

N-type TOPCon Series

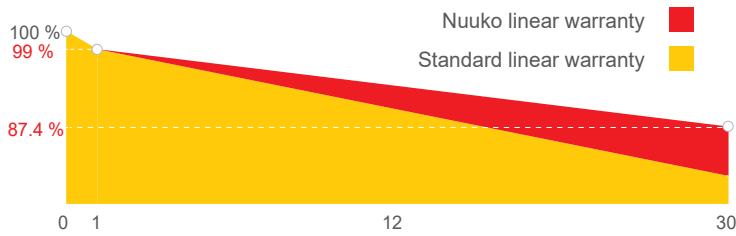
NKM-108 N-type (182mm Cell)

435-460 Watt

MONOFACIAL MODULE



Industry-leading Warranty based on nominal power



* 0.4% Annual Degradation over 30 Years

* 12 Years Product Warranty

* 30 Years 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.

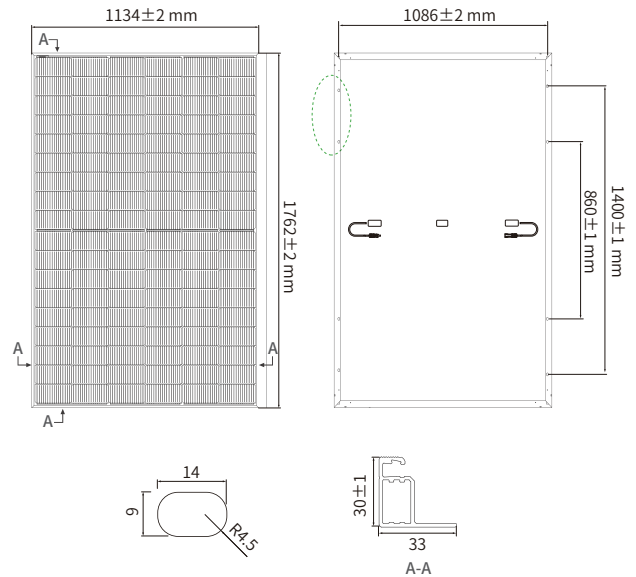


Lower LCOE

Higher bifaciality, higher power output and lower BOS cost

MECHANICAL SPECIFICATIONS

Cell Type	N type Mono-crystalline
Cell Dimensions	182*182mm
Cell Arrangement	108 (54*2)
Weight	21kg
Module Dimensions	1762*1134*30mm
Cable Length	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm ² /UL: 12AWG
Front Glass	3.2mm, Anti-reflection Coating, High Transmission, Low Iron, Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration (1)	37pcs/carton, 962pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated



ELECTRICAL SPECIFICATIONS

Module Type	NKM435N-108M10	NKM440N-108M10	NKM445N-108M10	NKM450N-108M10	NKM455N-108M10	NKM455N-108M10
Rated output (Pmp/Wp)	435	440	445	450	455	460
Maximum Power Voltage(Vmpp/V)	32.59	32.81	33.02	33.21	33.41	33.60
Maximum Power Current(Imp/A)	13.35	13.41	13.48	13.55	13.62	13.69
Open Circuit Voltage(Voc/V)	39.16	39.38	39.59	39.78	39.98	40.17
Short Circuit Current(Isc/A)	13.80	13.86	13.93	14.00	14.07	14.14
Module efficiency(%)	21.77%	22.02%	22.27%	22.52%	22.77%	23.02%
Power Tolerance (W)	0~+5	0~+5	0~+5	0~+5	0~+5	0~+5

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

MAXIMUM RATINGS

Maximum System Voltage	1000V/1500V DC (IEC)
Operating Temperature	-40°C ~ +70°C
Maximum Series Fuse	25A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ

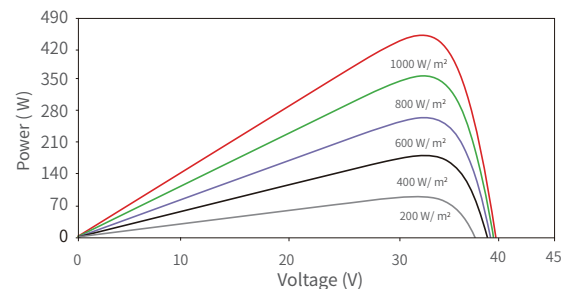
TEMPERATURE CHARACTERISTICS

NMOT Temperature	45°C±2°C
Temperature Coefficient (Pmax)	-0.29%/°C
Temperature Coefficient (Voc)	-0.25%/°C
Temperature Coefficient (Isc)	0.045%/°C

CURVE & TEMPERATURE DEPENDENCE

NKM450N-108M10

Power-Voltage Curves



Current-Voltage Curves

