

N-type

410-430 Watt

silver/black version

N-Type

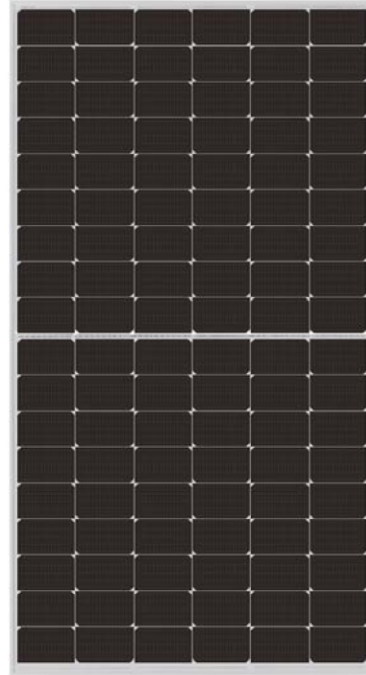
power tolerance of $\pm 3\%$

IEC61215, IEC61000

CE

ROHS

FCC



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.

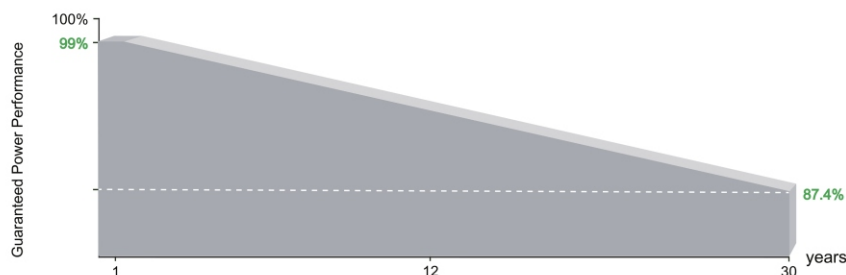


Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



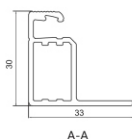
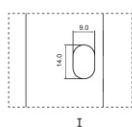
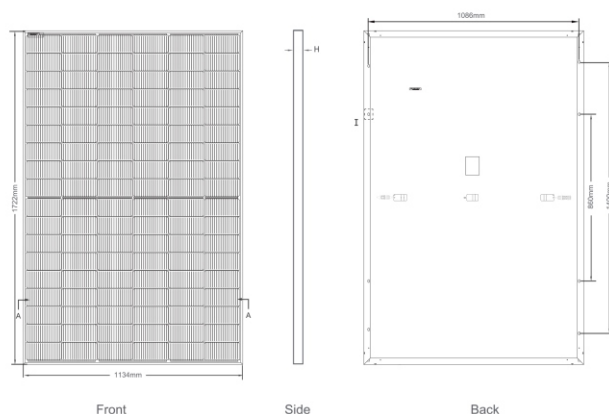
LINEAR PERFORMANCE WARRANTY



12 Year Product Warranty

30 Year Linear Power Warranty

0.40% Annual Degradation Over 30 years



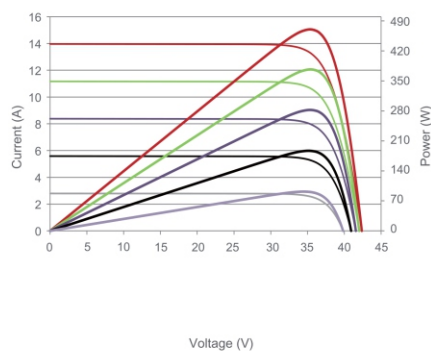
Length: $\pm 2\text{mm}$
Width: $\pm 2\text{mm}$
Height: $\pm 1\text{mm}$
Row Pitch: $\pm 2\text{mm}$

Packaging Configuration

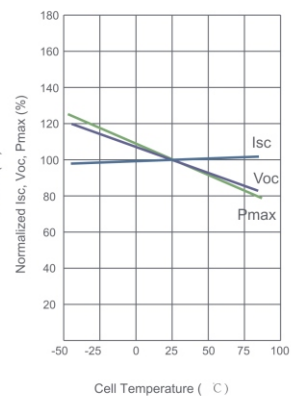
(Two pallets = One stack)

31pcs/pallets, 806pcs/ 40'HQ Container

Current-Voltage & Power-Voltage Curves (430W)



Temperature Dependence of I_{sc} , V_{oc} , P_{max}



Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	108 (6×18)
Dimensions	1722×1134×35mm
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' (+): 400mm, (-): 200mm or Customized Length

SPECIFICATIONS

Module Type

KN-400

	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (P_{max})	410Wp	308Wp	415Wp	312Wp	420Wp	316Wp	425Wp	320Wp	430Wp	323Wp
Maximum Power Voltage (V_{mp})	31.13V	29.06V	31.32V	29.21V	31.51V	29.34V	31.70V	29.50V	31.88V	29.63V
Maximum Power Current (I_{mp})	13.17A	10.61A	13.25A	10.68A	13.33A	10.76A	13.41A	10.83A	13.49A	10.91A
Open-circuit Voltage (V_{oc})	37.73V	35.84V	37.92V	36.02V	38.11V	36.20V	38.30V	36.38V	38.49V	36.56V
Short-circuit Current (I_{sc})	13.91A	11.23A	13.99A	11.29A	14.07A	11.36A	14.15A	11.42A	14.23A	11.49A
Module Efficiency STC (%)	21.00%		21.25%		21.51%		21.76%		22.02%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1000/1500VDC (IEC)									
Maximum series fuse rating	25A									
Power tolerance	0~+3%									
Temperature coefficients of P_{max}	-0.30%/°C									
Temperature coefficients of V_{oc}	-0.25%/°C									
Temperature coefficients of I_{sc}	0.046%/°C									
Nominal operating cell temperature (NOCT)	45±2°C									

*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