

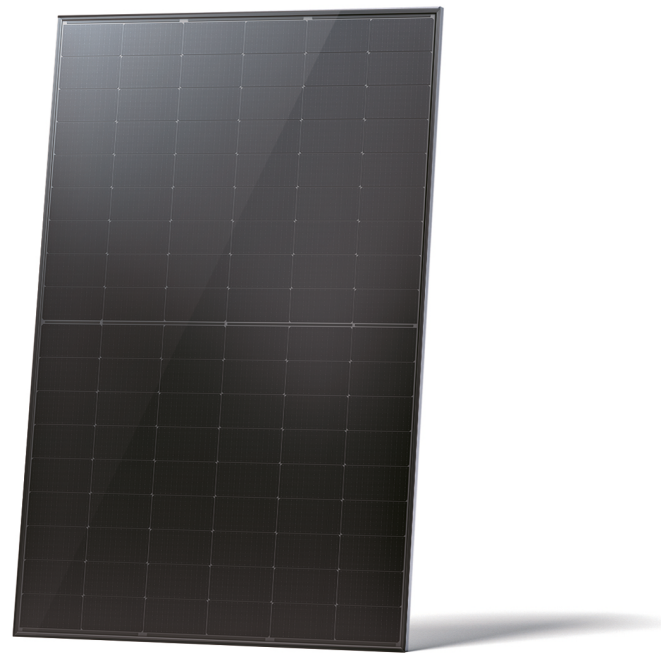
# TIGER Neo

## 54HL4R-BDB

425-445 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 2.0 Technology

N-type modules with JinkoSolar's HOT 2.0 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



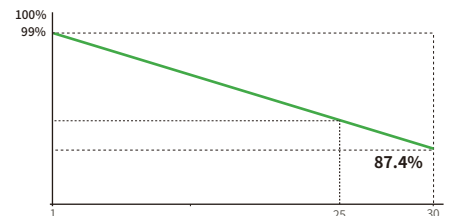
### SMBB Technology

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.



<b>25 Year</b> Product Warranty	<b>30 Year</b> Linear Power Warranty	<b>1%</b> First-year Degradation	<b>0.4%</b> Annual Degradation Over 30 Years
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- IEC61215 (2016) / IEC61730 (2016)
- IEC61701 / IEC62716 / IEC60068 / IEC62804
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018: Occupational health and safety management systems



**JKM425-445N-54HL4R-BDB-F2-EN**

# 54HL4R-BDB 425-445 Watt

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

## Specifications (NOCT)

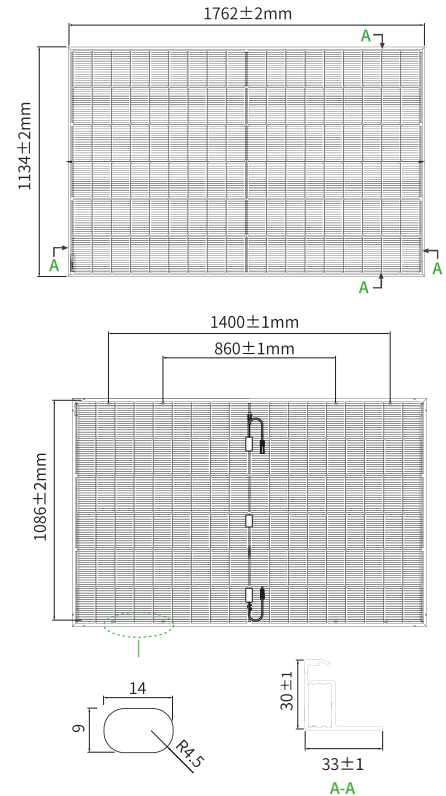
Maximum Power - Pmax [Wp]	320	324	328	332	335
Maximum Power Voltage - Vmp [V]	30.33	30.51	30.69	30.90	31.11
Maximum Power Current - Imp [A]	10.56	10.62	10.68	10.73	10.78
Open-circuit Voltage - Voc [V]	37.26	37.45	37.64	37.83	38.02
Short-circuit Current - Isc [A]	11.12	11.17	11.23	11.28	11.34

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

## Application Conditions

Operating Temperature	-40 °C ~ +85 °C
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	30 A
Nominal Operating Cell Temperature -NOCT	45 ± 2 °C
Refer. Bifacial Factor	80 ± 5 %

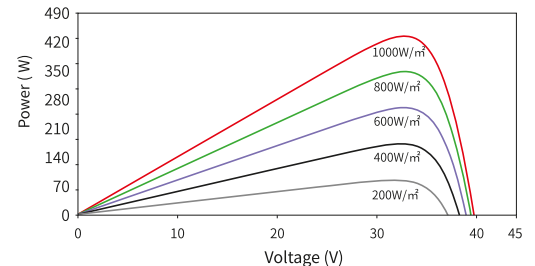
## Engineering Drawings



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

## Electrical Performance

Power-Voltage Curves (54HL4R-BDB 435 W)



Current-Voltage Curves (54HL4R-BDB 435 W)

