

Photon

Double Glass N-type-HJT-MONO-132



N-Technology

N-type modules using Tunnel Oxide Passivating Contacts (TOPCon) technology have lower LID/LeTID attenuation and excellent low light performance.



Bifacial power

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



SMBB Technology

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



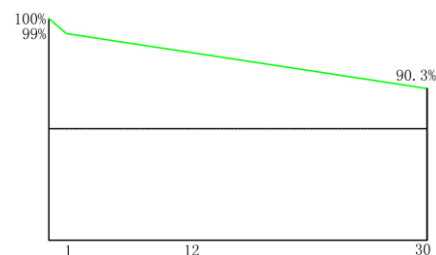
Load capacity

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



PID Resistance

Through the cell production technology optimization and material control to minimize the decline caused by the PID phenomenon



12-year
material
workman
ship
warranty

30-year
linear
warranty

1% First
year
power
degradation

0.3%
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



Photon

GEO-HG12R-66D

MECHANICAL CHARACTERISTICS

Solar Cell	N-type HJT monocrystalline
Number of cells	132 (66×2)
Dimension	2382×1134×33 mm
Weight	34.5 kg
Front Glass	2.0 mm, High-transmittance coated glass
Back Glass	2.0 mm, Half-tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 Rated
Safety Protection Level	Class II
IEC Fire Performance	Class A
Connector	MC4/Others
Cable	4.0mm ² solar cable (+): 300 mm, (-): 300 mm; Or Customized

PACKAGING CONFIGURATION

Pallet Dimensions	2400×1140×1251 mm
Packing	40HC: 36pieces per pallet, 20 pallets per truck, 720 pieces per container

ELECTRICAL SPECIFICATIONS (STC)

Maximum Power [Pmax /W]	610	615	620	625	630	635
Maximum Power Voltage [Vmp/V]	40.85	40.96	41.05	41.14	41.23	41.32
Maximum Power Cuurent [Imp/A]	14.95	15.03	15.12	15.21	15.30	15.39
Open-circuit Voltage[Voc /V]	48.94	49.05	49.15	49.25	49.34	49.43
Short Circuit Current[Isc/A]	15.76	15.86	15.96	16.06	16.16	16.26
Module efficiency(%)	22.6	22.8	23.0	23.1	23.3	23.5
Power Tolerance (W)	0 ~ + 3%					
Temprature Coefficient (Pmax)	-0.24%/°C					
Temprature Coefficient (Voc)	-0.22%/°C					
Temprature Coefficient (Isc)	0.04%/°C					

ELECTRICAL SPECIFICATIONS(BNPI)

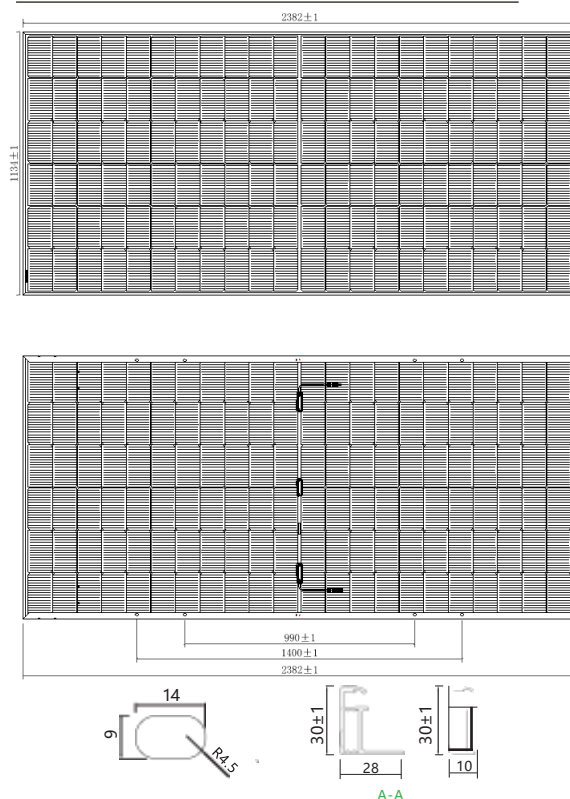
Maximum Power [Pmax /W]	685	690	695	700	705	710
Open-circuit Voltage[Voc /V]	49.11	49.22	49.32	49.42	49.51	49.60
Short Circuit Current[Isc/A]	17.67	17.79	17.90	18.01	18.12	18.24
Bifacial test conditions (BNPI)	Light intensity: front 1000W/m ² , back 135W/m ² , ambient temperature 25°C, atmospheric quality 1.5					

OPERATING PARAMETERS

Operational Temperature	-40°C ~ +85°C
Maximum System Voltage	1500VDC (IEC)
Maximum Series Fuse Rating	30 A
Bifacility	φVoc: 98±3 %, φIsc: 80±3 %, φPmax: 80±3 %

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

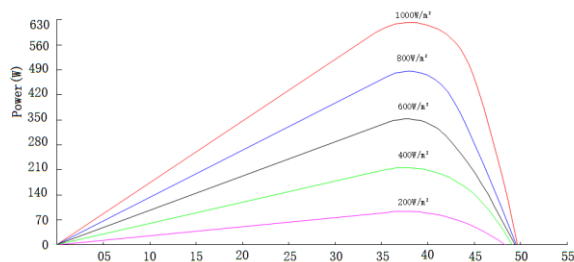
Dimensions



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

Curves

P-V Curves of PV Module HG12R-66D620w



I-V Curves of PV Module HG12R-66D620W

