



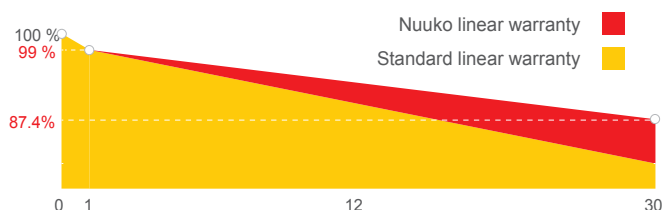
LIVE UP TO GOOD SUNSHINE

NKM-120 N-type (210mm Cell)

635-655 Watt

BIFACIAL MODULE

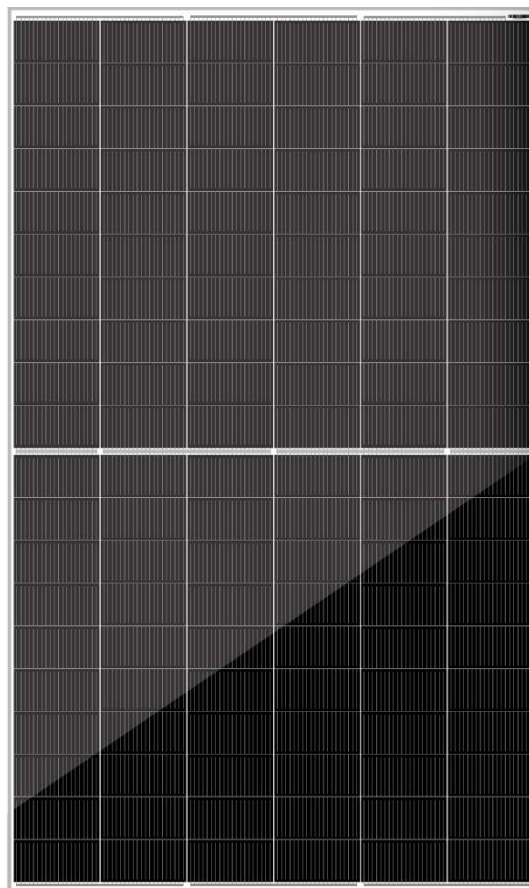
Industry-leading Warranty based on nominal power



* 0.4% Annual Degradation over 30 Years

* 12 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.

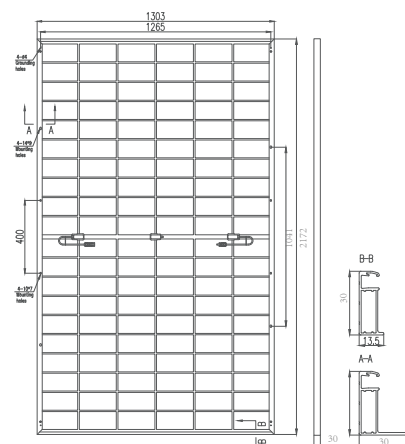


Lower LCOE

Higher bifaciality, higher power output and lower BOS cost

MECHANICAL SPECIFICATIONS

Cell Type	TOPCon Monocrystalline
Cell Arrangement	120 (6*20)
Weight	35KG
Module Dimensions	2172*1303*33mm
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 (1)	33pcs/pallet, 594pcs/40HQ
Frame	Anodized Aluminium Alloy
Junction Box	IP68



ELECTRICAL SPECIFICATIONS

Module Type	NKM635N-120BDG12		NKM640N-120BDG12		NKM645N-120BDG12		NKM650N-120BDG12		NKM655N-120BDG12	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Rated output (Pmp/Wp)	635	480	640	484	645	488	650	492	655	495
Maximum Power Voltage(Vmpp/V)	37.42	35.26	37.60	35.44	37.78	35.62	37.96	35.80	38.14	35.98
Maximum Power Current(Imp/A)	16.97	13.61	17.02	13.65	17.07	13.69	17.12	13.73	17.17	13.77
Open Circuit Voltage(Voc/V)	43.54	41.56	43.72	41.74	43.90	41.92	44.08	42.10	44.26	42.28
Short Circuit Current(Isc/A)	18.08	14.43	18.11	14.46	18.14	14.49	18.17	14.52	18.20	14.55
Module efficiency(%)	22.4%		22.6%		22.8%		23.0%		23.1%	
Power Tolerance (W)	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/

Electrical Characteristics with Different Rearside Power Gain (Reference to 640 W Front)

Pmax/W	672	704	736	768	800
Vmpp/V	37.60	37.60	37.60	37.60	37.60
Imp/A	17.87	18.72	19.57	20.42	21.28
Voc/V	43.72	43.72	43.72	43.72	43.72
Isc/A	19.02	19.92	20.83	21.73	22.64
Pmax gain	5%	10%	15%	20%	25%

MAXIMUM RATINGS

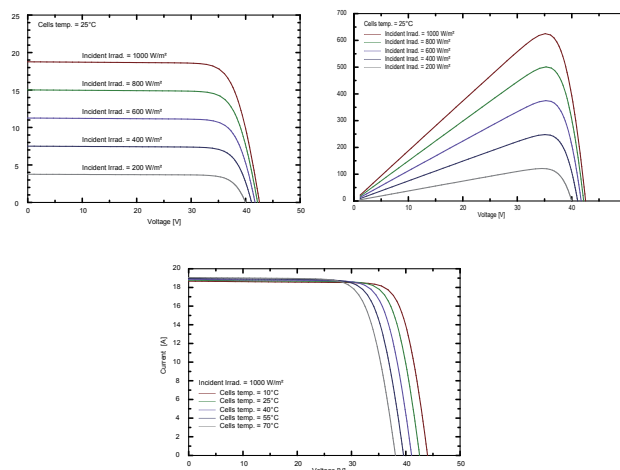
Maximum System Voltage	1500V DC (IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	30A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Protection Class	II
Fire Type	Class C (IEC)
Bifacial	80±5%

TEMPERATURE CHARACTERISTICS

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

CURVE & TEMPERATURE DEPENDENCE

NKM640N-120BDG12



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