



# GEO-M-460

**435-460 Watt**  
MONO-FACIAL MODULE

**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.



## Durability Against Extreme Environment

High salt mist and ammonia resistance.



## 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.



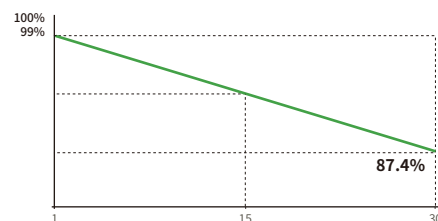
## Mechanical Load Enhanced

Certified to withstand:  
6000 Pa front side max static test load  
4000 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.



**15Year** Product Warranty | **30Year** 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-M-460 ( 435-460 Watt )

## Mechanical Characteristics

Cell Type	N -type Mono-crystalline
No. of cells	108 (54×2)
Dimensions	1762×1134×30 mm
Weight	21.0 kg
Front Glass	3.2mm, Anti-reflection Coating, High Transmission, Low Iron, Tempered 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 <sup>2</sup> (+): 400 mm , (-): 200 mm or Customized Length

## Packaging Configuration

Pallet Dimensions	1792×1140×1249 mm
Packing detail (Two pallets=One stack)	37 pcs/pallets, 74 pcs/stack, 962 pcs/ 40'HQ Container

## Specifications (STC)

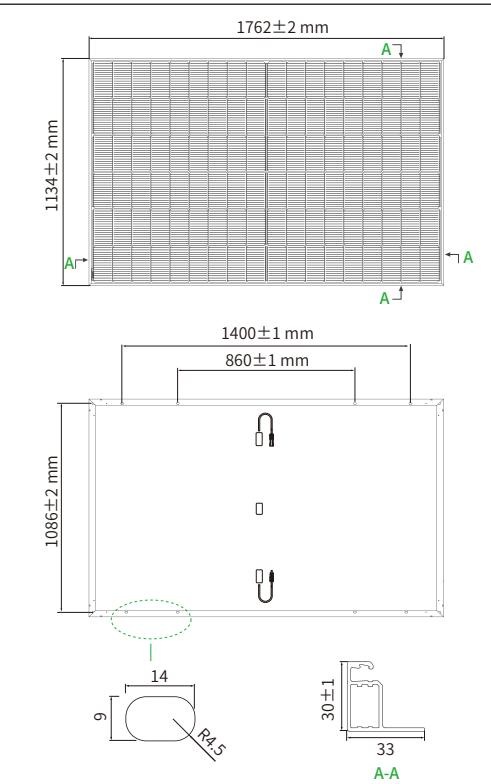
Maximum Power – Pmax [Wp]	435	440	445	450	455	460
Maximum Power Voltage – Vmp [V]	32.59	32.81	33.02	33.21	33.41	33.60
Maximum Power Current – Imp [A]	13.35	13.41	13.48	13.55	13.62	13.69
Open-circuit Voltage – Voc [V]	39.16	39.38	39.59	39.78	39.98	40.17
Short-circuit Current – Isc [A]	13.80	13.86	13.93	14.00	14.07	14.14
Module Efficiency STC [%]	21.77	22.02	22.27	22.52	22.77	23.02
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/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Application Conditions

Operating Temperature	-40 °C ~ +70°C
Maximum System Voltage	1000/1500 VDC (IEC)
Maximum Series Fuse Rating	25 A

## Engineering Drawings



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

## Electrical Performance

