

# Spiration Series

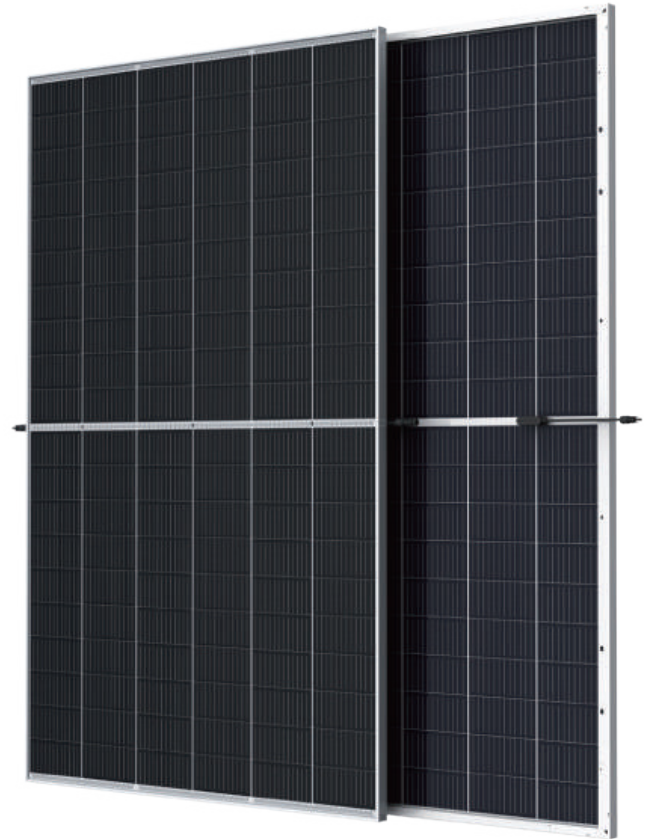
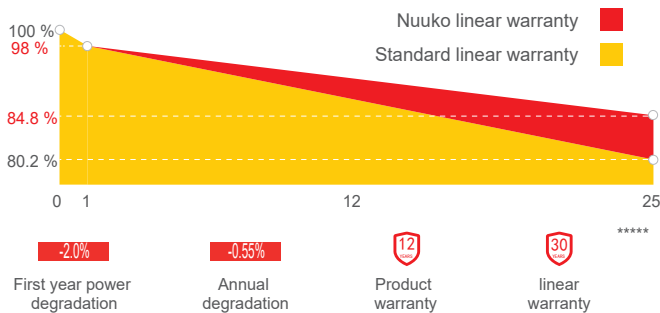
LIVE UP TO GOOD SUNSHINE

NKM-120 (210mm Cell)

**585-605 Watt**

BIFACIAL MODULE

Industry-leading Warranty based on nominal power



## Features



### High module conversion efficiency

Module efficiency up to 21.4% achieved through advanced cell technology and manufacturing process



### Extended wind and snow load tests

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



### Excellent weak light performance

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



### Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



### Nuuko current sorting process

Up to 2 % power loss caused by current mismatch could be diminished by current sorting technique to maximize system power output

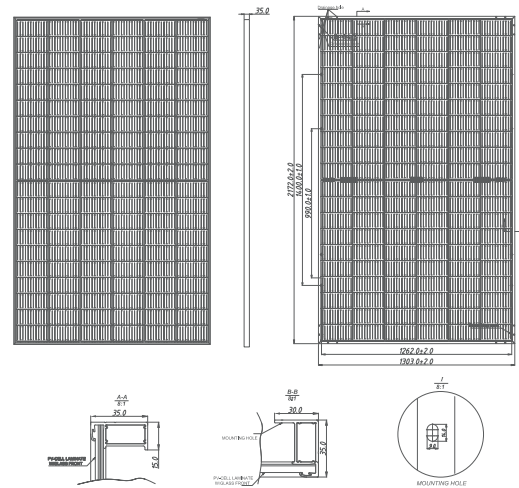


### Withstanding harsh environment

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline

## MECHANICAL SPECIFICATIONS

Cell Type	Monocrystalline
Cell Dimensions	210*210mm
Cell Arrangement	120 (6*20)
Weight	35kg
Module Dimensions	2172*1303*35mm
Cable Length	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm <sup>2</sup> /UL: 12AWG
Front Glass	2.0mm AR Coating Semi-tempered Glass
Back Glass	2.0mm Glazed Semi-tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration (1)	31pcs/Pallet, 558pcs/40HQ
Frame	Anodized Aluminium Alloy
Junction Box	IP68



## ELECTRICAL SPECIFICATIONS

Module Type	NKM585-120G12		NKM590-120G12		NKM595-120G12		NKM600-120G12		NKM605-120G12	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Rated output (Pmp/Wp)	585	441	575	444	595	448	600	452	605	455
Maximum Power Voltage(Vmpp/V)	34.1	32.0	34.3	32.2	34.5	32.4	34.7	32.6	34.9	32.8
Maximum Power Current(Imp/A)	17.16	13.76	17.21	13.80	17.25	13.83	17.30	13.86	17.34	13.90
Open Circuit Voltage(Voc/V)	40.9	38.5	41.1	38.7	41.3	38.9	41.5	39.1	41.7	39.3
Short Circuit Current(Isc/A)	18.22	14.68	18.27	14.72	18.31	14.75	18.36	14.79	18.40	14.82
Module efficiency(%)	20.7%		20.8%		21.0%		21.2%		21.4%	
Power Tolerance (W)	0~+5		0~+5		0~+5		0~+5		0~+5	

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

### Electrical characteristics with different rear side power gain (refer to 595W front)

	625	655	684	714	744
Pmax/W	625	655	684	714	744
Vmpp/V	34.5	34.5	34.5	34.5	34.5
Imp/A	18.11	18.98	19.84	20.70	21.56
Voc/V	41.3	41.3	41.3	41.3	41.3
Isc/A	19.23	20.14	21.06	21.97	22.89
Pmax gain	5%	10%	15%	20%	25%

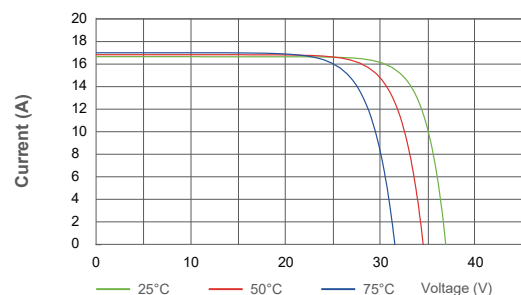
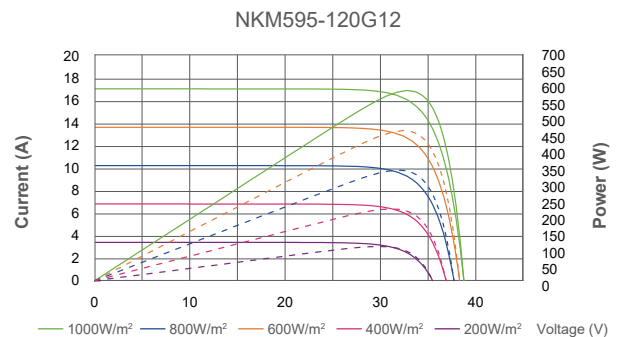
## MAXIMUM RATINGS

Maximum System Voltage	1500V DC (IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	35A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ

## TEMPERATURE CHARACTERISTICS

NMOT Temperature	43°C±2°C
Temperature Coefficient (Pmax)	-0.36%/°C
Temperature Coefficient (Voc)	-0.26%/°C
Temperature Coefficient (Isc)	0.043%/°C

## CURVE & TEMPERATURE DEPENDENCE



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