



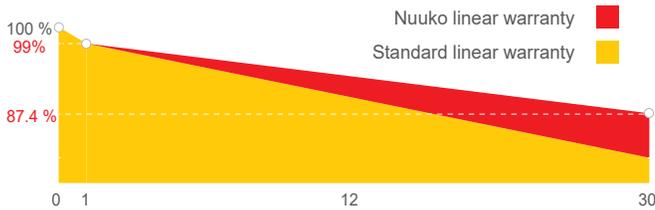
LIVE UP TO GOOD SUNSHINE

NKM-96 N Type (210R)

440-460 Watt

BIFACIAL MODULE

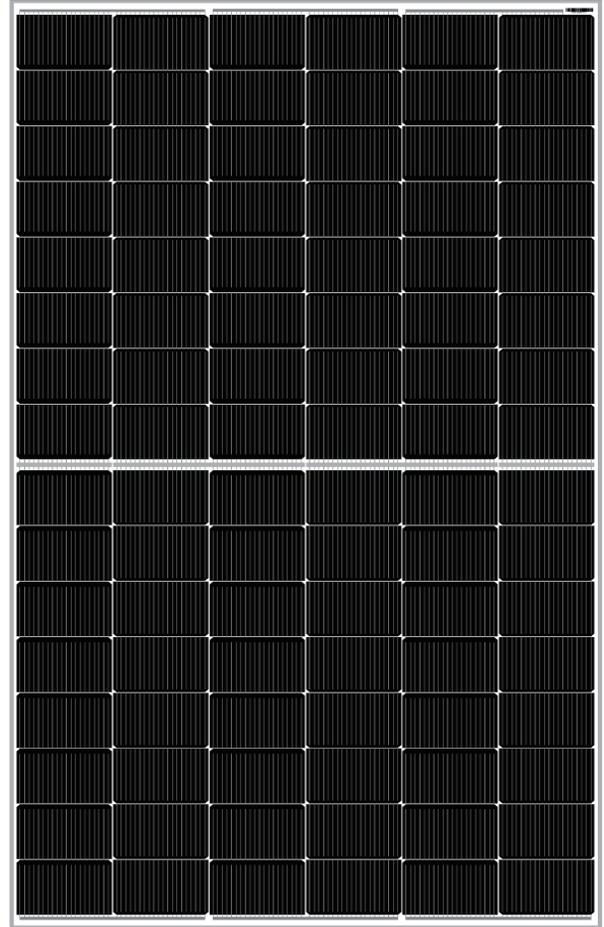
Industry-leading Warranty based on nominal power



* 0.4% Annual Degradation over 30 Years

* 15 Year Product Warranty

* 30 Year Linear Power Warranty



Features



SMBB Technology

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



Hot 2.0 Technology

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



Excellent weak light performance

More power output in weak light condition, such as cloudy, morning and sunset



Extended wind and snow load tests

Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal) *



PID Resistance

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

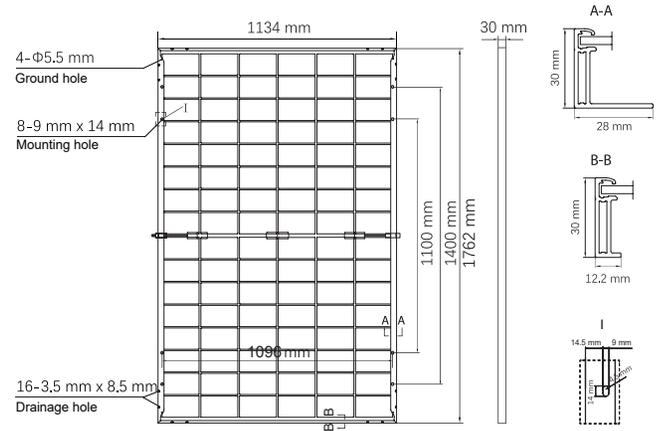


Lower LCOE

Higher bifaciality, higher power output and lower BOS cost

MECHANICAL SPECIFICATIONS

Cell Type	N Type Mono-crystalline
Cell Arrangement	96 (6*16)
Weight	24kg
Module Dimensions	1762*1134*30mm
Cables	4.0mm ² , ±300mm or Customized length
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
No. of Bypass Diodes	3/6
Packing Configuration	36pcs/pallet, 936pcs/40HQ
Frame	Anodized Aluminium Alloy
Junction Box	IP68



ELECTRICAL SPECIFICATIONS

Module Type	NKM440N-96BDR12	NKM445N-96BDR12	NKM450N-96BDR12	NKM455N-96BDR12	NKM460N-96BDR12
Testing Condition	STC	STC	STC	STC	STC
Rated output (Pmp/Wp)	440	445	450	455	460
Maximum Power Voltage(Vmpp/V)	30.06	30.20	30.33	30.47	30.60
Maximum Power Current(Imp/A)	14.64	14.74	14.83	14.93	15.03
Open Circuit Voltage(Voc/V)	36.09	36.25	36.42	36.58	36.74
Short Circuit Current(Isc/A)	15.47	15.57	15.68	15.78	15.88
Module efficiency(%)	22.00%	22.30%	22.50%	22.80%	23.00%
Power Tolerance (W)	0~+5	0~+5	0~+5	0~+5	0~+5

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

BNPI

	488	493	498	504	509
Rated Output (Pmp / Wp)					
Rated Voltage (Vmpp / V)	30.06	30.20	30.33	30.47	30.60
Rated Current (Imp / A)	16.22	16.33	16.43	16.54	16.65
Open Circuit Voltage (Voc / V)	36.09	36.25	36.42	36.58	36.74
Short Circuit Current (Isc / A)	17.14	17.25	17.37	17.48	17.59

Irradiance: front 1000W/m², rear 135W/m², Cell Temperature 25°C, AM=1.5

MAXIMUM RATINGS

Maximum System Voltage	1500V DC
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	30A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Protection Class	II
Fire Type	Class C (IEC)
Bifacial	80±5%

TEMPERATURE CHARACTERISTICS

NMOT Temperature	45±2°C
Temperature Coefficient (Pmax)	-0.29%/°C
Temperature Coefficient (Voc)	-0.25%/°C
Temperature Coefficient (Isc)	0.043%/°C

CURVE & TEMPERATURE DEPENDENCE

