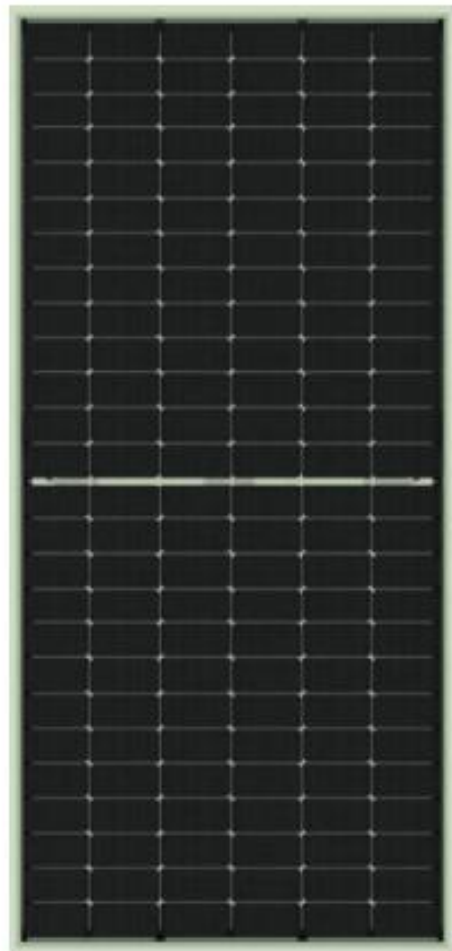




GEp-HfMcNH Double Glass N-type -MONO-156

635-650W



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.



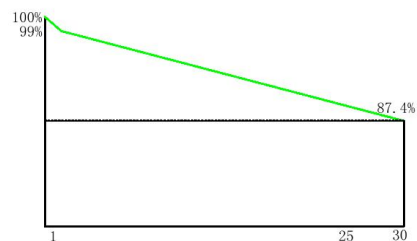
MBB Technology

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.



25-year
material
workman
ship
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-HfMcNH

MECHANICAL CHARACTERISTICS

Solar Cell	N-type monocrystalline
Number of cells	156 (78×2)
Dimension	2465×1134×30 mm
Weight	34.2 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	2495×1130×1251 mm
Packing	40HC: 36pieces per pallet, 16 pallets per truck, 576 pieces per container

ELECTRICAL SPECIFICATIONS (STC)

Model number	GEP-HfMc635NH	GEP-HfMc640NH	GEP-HfMc645NH	GEP-HfMc650NH
Maximum Power [Pmax /W]	635±3%	640±3%	645±3%	650±3%
Maximum Power Voltage [Vmp/V]	48.51	48.67	48.83	48.99
Maximum Power Cuurent [Imp/A]	13.09	13.15	13.21	13.27
Open-circuit Voltage[Voc /V]	57.02±3%	57.18±3%	57.34±3%	57.50±3%
Short Circuit Current[Isc/A]	14.22±3%	14.28±3%	14.34±3%	14.40±3%
Module efficiency(%)	22.7	22.9	23.1	23.3
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)

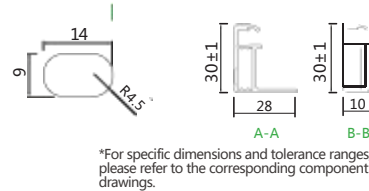
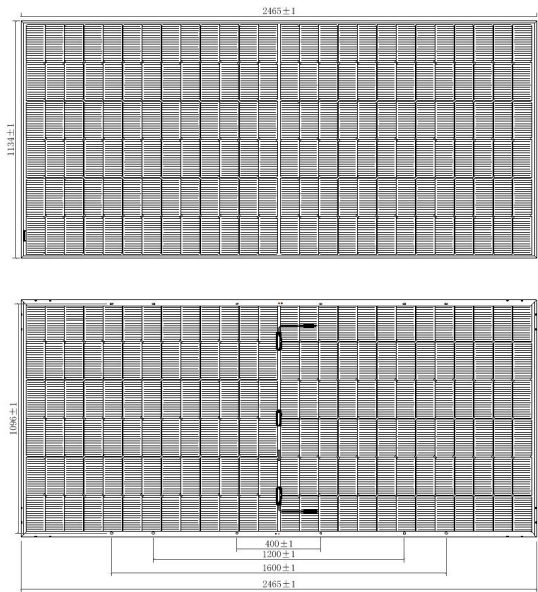
Maximum Power [Pmax /W]	700±3%	705±3%	710±3%	715±3%
Open-circuit Voltage[Voc /V]	57.02±3%	57.18±3%	57.34±3%	57.50±3%
Short Circuit Current[Isc/A]	15.64±3%	15.71±3%	15.77±3%	15.84±3%
Bifacial test conditions (BNPI)	Light intensity: front 1000W/m², back 135W/m², ambient temperature 25°C, atmospheric quality 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/m2, Cell Temperature 25°C, Air Mass AM1.5.

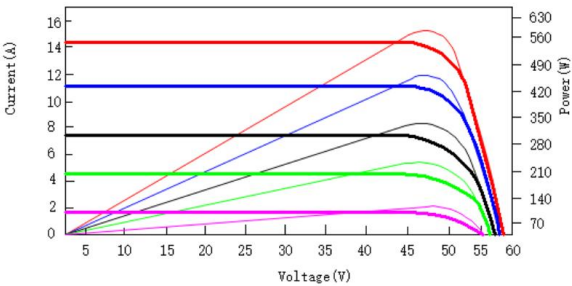
Dimensions



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

Curves

GEP-HfMc635NH



BIFACIAL OUTPUT-REARSIDE POWER GAIN

5%	Maximum Power [Pmax /W]	667±3%	672±3%	677±3%	683±3%
	Module efficiency STC(%)	23.9	24.0	24.2	24.4
15%	Maximum Power [Pmax /W]	730±3%	736±3%	742±3%	748±3%
	Module efficiency STC(%)	26.1	26.3	26.5	26.7
25%	Maximum Power [Pmax /W]	794±3%	800±3%	806±3%	813±3%
	Module efficiency STC(%)	28.4	28.6	28.8	29.1

Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and celtemperature of 25°C.