



SP-N16A/144HG

SIRIUS

TOPcon Bifacial

600-620W



HIGHER EFFICIENCY



LOWER TEMPERATURE COEFFICIENT



LOW ATTENUATION, LONG WARRANTY



HIGHER BIFACIALITY

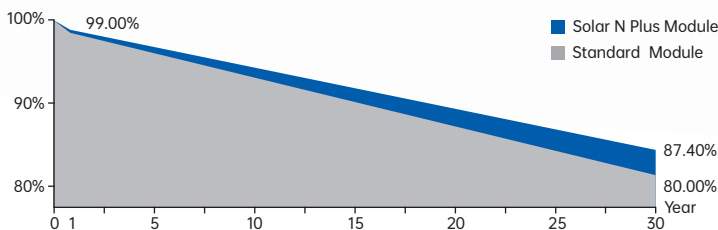
WARRANTY



15 YEARS Guarantee on product material and workmanship



30 YEARS Linear power output warranty



INSURANCE



中国平安 PINGAN

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

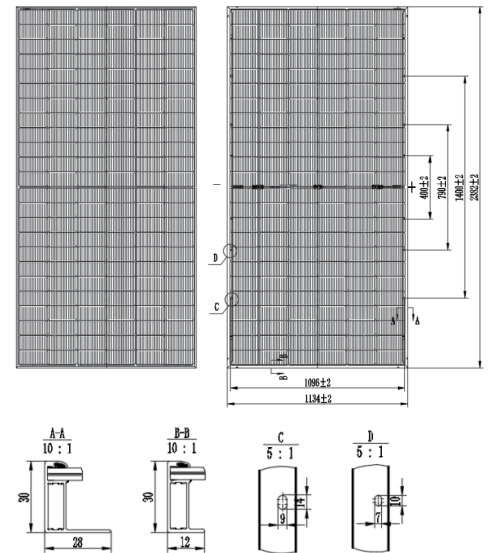
APPLICATION CONDITIONS

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

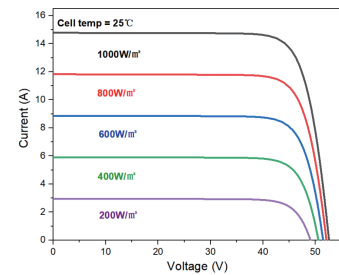
Nominal Module Operating Temperature	42±2°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of ISC	+0.045%/°C

TECHNICAL DRAWING

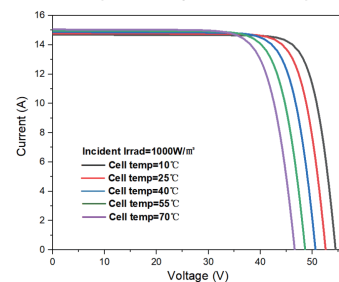


I-V CURVE

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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