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TIGER Neo

54HL4R-BDB

425-450 Watt

ALL BLACK 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.

Dual-Sided Power Generation

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

Mechanical Load Enhanced

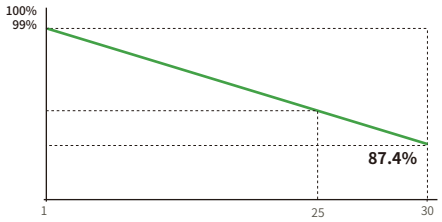
Certified to withstand:
6000 Pa front side max static test load
4000 Pa rear side max static test load

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.



25Year 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

JKM425-450N-54HL4R-BDB-F3-EN

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Mechanical Characteristics

Cell Type	N- type Mono-crystalline
No. of cells	108 (54×2)
Dimensions	1762×1134×30 mm
Weight	24.5 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 mm² (+): 400 mm , (-): 200 mm or Customized Length

Packaging Configuration

Pallet Dimentions	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]	425	430	435	440	445	450
Maximum Power Voltage - Vmp [V]	32.90	33.08	33.26	33.44	33.61	33.79
Maximum Power Current - Imp [A]	12.92	13.00	13.08	13.16	13.24	13.32
Open-circuit Voltage - Voc [V]	39.23	39.43	39.63	39.83	40.03	40.23
Short-circuit Current - Isc [A]	13.77	13.84	13.91	13.98	14.05	14.12
Module Efficiency STC [%]	21.27	21.52	21.77	22.02	22.27	22.52
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)

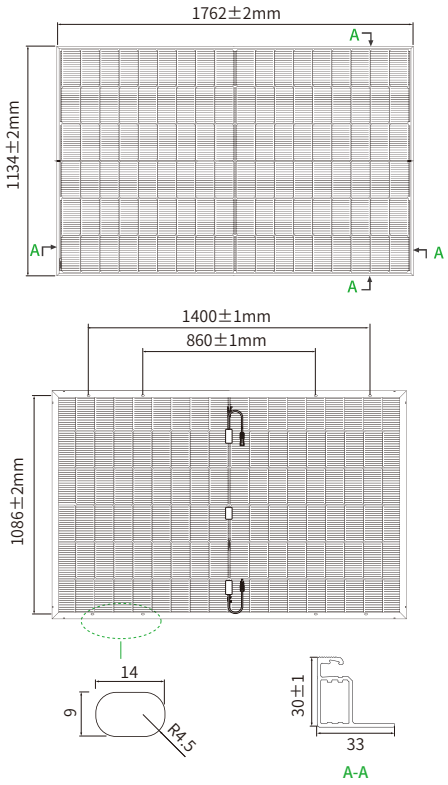
Maximum Power - Pmax [Wp]	469	474	480	485	491	496
Maximum Power Voltage - Vmp [V]	32.91	33.06	33.26	33.41	33.61	33.76
Maximum Power Current - Imp [A]	14.25	14.34	14.43	14.52	14.60	14.69
Open-circuit Voltage - Voc [V]	39.23	39.43	39.63	39.83	40.03	40.23
Short-circuit Current - Isc [A]	15.16	15.24	15.32	15.40	15.48	15.56

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 Coefficent	φVoc: 98±5 %, φIsc: 80±5 %, φPmax: 80±5 %

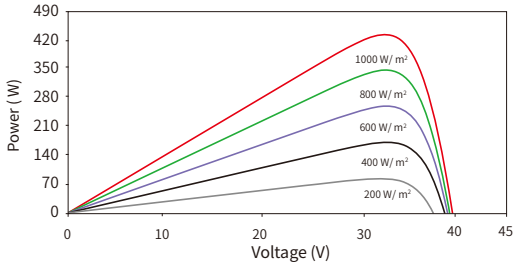
Engineering Drawings



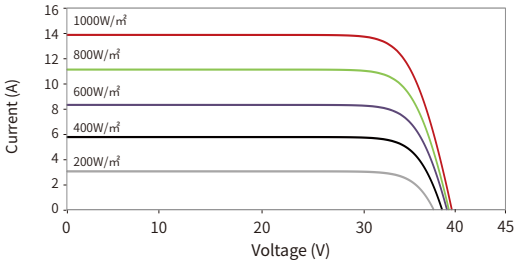
*Note: For specific dimensions and tolerance ranges, please refer to the corresponding detailed module drawings.

Electrical Performance

Power-Voltage Curves (54HL4R-BDB 440W)



Current-Voltage Curves (54HL4R-BDB 440W)



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.