

TIGER Neo



48HL4M-DV

450-475 Watt

MONO-FACIAL MODULE
WITH DUAL GLASS

N-type



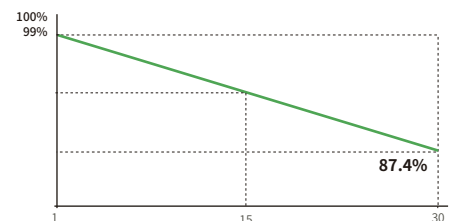
N-type Technology

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



HOT 3.0 Technology

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



15 Year Product Warranty | **30 Year** Linear Power Warranty | **1%** First-year Degradation | **0.40%** Annual Degradation Over 30 Years



Durability Against Extreme Environment

High salt mist and ammonia resistance.



Mechanical Load Enhanced

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



SMBB Technology

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



Anti-PID Guarantee

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

- 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



JKM450-475N-48HL4M-DV-Z2-EN

48HL4M-DV 450-475 Watt

Mechanical Characteristics

| | |
|--|---|
| Cell Type | N- type Mono-crystalline |
| No. of cells | 96 (48×2) |
| Dimensions | 1762×1134×30 mm |
| Weight | 24.0 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/JK03M2/Others* |
| Output Cables (Including Connector) | 4.0 mm ² (+): 400 mm , (-): 200 mm or Customized Length |

* MC4 and MC4-EVO2 available upon request and subject to availability

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)

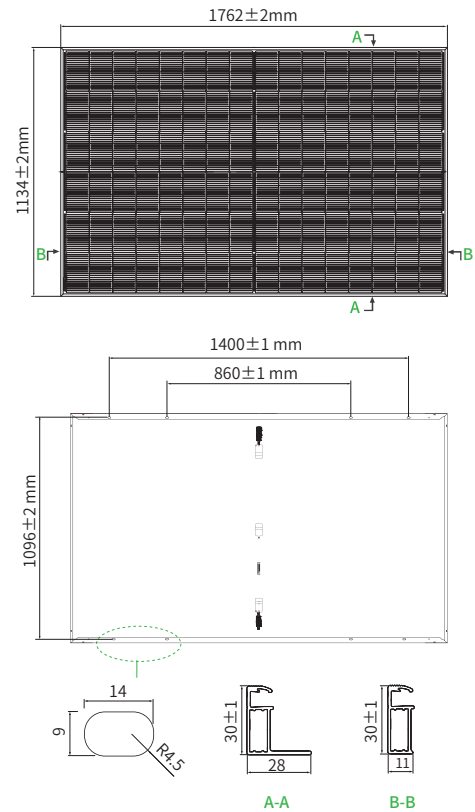
| | | | | | | |
|----------------------------------|------------|-------|-------|-------|-------|-------|
| Maximum Power - Pmax [Wp] | 450 | 455 | 460 | 465 | 470 | 475 |
| Maximum Power Voltage - Vmp [V] | 30.04 | 30.28 | 30.51 | 30.74 | 30.97 | 31.19 |
| Maximum Power Current - Imp [A] | 14.98 | 15.03 | 15.08 | 15.13 | 15.18 | 15.23 |
| Open-circuit Voltage - Voc [V] | 35.88 | 36.05 | 36.22 | 36.39 | 36.56 | 36.73 |
| Short-circuit Current - Isc [A] | 15.83 | 15.88 | 15.93 | 15.98 | 16.03 | 16.08 |
| Module Efficiency STC [%] | 22.52 | 22.77 | 23.02 | 23.27 | 23.52 | 23.77 |
| 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

Application Conditions

| | |
|----------------------------|-----------------|
| Operating Temperature | -40 °C ~ +70 °C |
| Maximum System Voltage | 1500 VDC (IEC) |
| Maximum Series Fuse Rating | 30 A |

Engineering Drawings



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

Electrical Performance

