

Tiger Neo N-Typ

54HL4R-B

425-445 Watt

ALL-BLACK MODUL

N-Typ

Positive Leistungstoleranz von 0~+3 %

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Qualitätsmanagementsystem

ISO14001:2015: Umweltmanagementsystem

ISO45001:2018:
Managementsysteme für Sicherheit und Gesundheit bei der Arbeit



WICHTIGE MERKMALE



SMBB-Technologie

Mehr Modulleistung und Zuverlässigkeit dank verbesserter Lichtabsorption und verbessertem Stromtransport.



PID-Widerstand

Exzellente Anti-PID-Leistungsgarantie dank optimiertem Massenproduktionsprozess und Materialkontrolle.



Maximale Lebensdauer auch unter extremen Umweltbedingungen

Hohe Salznebel- und Ammoniakbeständigkeit.



Hot 2.0-Technologie

Das N-Typ-Modul mit Hot 2.0-Technologie ist zuverlässiger und reduziert LID/LeTID-Effekte.

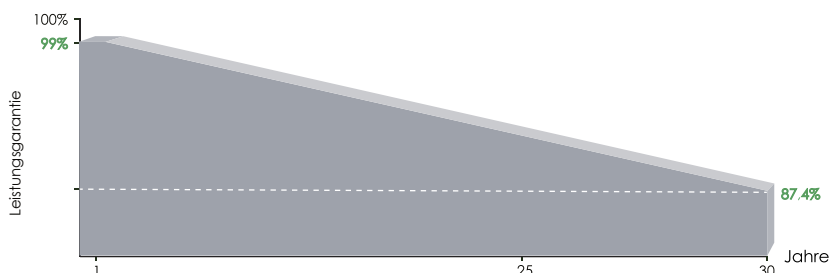


Verbesserte mechanische Widerstandskraft

Zertifiziert für Windlasten bis 4000 Pa und Schneelasten bis 6000 Pa.



LINEARE LEISTUNGSGARANTIE

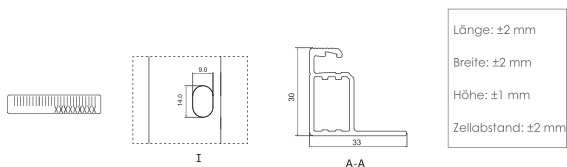
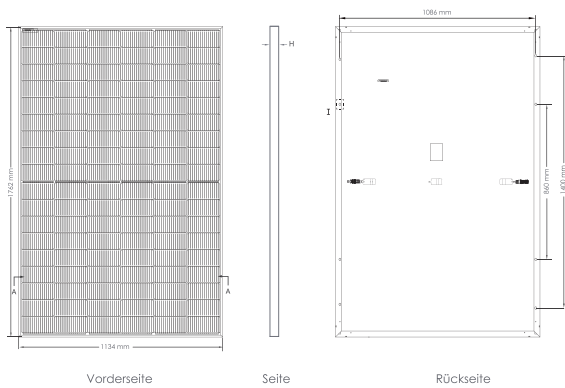


25 Jahre Produktgarantie

30 Jahre lineare Leistungsgarantie

0,40 % jährliche Degradation über 30 Jahre

Technische Zeichnungen

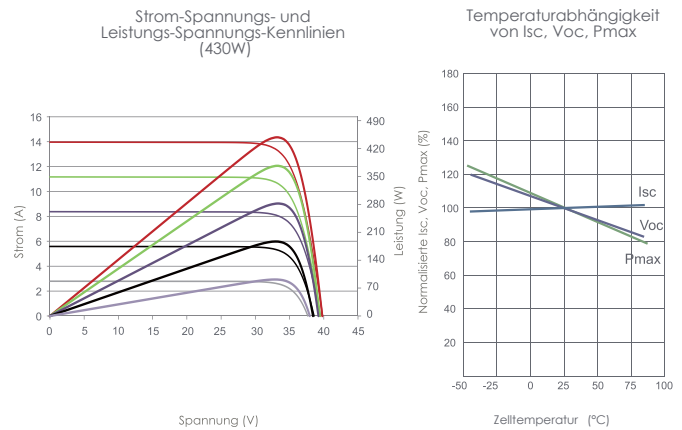


Verpackungseinheiten

(zwei Paletten = ein Stapel)

36 Stück/Palette, 72 Stück/Stapel, 936 Stück/40-Fuss-Container

Elektrische Leistung und Temperaturabhängigkeit



Mechanische Eigenschaften

Zellentyp	Monokristallin N-Typ
Zellenanzahl	108 (6×18)
Maße	1762×1134×30mm (69,36×44,65×1,18 Zoll)
Gewicht	22 kg (48,50 lbs)
Glas	3,2 mm, Antireflexbeschichtung, Hohe Lichtdurchlässigkeit, Niedriger Eisenbehalt, getempertes Glas
Rahmen	Eloxierte Aluminiumlegierung
Anschlusskasten	Schutzklasse IP68
Anschlusskabel	TÜV 1×4,0mm ² (+): 400mm, (-): 200mm oder maßgeschneiderte Länge

Spezifikationen

Modultyp	JKM425N-54HL4R-B		JKM430N-54HL4R-B		JKM435N-54HL4R-B		JKM440N-54HL4R-B		JKM445N-54HL4R-B	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximale Leistung (Pmax)	425 Wp	320 Wp	430 Wp	323 Wp	435 Wp	327 Wp	440 Wp	331 Wp	445 Wp	335 Wp
Max. Spannung (Vmp)	32,37 V	30,19 V	32,58 V	30,30 V	32,78 V	30,50 V	32,99 V	30,73 V	33,19 V	30,93 V
Max. Strom (Imp)	13,13 A	10,60 A	13,20 A	10,66 A	13,27 A	10,72 A	13,34 A	10,77 A	13,41 A	10,83 A
Leerlaufspannung (Voc)	38,95 V	37,00 V	39,16 V	37,20 V	39,36 V	37,39 V	39,57 V	37,59 V	39,77 V	37,78 V
Kurzschlussstrom (Isc)	13,58 A	10,96 A	13,65 A	11,02 A	13,72 A	11,08 A	13,80 A	11,14 A	13,87 A	11,20 A
Modulwirkungsgrad STC (%)	21,27 %		21,52 %		21,77 %		22,02 %		22,27 %	
Betriebstemperatur (°C)	-40°C~+85°C									
Maximale Systemspannung	1000VDC (IEC)									
Maximale Vorschaltleistungsleistung	25A									
Leistungstoleranz	0~+3%									
Temperaturkoeffizient Pmax	-0,29%/°C									
Temperaturkoeffizient Voc	-0,25%/°C									
Temperaturkoeffizient Isc	0,045%/°C									
Nominale Betriebstemperatur der Zelle (NOCT)	45±2°C									

*STC: Einstrahlung 1000 W/m² Zelltemperatur 25°C

AM=1,5

NOCT: Einstrahlung 800 W/m² Umgebungstemperatur 20°C

AM=1,5

Windgeschwindigkeit 1 m/s

Tiger Neo N-type 54HL4R-B 425-445 Watt ALL-BLACK MODULE

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.

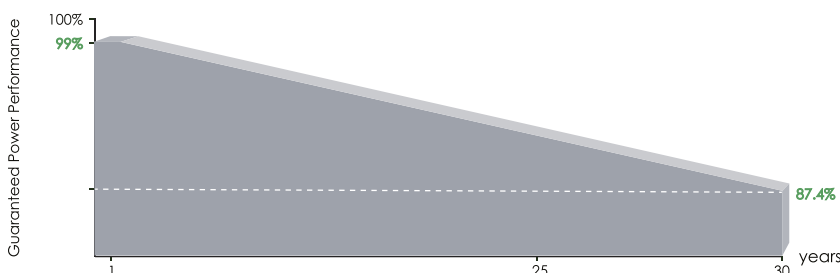


Enhanced Mechanical Load

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



LINEAR PERFORMANCE WARRANTY

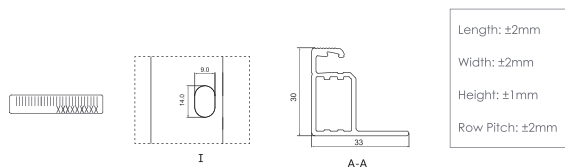
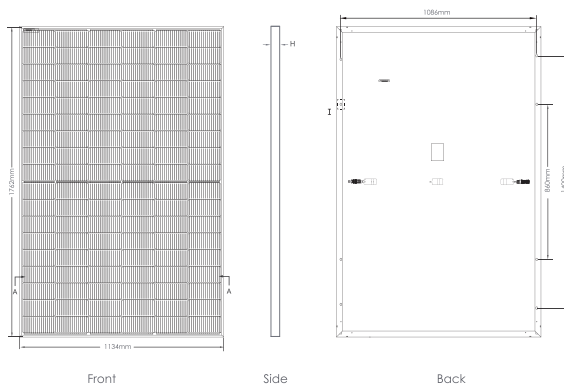


25 Year Product Warranty

30 Year Linear Power Warranty

0.40% Annual Degradation Over 30 years

Engineering Drawings

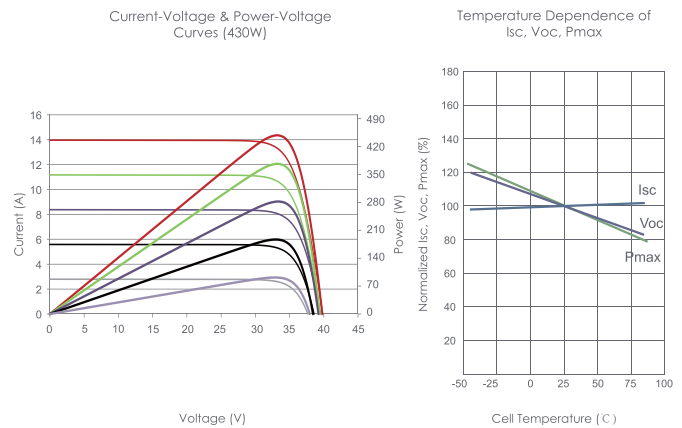


Packaging Configuration

(Two pallets = One stack)

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

Electrical Performance & Temperature Dependence



Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	108 (6×18)
Dimensions	1762×1134×30mm (69.36×44.65×1.18 inch)
Weight	22 kg (48.50 lbs)
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm ² (+): 400mm , (-): 200mm or Customized Length

SPECIFICATIONS

Module Type	JKM425N-54HL4R-B		JKM430N-54HL4R-B		JKM435N-54HL4R-B		JKM440N-54HL4R-B		JKM445N-54HL4R-B	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	425Wp	320Wp	430Wp	323Wp	435Wp	327Wp	440Wp	331Wp	445Wp	335Wp
Maximum Power Voltage (Vmp)	32.37V	30.19V	32.58V	30.30V	32.78V	30.50V	32.99V	30.73V	33.19V	30.93V
Maximum Power Current (Imp)	13.13A	10.60A	13.20A	10.66A	13.27V	10.72A	13.34A	10.77A	13.41A	10.83A
Open-circuit Voltage (Voc)	38.95V	37.00V	39.16V	37.20V	39.36V	37.39V	39.57V	37.59V	39.77V	37.78V
Short-circuit Current (Isc)	13.58A	10.96A	13.65A	11.02A	13.72A	11.08A	13.80A	11.14A	13.87A	11.20A
Module Efficiency STC (%)	21.27%		21.52%		21.77%		22.02%		22.27%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1000VDC (IEC)									
Maximum series fuse rating	25A									
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									

*STC: Irradiance 1000W/m² Cell Temperature 25°C

NOCT: Irradiance 800W/m² Ambient Temperature 20°C

AM=1.5

AM=1.5

Wind Speed 1m/s