

**SP-N16B/96HG**



# SIRIUS

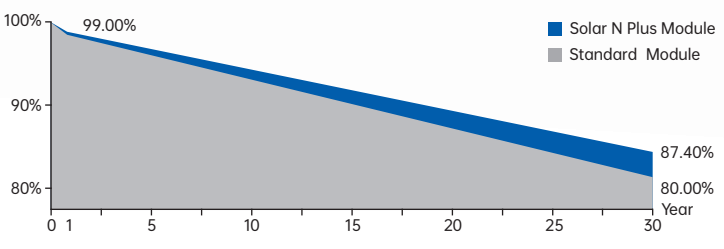
## TOPcon Bifacial

# 435-455W

-  **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

# 435-455W SP-N16B/96HG

## ELECTRICAL CHARACTERISTICS (STC)

Maximum Power (Pm)	W	435	440	445	450	455
Power Tolerance	W			0~+5		
Maximum Power Voltage (V <sub>m</sub> )	V	29.54	29.72	29.90	30.08	30.26
Maximum Power Current (I <sub>m</sub> )	A	14.73	14.81	14.89	14.97	15.04
Open Circuit Voltage (V <sub>oc</sub> )	V	34.49	34.67	34.85	35.03	35.21
Short Circuit Current (I <sub>sc</sub> )	A	15.90	15.95	16.00	16.05	16.10
Module Efficiency (η <sub>m</sub> )	%	21.8	22.0	22.3	22.5	22.8

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

## ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power (Pm)	W	327	331	335	338	342
Maximum Power Voltage (V <sub>m</sub> )	V	27.51	27.68	27.88	27.96	28.18
Maximum Power Current (I <sub>m</sub> )	A	11.89	11.96	12.02	12.09	12.14
Open Circuit Voltage (V <sub>oc</sub> )	V	32.77	32.94	33.11	33.28	33.45
Short Circuit Current (I <sub>sc</sub> )	A	12.84	12.88	12.92	12.96	13.00

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

## REAR SIDE POWER GAIN

5%	Max Power	457W	462W	467W	473W	478W
	Efficiency	22.86%	23.12%	23.38%	23.65%	23.91%
15%	Max Power	500W	506W	512W	518W	523W
	Efficiency	25.04%	25.32%	25.61%	25.90%	26.19%
25%	Max Power	544W	550W	556W	563W	569W
	Efficiency	27.21%	27.53%	27.84%	28.15%	28.46%

## MECHANICAL SPECIFICATIONS

External Dimension (L×W×H)	1762×1134×30mm
Weight	20.9kg
Number of Cells	96 (6×16)
Front Glass	1.6mm AR-coating heat-strengthened glass
Rear Glass	1.6mm 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

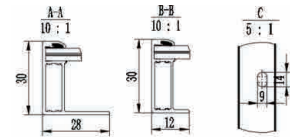
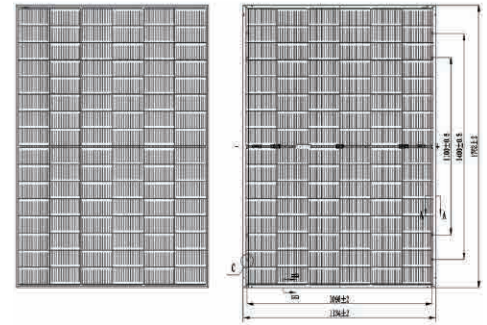
## APPLICATION CONDITIONS

Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	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

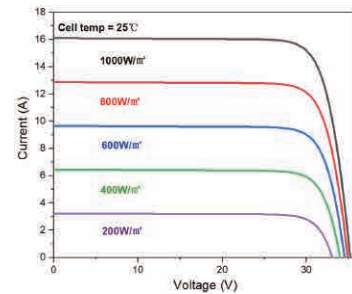
Nominal Module Operating Temperature	42±2°C
Temperature Coefficient of P <sub>max</sub>	-0.29%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.25%/°C
Temperature Coefficient of I <sub>sc</sub>	+0.045%/°C

## TECHNICAL DRAWING

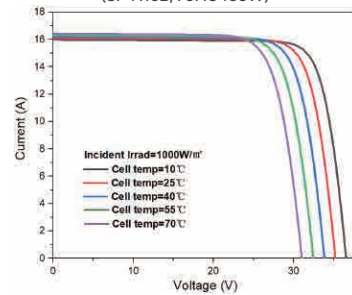


## I-V CURVE

I-V characteristics at different irradiance (SP-N16B/96HG455W)



I-V characteristics at different temperatures (SP-N16B/96HG455W)



## PACKING CONFIGURATION

Container	40'HC
Pieces per Pallet	36 pcs
Packaging box Size	1790×1150×1255mm
Pieces per Container	936 pcs



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