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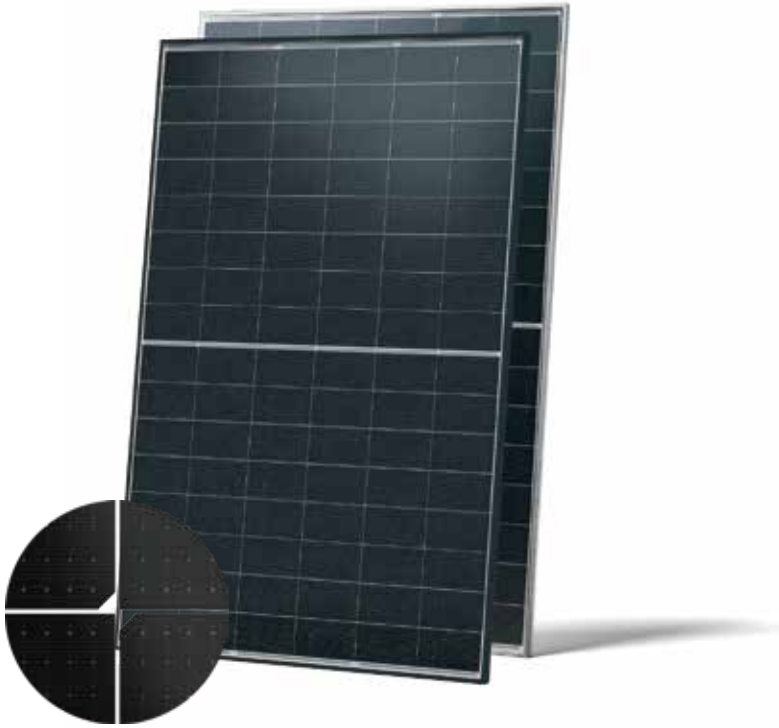
TIGER Neo

48HL4M-BDV

445-470 Watt

BIFACIAL MODULE WITH DUAL GLASS

N-type

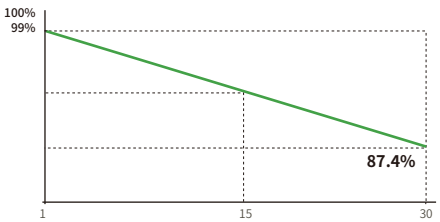


N-type Technology

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

HOT 3.0 Technology

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



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

Dual-Sided Power Generation

Dual-sided power generation gain increases with backside exposure to light, significantly reducing LCOE.

Mechanical Load Enhanced

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

- 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

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.

CLEAN ENERGY COUNCIL MEMBER

POSITIVE QUALITY™ Continuous Quality Assurance

JKM445-470N-48HL4M-BDV-Z1-EN

48HL4M-BDV 445-470 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 mm² (+): 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]	445	450	455	460	465	470
Maximum Power Voltage - Vmp [V]	30.30	30.53	30.77	31.00	31.23	31.46
Maximum Power Current - Imp [A]	14.69	14.74	14.79	14.84	14.89	14.94
Open-circuit Voltage - Voc [V]	36.02	36.19	36.36	36.53	36.70	36.87
Short-circuit Current - Isc [A]	15.60	15.65	15.70	15.75	15.80	15.85
Module Efficiency STC [%]	22.27	22.52	22.77	23.02	23.27	23.52
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)

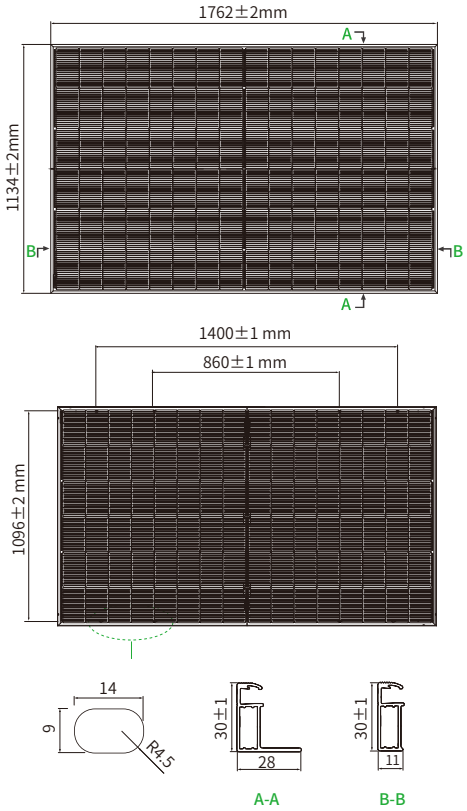
Maximum Power - Pmax [Wp]	493	498	504	509	515	520
Maximum Power Voltage - Vmp [V]	30.30	30.53	30.77	31.00	31.23	31.46
Maximum Power Current - Imp [A]	16.26	16.32	16.37	16.43	16.48	16.54
Open-circuit Voltage - Voc [V]	36.02	36.19	36.36	36.53	36.70	36.87
Short-circuit Current - Isc [A]	17.27	17.32	17.38	17.44	17.49	17.55

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

Application Conditions

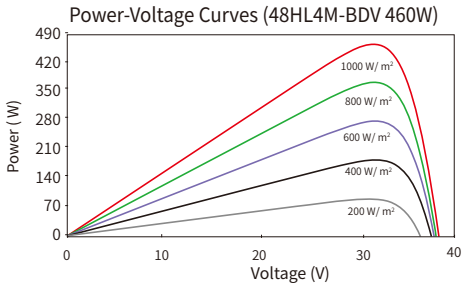
Operating Temperature	-40 °C ~ +70 °C
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	35 A
Bifaciality Coefficient	φVoc: 98±5 %, φIsc: 80±5 %, φPmax: 80±5 %

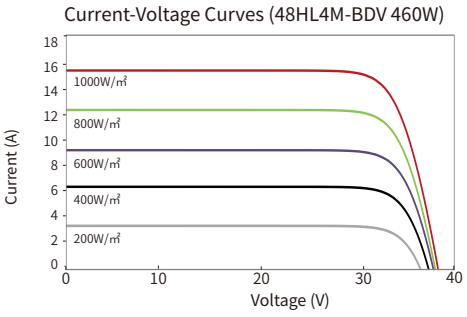
Engineering Drawings



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

Electrical Performance





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Note: Please read the safety and installation manual before using the product. We reserve the right of final interpretation. The specifications in this datasheet are subject to change without notice.