

SP-N16/120HG



# SIRIUS

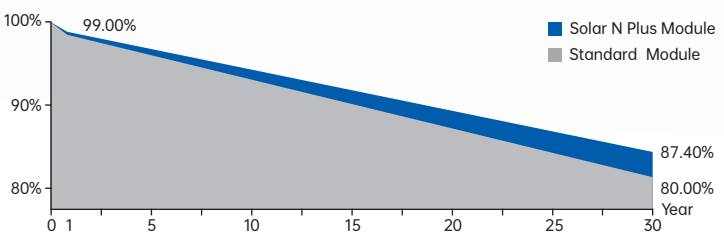
## TOPcon Bifacial

# 460-480W

-  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

# 460-480W SP-N16/120HG

## ELECTRICAL CHARACTERISTICS (STC)

Maximum Power (Pm)	W	460	465	470	475	480
Power Tolerance	W	0~+5				
Maximum Power Voltage (V <sub>m</sub> )	V	35.00	35.20	35.40	35.60	35.80
Maximum Power Current (I <sub>m</sub> )	A	13.16	13.22	13.28	13.34	13.40
Open Circuit Voltage (V <sub>oc</sub> )	V	42.50	42.70	42.90	43.10	43.30
Short Circuit Current (I <sub>sc</sub> )	A	13.73	13.77	13.81	13.85	13.89
Module Efficiency (η <sub>m</sub> )	%	21.30	21.50	21.80	22.00	22.30

STC:AM=1.5, irradiance=1000W/m<sup>2</sup>, module temperature=25°C

## ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power (Pm)	W	344	349	354	359	364
Maximum Power Voltage (V <sub>m</sub> )	V	32.80	33.00	33.20	33.40	33.60
Maximum Power Current (I <sub>m</sub> )	A	10.53	10.59	10.65	10.71	10.77
Open Circuit Voltage (V <sub>oc</sub> )	V	40.37	40.57	40.77	40.97	41.17
Short Circuit Current (I <sub>sc</sub> )	A	10.97	11.01	11.05	11.09	11.13

NMOT: irradiance=800W/m<sup>2</sup>, environment temperature=20°C, wind speed=1m/s

## REAR SIDE POWER GAIN

5%	Max Power	483W	488W	494W	499W	504W
	Efficiency	22.38%	22.63%	22.87%	23.11%	23.35%
15%	Max Power	529W	535W	541W	546W	552W
	Efficiency	24.51%	24.78%	25.05%	25.31%	25.58%
25%	Max Power	575W	581W	588W	594W	600W
	Efficiency	26.65%	26.93%	27.22%	27.51%	27.80%

## MECHANICAL SPECIFICATIONS

External Dimension (L×W×H)	1903×1134×30mm
Weight	27.1kg
Number of Cells	120 (6x20)
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 <sup>2</sup> , 300mm or customized length
Connector	MC4 Compatible

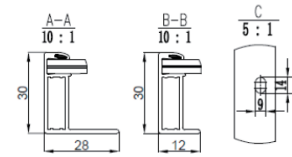
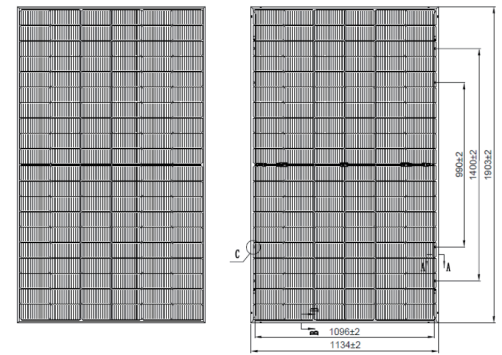
## APPLICATION CONDITIONS

Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	25A
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

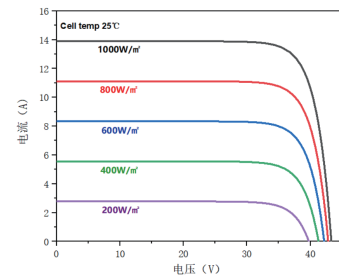
Nominal Module Operating Temperature	42±2°C
Temperature Coefficient of P <sub>max</sub>	-0.29%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.25%/°C
Temperature Coefficient of I <sub>sc</sub>	+0.045%/°C

## TECHNICAL DRAWING

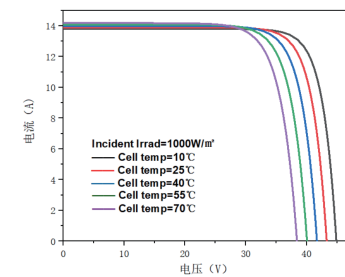


## I-V CURVE

I-V characteristics at different irradiance (SP-N16/120HG480W)



I-V characteristics at different temperatures (SP-N16/120HG480W)



## PACKING CONFIGURATION

Container	40'HC
Pieces per Pallet	36 pcs
Packaging box Size	1933×1140×1290mm
Pieces per Container	864 pcs



**SOLAR N PLUS NEW ENERGY TECHNOLOGY CO., LTD**

No.1 Jianye road, Zhongxin Suchu Industrial Development Zone, Chuzhou City, 239000, Anhui Province, China  
025-52806120  
www.solarnplus.com

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