

# TIGER Neo

## 54HL4R-BDV

### 425-450 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.



### 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



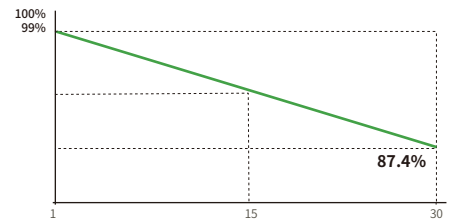
### SMBB Technology

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.



**30 Year**  
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-BDV-F4-EN**

# 54HL4R-BDV 425-450 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                                                               |
| Connector Type   | JK03M,JK03M02(JinKO)/MC4-EVO2(Staubli)                                |
| Output Cables    | 4.0 mm <sup>2</sup><br>(+): 400 mm , (-): 200 mm or Customized Length |

## Packaging Configuration

|                                             |                                                           |
|---------------------------------------------|-----------------------------------------------------------|
| Pallet Dimentions                           | 1792×1120×1249 mm                                         |
| Packing Detail<br>(Two pallets = One stack) | 36 pcs/pallets, 72 pcs/stack,<br>936 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/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

## Specifications (BNPI)

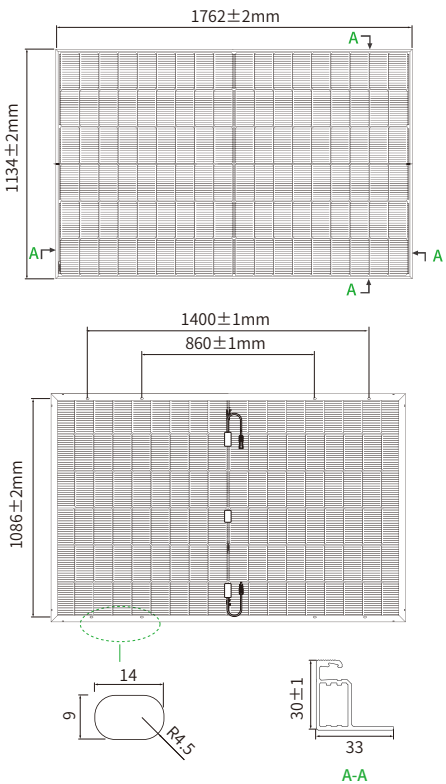
|                                 |       |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|-------|
| Maximum Power - Pmax [Wp]       | 469   | 474   | 480   | 485   | 491   | 496   |
| Maximum Power Voltage - Vmp [V] | 32.91 | 33.06 | 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/m<sup>2</sup>, rear 135W/m<sup>2</sup>, 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 Coefficient    | φVoc: 98±5 %, φIsc: 80±5 %, φPmax: 80±5 % |

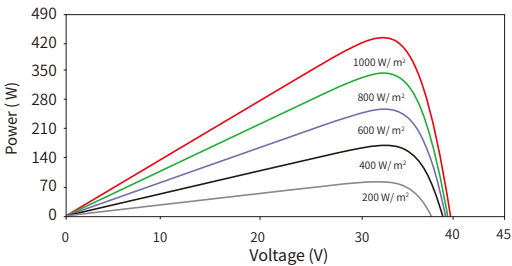
## Engineering Drawings



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

## Electrical Performance

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



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

