

Solar N Plus New Energy Technology Co., LTD

Produce Specification	Produce Name	Monocrystalline High Efficiency PV Module	Document Number	
	Document Name	Spec. Of SP-N16/144HG550-590W	Version Number	A/0

Typical Electrical Characteristics at Standard Test Conditions (STC)

Typical Type	Unit	SP- N16/144HG5 50W	SP- N16/144HG5 55W	SP- N16/144HG5 60W	SP- N16/144HG5 65W	SP- N16/144HG5 70W	SP- N16/144HG5 75W	SP- N16/144HG5 80W	SP- N16/144HG5 85W	SP- N16/144HG5 90W
Max-Power	Pm(W)	550	555	560	565	570	575	580	585	590
Power Tolerance	W	0~+5								
Max-Power Voltage	Vm(V)	41.90	42.10	42.30	42.50	42.70	42.90	43.10	43.30	43.50
Max-Power Current	Im(A)	13.13	13.19	13.24	13.30	13.35	13.41	13.47	13.53	13.59
Open-Circuit Voltage	Voc(V)	51.00	51.20	51.40	51.60	51.80	52.00	52.20	52.40	52.60
Short-Circuit Current	Isc(A)	13.57	13.63	13.69	13.75	13.81	13.88	13.95	14.02	14.09

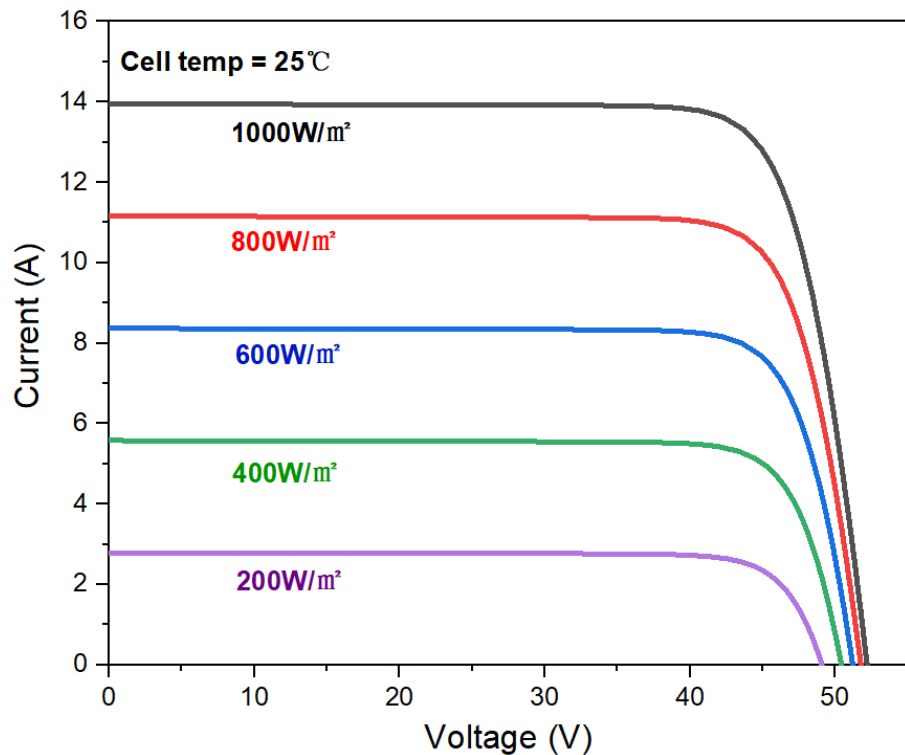
STC:AM=1.5, 1000W/m² irradiance, Module Temperature 25°C

Certifications	TUV
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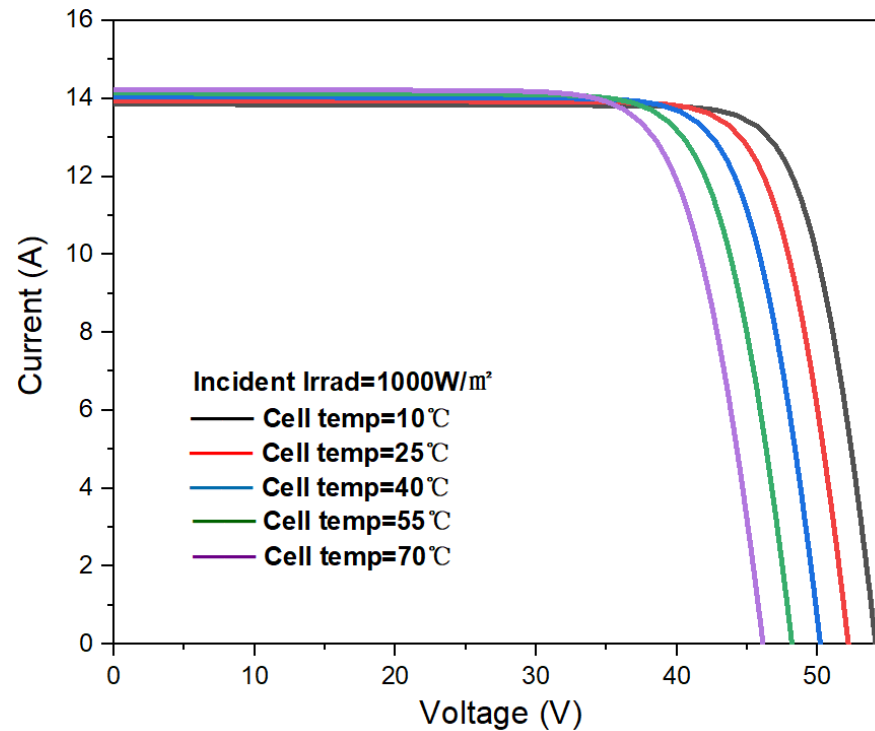
OPERATING CONDITIONS		MECHANICAL PROPERTY	
Max. system voltage	DC1500V(IEC)	Dimension(L×W×H)	2278mm×1134mm×30mm
Max. series fuse rating	25A	Weight	32.0kg
Operating temperature range	-40°C~+85°C	Cell	16BB single crystal / 182*91mm
Mechanical load	5400Pa/2400Pa	Glass type	Antireflection coated heat-enhanced glass /2.0mm
Max. hailstone impact(diameter/velocity)	Φ25mm hail, from 1 m of distance at 23 m/s	Frame	Anodized Aluminum alloy
Application Class	Class A	Junction Box	IP68
Fire Class	Class C	Cable	4mm ² ,300mm or Customized•Length
		Connector	MC4 Compatible

IV Curve

I-V Curves of SP-N16/144HG590W at different irradiance



I-V Curves of SP-N16/144HG590W at different cell temperature



Performance Warranty

Within the first year from the date of installation and normal operation, the output power shall not be less than 99 % of the product's minimum output power as set forth in the specifications, Afterwards, maximum 0.4% output decrease per year. After 30 years, the product's output power shall not be less than 87.4% of its minimum output power as set forth in the specifications.

Dimensions

