



SP-N16A/144HG

SIRIUS

TOPcon Bifacial

600-620W



HIGHER EFFICIENCY



LOWER TEMPERATURE COEFFICIENT



LOW ATTENUATION, LONG WARRANTY

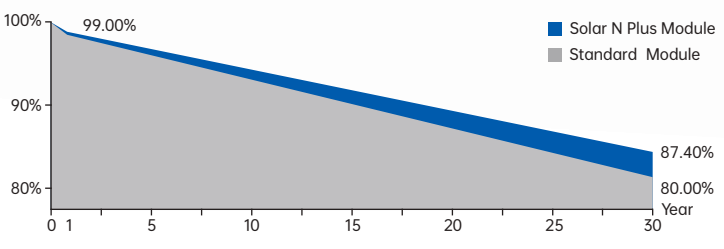


HIGHER BIFACIALITY

WARRANTY

15 YEARS Guarantee on product material and workmanship

30 YEARS Linear power output warranty



INSURANCE



CERTIFICATION



- ISO 9001: 2015/quality management system
- ISO 14001: 2015/environment management system
- ISO 45001: 2018/occupation health safety management system

600-620W SP-N16A/144HG

ELECTRICAL CHARACTERISTICS (STC)

Maximum Power (Pm)	W	600	605	610	615	620
Power Tolerance	W					0~+5
Maximum Power Voltage (Vm)	V	44.0	44.2	44.4	44.6	44.8
Maximum Power Current (Im)	A	13.64	13.69	13.74	13.79	13.84
Open Circuit Voltage (Voc)	V	51.8	52.0	52.2	52.4	52.6
Short Circuit Current (Isc)	A	14.54	14.60	14.66	14.72	14.78
Module Efficiency (ηm)	%	22.2	22.4	22.6	22.8	23.0

STC:AM=1.5, irradiance=1000W/m², module temperature=25°C

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power (Pm)	W	454	458	461	465	469
Maximum Power Voltage (Vm)	V	41.6	41.8	42.0	42.2	42.4
Maximum Power Current (Im)	A	10.91	10.95	10.99	11.03	11.07
Open Circuit Voltage (Voc)	V	49.0	49.2	49.4	49.6	49.8
Short Circuit Current (Isc)	A	11.73	11.77	11.82	11.87	11.92

NMOT: irradiance=800W/m², environment temperature=20°C, wind speed=1m/s

REAR SIDE POWER GAIN

5%	Max Power	630W	635W	641W	646W	651W
	Efficiency	23.32%	23.52%	23.71%	23.91%	24.10%
15%	Max Power	690W	696W	702W	707W	713W
	Efficiency	25.54%	25.76%	25.97%	26.18%	26.40%
25%	Max Power	750W	756W	763W	769W	775W
	Efficiency	27.77%	28.00%	28.23%	28.46%	28.69%

MECHANICAL SPECIFICATIONS

External Dimension (L×W×H)	2382×1134×30mm
Weight	33.7kg
Number of Cells	144 (6x24)
Front Glass	2.0mm AR-coating heat-strengthened glass
Rear Glass	2.0mm heat-strengthened glass
Frame	Anodized aluminum alloy, silver color
Junction Box	IP68
Output Cables	4.0mm ² , 300mm or customized length
Connector	MC4 Compatible

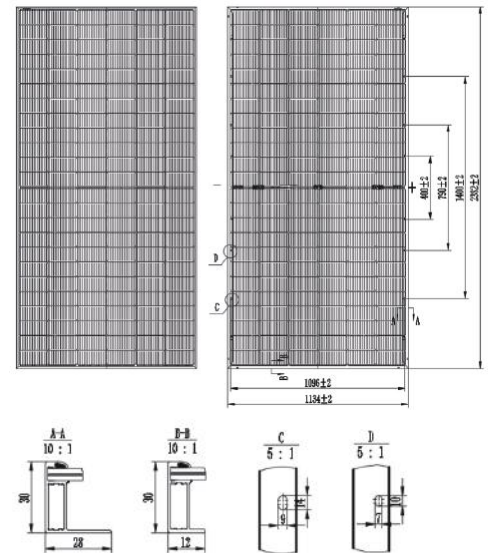
APPLICATION CONDITIONS

Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	30A
Operating Temperature	-40°C ~ +85°C
Mechanical Load	5400Pa/2400Pa
Hail Test	25mm diameter hail at 23m/s
Bifaciality	80±5%
Application Rating	Class A

TEMP CHARACTERISTICS

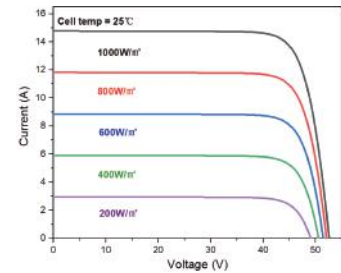
Nominal Module Operating Temperature	42±2°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of ISC	+0.045%/°C

TECHNICAL DRAWING

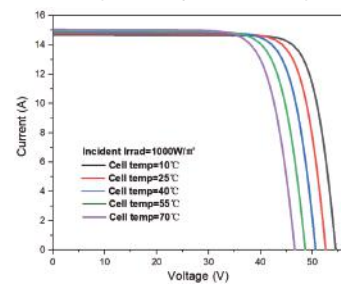


I-V CURVE

I-V characteristics at different irradiance (SP-N16A/144HG620W)



I-V characteristics at different temperatures (SP-N16A/144HG620W)



PACKING CONFIGURATION

Container	40'HC
Pieces per Pallet	36 pcs
Packaging box Size	2400×1140×1251mm
Pieces per Container	720 pcs



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