

Tiger Neo N-type 54HL4R-BDV 420-440 Watt BIFACIAL MODULE WITH DUAL GLASS

N-Type

Positive power tolerance of 0~+3%

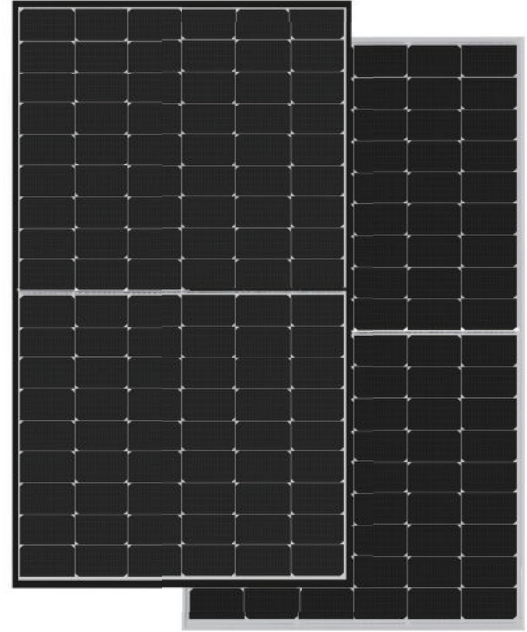
IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018

Occupational health and safety management systems



Key Features



SMBB Technology

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



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.



Hot 2.0 Technology

The N-type module with Hot 2.0 technology has better reliability and lower LID/LeTID.

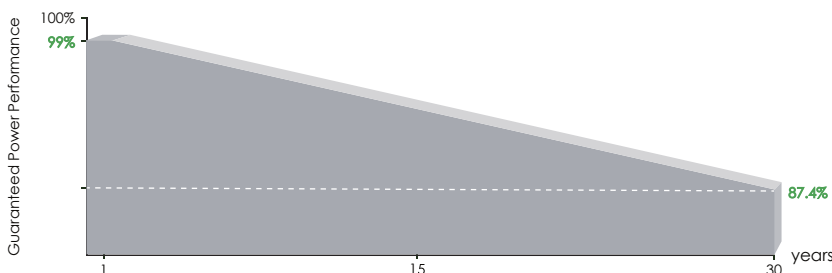


Enhanced Mechanical Load

Certified to withstand: wind load (4000 Pascal) and snow load (6000 Pascal).



LINEAR PERFORMANCE WARRANTY

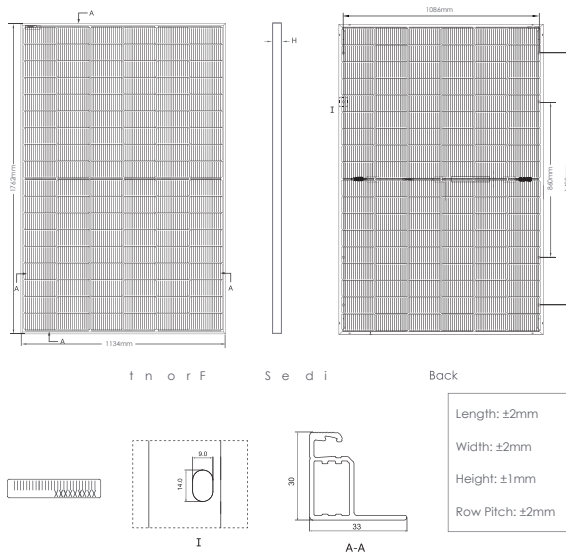


15 Year Product Warranty

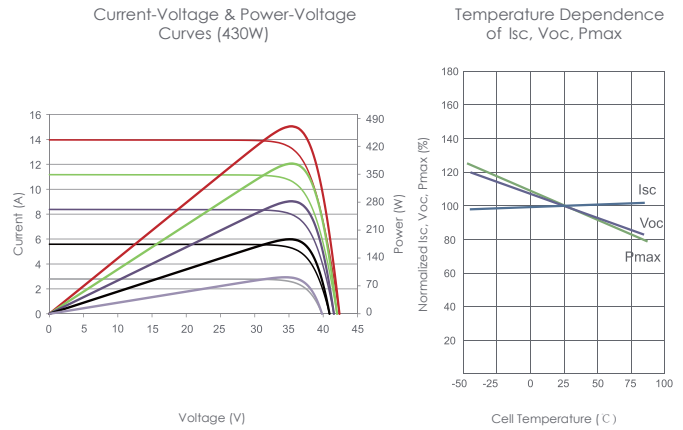
30 Year Linear Power Warranty

0.40% Annual Degradation Over 30 years

Engineering Drawings



Electrical Performance & Temperature Dependence



Mechanical Characteristics

| | |
|---------------|---|
| Cell Type | N type Mono-crystalline |
| No. of cells | 108 (2×54) |
| Dimensions | 1762×1134×30mm (69.37×44.65×1.18 inch) |
| Weight | 22.0 kg (48.50 lbs) |
| Front Glass | 1.6mm, Anti-Reflection Coating |
| Back Glass | 1.6mm, Heat Strengthened Glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68 Rated |
| Output Cables | TUV 1×4.0mm ² (+): 400mm, (-): 200mm or Customized Length |

Packaging Configuration

[Two pallets = One stack]

36pcs/pallets, 72pcs/stack, 936pcs/ 40'HQ Container

SPECIFICATIONS

| Module Type | JKM420N-54HL4R-BDV | | JKM425N-54HL4R-BDV | | JKM430N-54HL4R-BDV | | JKM435N-54HL4R-BDV | | JKM440N-54HL4R-BDV | |
|---|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|
| | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum Power (Pmax) | 420Wp | 316Wp | 425Wp | 320Wp | 430Wp | 323Wp | 435Wp | 327Wp | 440Wp | 331Wp |
| Maximum Power Voltage (Vmp) | 31.68V | 29.57V | 31.86V | 29.73V | 32.04V | 29.94V | 32.23V | 30.12V | 32.40V | 30.27V |
| Maximum Power Current (Imp) | 13.26A | 10.68A | 13.34A | 10.75A | 13.42A | 10.80A | 13.50A | 10.86A | 13.58A | 10.93A |
| Open-circuit Voltage (Voc) | 38.18V | 36.26V | 38.38V | 36.45V | 38.58V | 36.64V | 38.79V | 36.84V | 38.98V | 37.02V |
| Short-circuit Current (Isc) | 14.03A | 11.33A | 14.11A | 11.39A | 14.19A | 11.46A | 14.27A | 11.52A | 14.35A | 11.59A |
| Module Efficiency STC (%) | 21.02% | | 21.27% | | 21.52% | | 21.77% | | 22.02% | |
| Operating Temperature(°C) | -40°C~+85°C | | | | | | | | | |
| Maximum system voltage | 1500VDC (IEC) | | | | | | | | | |
| Maximum series fuse rating | 30A | | | | | | | | | |
| Power tolerance | 0~+3% | | | | | | | | | |
| Temperature coefficient of Pmax | -0.29%/°C | | | | | | | | | |
| Temperature coefficient of Voc | -0.25%/°C | | | | | | | | | |
| Temperature coefficient of Isc | 0.045%/°C | | | | | | | | | |
| Nominal operating cell temperature (NOCT) | 45±2°C | | | | | | | | | |
| Bifacial Factor | 80±5% | | | | | | | | | |

BIFACIAL OUTPUT-REAR SIDE POWER GAIN

| | | 5% | | 15% | | 25% | |
|--|--|----------------------|---------------------------|----------------------|---------------------------|----------------------|---------------------------|
| | | Maximum Power (Pmax) | Module Efficiency STC (%) | Maximum Power (Pmax) | Module Efficiency STC (%) | Maximum Power (Pmax) | Module Efficiency STC (%) |
| | | 441Wp | 22.07% | 483Wp | 24.17% | 525Wp | 26.27% |
| | | 446Wp | 22.33% | 489Wp | 24.46% | 531Wp | 26.59% |
| | | 452Wp | 22.60% | 495Wp | 24.75% | 538Wp | 26.90% |
| | | 457Wp | 22.86% | 500Wp | 25.04% | 544Wp | 27.21% |
| | | 462Wp | 23.12% | 506Wp | 25.32% | 550Wp | 27.53% |

*STC: Irradiance 1000W/m²

Cell Temperature 25°C

AM=1.5

NOCT: Irradiance 800W/m²

Ambient Temperature 20°C

AM=1.5

Wind Speed 1m/s