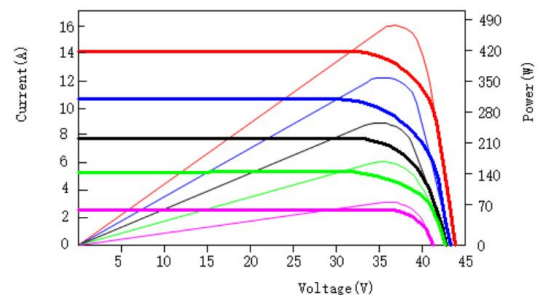
## Dimensions



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

## Curves

### GEP-JfMc450NH



## BIFACIAL OUTPUT-REARSIDE POWER GAIN

	Maximum Power [Pmax /W]	457±3%	462±3%	467±3%	473±3%
5%	Module efficiency STC(%)	23.4	23.7	23.9	24.2
15%	Maximum Power [Pmax /W]	500±3%	506±3%	512±3%	518±3%
	Module efficiency STC(%)	25.6	25.9	26.2	26.5
25%	Maximum Power [Pmax /W]	544±3%	550±3%	556±3%	563±3%
	Module efficiency STC(%)	27.8	28.2	28.5	28.8

Under Standard Test Conditions (STC) of irradiance of 1000 W/m<sup>2</sup>, spectrum AM 1.5 and celtemperature of 25°C.