Spirit Series

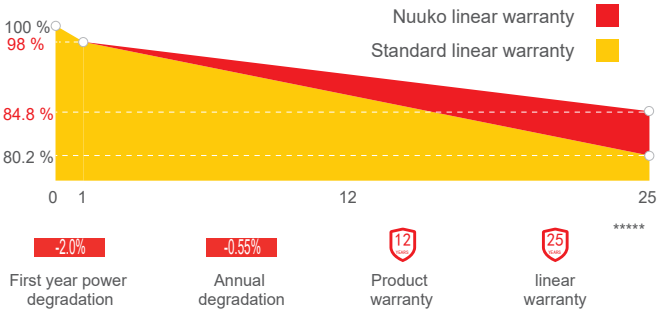
LIVE UP TO GOOD SUNSHINE

NKM-144（182mm Cell）

540-560 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

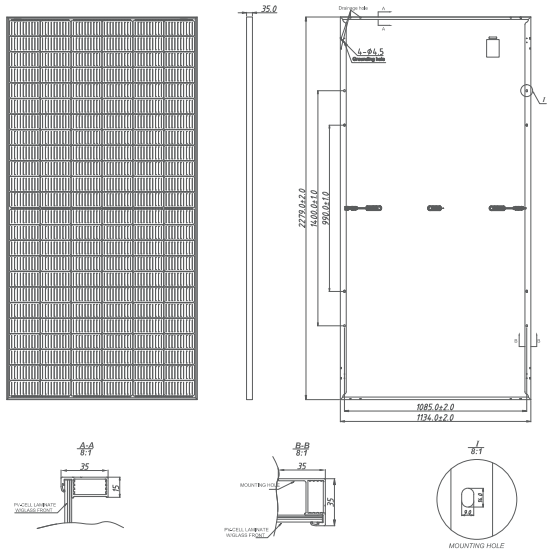
Withstanding harsh environment

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

Spirit Series NKM-144

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: 4mm2 (0.006inches2)/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	NKM540-144M10		NKM545-144M10		NKM550-144M10		NKM555-144M10		NKM560-144M10	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Rated output (Pmp/Wp)	540	402	545	405	550	409	555	413	560	417
Maximum Power Voltage(Vmpp/V)	41.9	39.0	42.0	39.1	42.1	39.2	42.2	39.3	42.3	39.4
Maximum Power Current(Impp/A)	12.89	10.30	12.98	10.37	13.07	10.44	13.16	10.51	13.25	10.58
Open Circuit Voltage(Voc/V)	49.7	46.5	49.8	46.6	49.9	46.7	50.0	46.8	50.1	46.9
Short Circuit Current(Isc/A)	13.62	10.98	13.71	11.05	13.80	11.12	13.89	11.19	13.98	11.26
Module efficiency(%)	20.9%		21.1%		21.3%		21.5%		21.7%	
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 Temperatue 20°C, Air Mass AM1.5, Wind Speed 1m/s

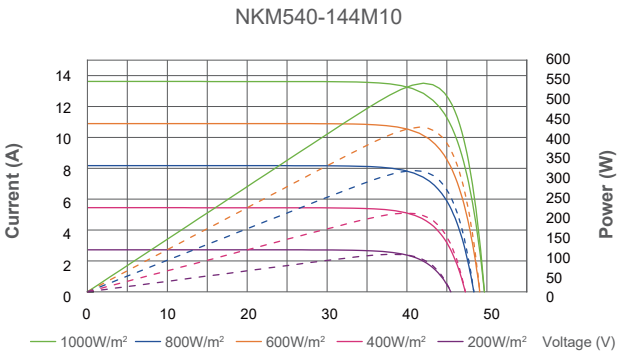
MAXIMUM RATINGS

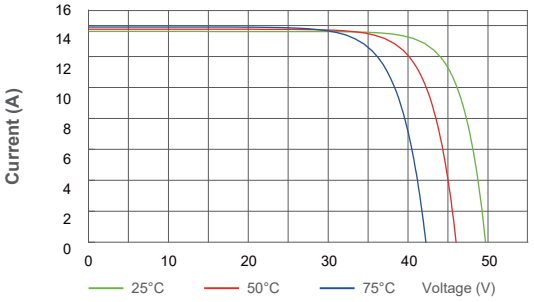
Maximum System Voltage	1000V/1500V DC（IEC）
Operating Temperature	-40°C ~ +85°C
Maximun Series Fuse	25A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	T01/LJQ-3-CSY/MC4/MC4-EVO2

TEMPERATURE CHARACTERISTICS

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

CURVE & TEMPERATURE DEPENDENC





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