

GEO-BI-650

625-650 Watt

BIFACIAL MODULE WITH DUAL GLASS

N-type



N-type Technology

N-type modules with Tunnel Oxide Passivating Contacts (TOPcon) technology offer lower LID/LeTID degradation and better low light performance.



Dual-Sided Power Generation

Dual-sided 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.



HOT 3.0 Technology

N-type modules with JinkoSolar's HOT 3.0 technology offer better reliability and efficiency.



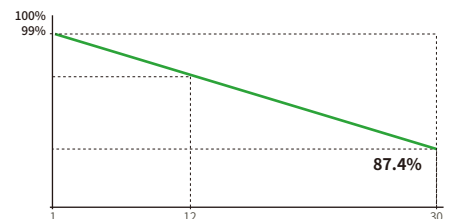
Mechanical Load Enhanced

Certified to withstand:
5400 Pa front side max static test load
2400 Pa rear side max static test load



Anti-PID Guarantee

Minimizes the chance of degradation caused by PID phenomena through optimization of cell production technology and material control.



12 Year
Product Warranty

30 Year
Linear Power
Warranty

1%
First-year
Degradation

0.40%
Annual Degradation
Over 30 Years

- IEC61215:2021 / IEC61730:2023
- IEC61701 / IEC62716 / IEC60068 / IEC62804
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018: Occupational health and safety management systems



GEO-BI-650 (625-650 Watt)

Mechanical Characteristics

Cell Type	N- type Mono-crystalline
No. of cells	156 (78×2)
Dimensions	2465×1134×30 mm
Weight	34.0 kg
Front Glass	2.0 mm, Anti-reflection Coating
Back Glass	2.0 mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Protection Class	Class II
IEC Fire Type	Class C
Connector Type	JK03M/MC4/Others
Output Cables	4.0 mm ² (+): 400 mm , (-): 200 mm or Customized Length

Packaging Configuration

Pallet Dimentions	2525×1140×1251 mm
Packing Detail (Two pallets = One stack)	36 pcs/pallets, 72 pcs/stack, 576 pcs/ 40'HQ Container

Specifications (STC)

Maximum Power - Pmax [Wp]	625	630	635	640	645	650
Maximum Power Voltage - Vmp [V]	47.54	47.70	47.86	48.02	48.17	48.33
Maximum Power Current - Imp [A]	13.15	13.21	13.27	13.33	13.39	13.45
Open-circuit Voltage - Voc [V]	56.95	57.08	57.21	57.34	57.47	57.60
Short-circuit Current - Isc [A]	13.80	13.86	13.92	13.98	14.04	14.10
Module Efficiency STC [%]	22.36	22.54	22.72	22.90	23.07	23.25
Power Tolerance	0 ~ + 3 %					
Temperature Coefficients of Pmax	-0.29 %/°C					
Temperature Coefficients of Voc	-0.25 %/°C					
Temperature Coefficients of Isc	0.045 %/°C					

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

Specifications (BNPI)

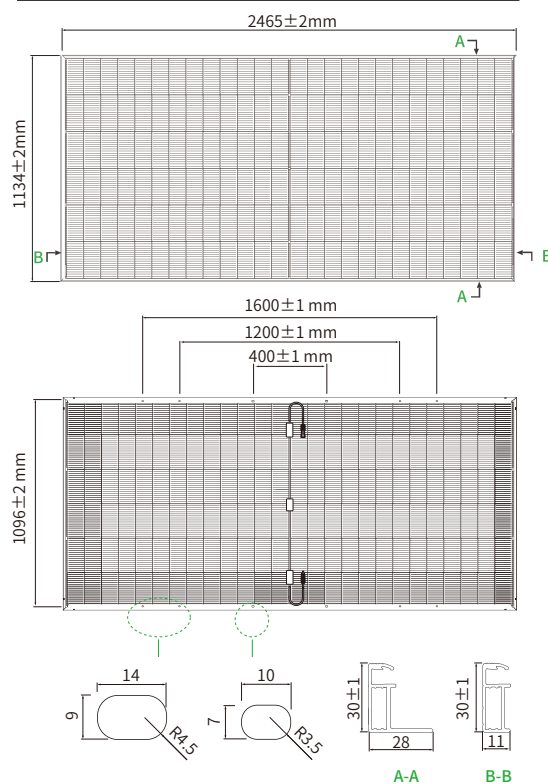
Maximum Power - Pmax [Wp]	688	693	699	704	710	716
Maximum Power Voltage - Vmp [V]	47.57	47.73	47.91	48.06	48.23	48.40
Maximum Power Current - Imp [A]	14.46	14.52	14.59	14.65	14.72	14.79
Open-circuit Voltage - Voc [V]	57.00	57.14	57.28	57.42	57.56	57.70
Short-circuit Current - Isc [A]	15.19	15.27	15.35	15.43	15.51	15.59

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

Application Conditions

Operating Temperature	-40 °C ~ +70 °C
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	30 A
Bifaciality Coefficient	φVoc: 98±5 %, φIsc: 80±5 %, φPmax: 80±5 %

Engineering Drawings



*Note: For specific dimensions and tolerance ranges, please refer to the corresponding detailed module drawings.

Electrical Performance & Temperature Dependence

