

# Spirit Series

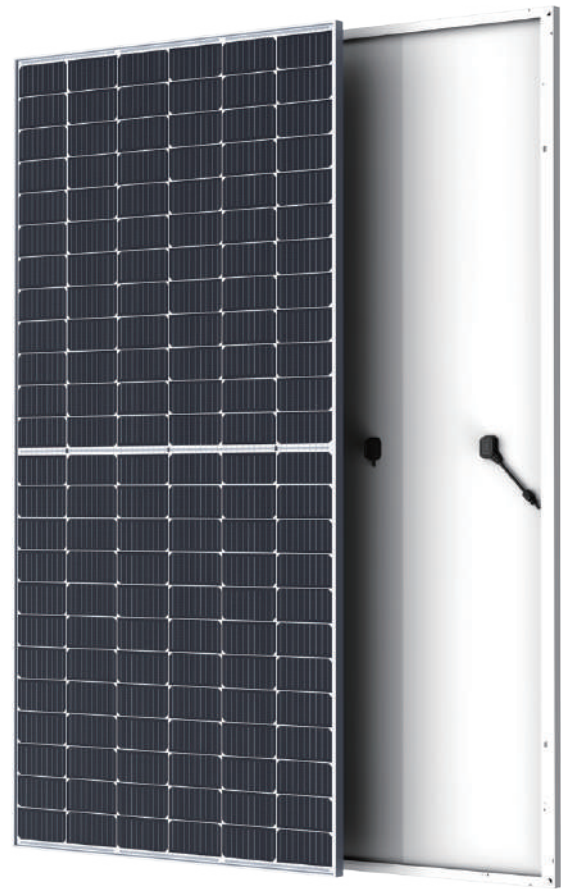
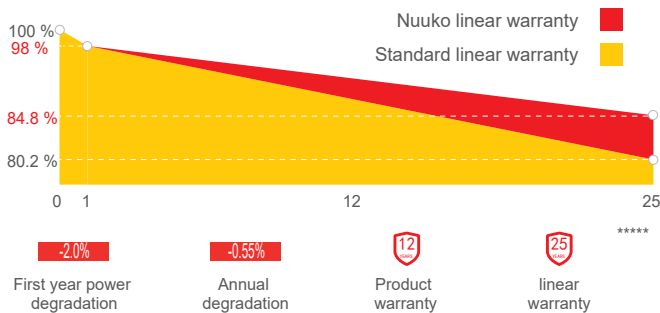
LIVE UP TO GOOD SUNSHINE

NKM-144 (182mm Cell)

**530-550 Watt**

MONOFACIAL MODULE

Industry-leading Warranty based on nominal power



## Features



### High module conversion efficiency

Module efficiency up to 21.3% achieved through advanced cell technology and manufacturing process



### Extended wind and snow load tests

Module certified to withstand extreme wind (3800 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

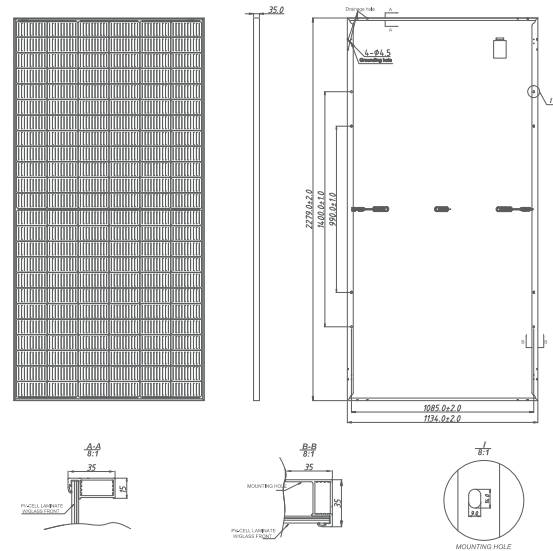


### Withstanding harsh environment

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

## MECHANICAL SPECIFICATIONS

Cell Type	Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	144 (6*24)
Weight	29kg (63.9lbs.)
Module Dimensions	2279*1134*35mm (89.72*44.65*1.38inches)
Cable Length	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm <sup>2</sup> (0.006inches <sup>2</sup> )/UL: 12AWG
Front Glass	3.2mm (0.13inches) AR Coating Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration (1)	31pcs/carton, 620pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68



## ELECTRICAL SPECIFICATIONS

Module Type	NKM530-144M10		NKM535-144M10		NKM540-144M10		NKM545-144M10		NKM550-144M10	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Rated output (Pmp/Wp)	530	394	535	398	540	402	545	405	550	409
Maximum Power Voltage(Vmpp/V)	41.7	38.8	41.8	38.9	41.9	39.0	42.0	39.1	42.1	39.2
Maximum Power Current(Imp/A)	12.71	10.16	12.80	10.23	12.89	10.30	12.98	10.37	13.07	10.44
Open Circuit Voltage(Voc/V)	49.5	46.3	49.6	46.4	49.7	46.5	49.8	46.6	49.9	46.7
Short Circuit Current(Isc/A)	13.44	10.83	13.53	10.91	13.62	10.98	13.71	11.05	13.80	11.12
Module efficiency(%)	20.5%		20.7%		20.9%		21.1%		21.3%	
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

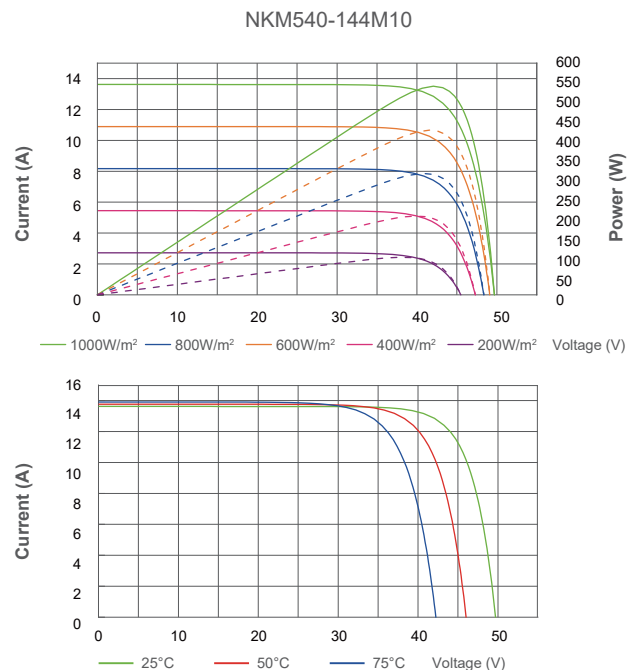
## MAXIMUM RATINGS

Maximum System Voltage	1000V/1500V DC (IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	25A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	T01/LJQ-3-CSY/MC4/MC4-EVO2

## 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 DEPENDENC



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