



54HL4R-BDB 425-445 Watt

BIFACIAL MODULE WITH DUAL GLASS

N-type





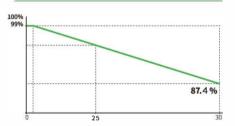
N-Type Technology

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



HOT 2.0 Technology

N-type modules with JinkoSolar's HOT 2.0 technology offer better reliability and efficiency.





30 Year Linear Power Warranty

1% First-year Degradation 0.4%
Annual Degradatio



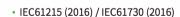
Dual-sided power generation

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



Mechanical Load Enhanced

Certified to withstand: 5400 Pa front side max static test load 2400 Pa rear side max static test load



- 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.











POSITIVE QUALITY"
Continuous Quality Assurance

JKM425-445N-54HL4R-BDB-F1-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	25.4 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	TUV 1×4.0 mm ² (+): 400 mm , (-): 200 mm or Customized Length

Packaging Configuration

(Two pallets = One stack)	1792×1120×1249 mm
Packing detail	36 pcs/pallets, 72 pcs/stack, 936 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 <u>.</u> 045 %/°C				

STC: Irradiance 1000W/m²,Cell Temperature 25°C, AM=1.5

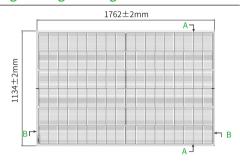
Specifications (NOCT)

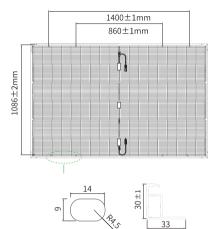
Maximum Power-Pmax [Wp]	320	324	328	332	335
Maximum Power Voltage-Vmp [V]	30.33	30.51	30.69	30.90	31.11
Maximum Power Current-Imp [A]	10.56	10.62	10.68	10.73	10.78
Open-circuit Voltage-Voc [V]	37.26	37.45	37.64	37.83	38.02
Short-circuit Current-Isc [A]	11.12	11.17	11.23	11.28	11.34
Module Efficiency STC [%]	21.27	21.52	21.77	22.02	22.27

NOCT: Irradiance 800W/m2, Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

Operating Temperature(°C)	-40 °C ~ +85 °C
Maximum system voltage	1500 VDC (IEC)
Maximum series fuse rating	30 A
Nominal operating cell temperature (NOCT)	45±2℃
Refer. Bifacial Factor	80±5%

Engineering Drawings





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

A-A

Electrical Performance

