



# SOLAR PLUS

SP-N16/108H

# SIRIUS

All-black monofacial

# 415-435W



HIGH POWER



MUTI BUSBAR



HALF-CUT CELL



HIGH DENSITY ENCAPSULATION

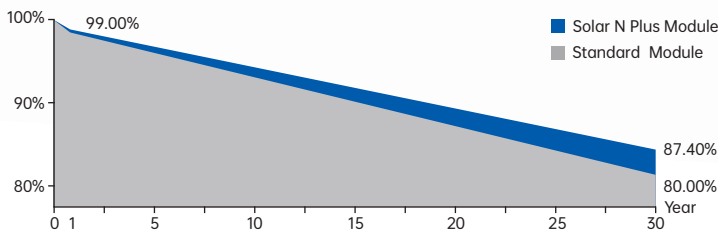
## WARRANTY



Guarantee on product material and workmanship



Linear power output warranty



## CERTIFICATION



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

# 415-435W

SP-N16/108H

## ELECTRICAL CHARACTERISTICS (STC)

Maximum Power (Pm)	W	415	420	425	430	435
Power Tolerance	W			0~+5		
Maximum Power Voltage (V <sub>m</sub> )	V	31.49	31.70	31.91	32.12	32.30
Maximum Power Current (I <sub>m</sub> )	A	13.18	13.25	13.32	13.39	13.47
Open Circuit Voltage (V <sub>oc</sub> )	V	38.11	38.32	38.53	38.74	38.85
Short Circuit Current (I <sub>sc</sub> )	A	13.92	14.00	14.08	14.16	14.24
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	312	316	320	324	328
Maximum Power Voltage (V <sub>m</sub> )	V	29.59	29.80	30.01	30.22	30.40
Maximum Power Current (I <sub>m</sub> )	A	10.48	10.55	10.62	10.69	10.76
Open Circuit Voltage (V <sub>oc</sub> )	V	36.21	36.42	36.63	36.84	37.05
Short Circuit Current (I <sub>sc</sub> )	A	11.22	11.30	11.38	11.46	11.54

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

## MECHANICAL SPECIFICATIONS

External Dimension (L×W×H)	1722×1134×30mm
Solar Cells	108 (6x18)/16BB Mono/182×91mm
Weight	21kg
Glass	2.0mm AR-coating heat-strengthened glass
Frame	Anodized aluminum alloy, black 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
Application Rating	Class A

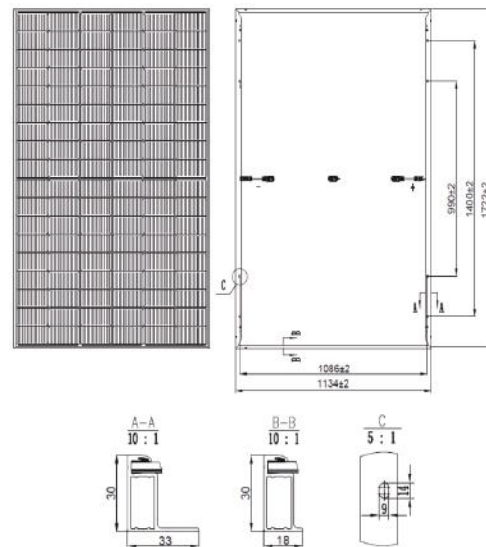
## TEMP CHARACTERISTICS

Nominal Module Operating Temperature	42±2°C
Temperature Coefficient of Power	-0.29%/°C
Temperature Coefficient of Voltage	-0.25%/°C
Temperature Coefficient of Current	+0.045%/°C

## PACKING CONFIGURATION

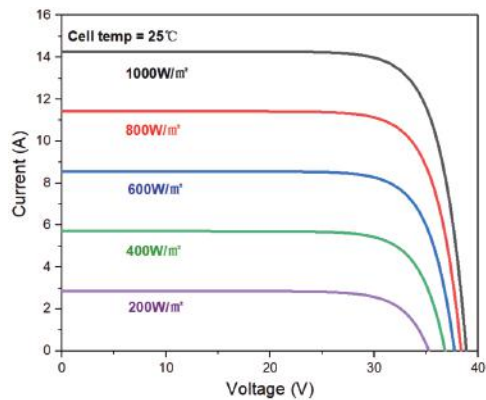
Container	40'HC
Module per box	36 Pieces
Packaging box Size	1750×1140×1290mm
Module per container	936 Pieces

## TECHNICAL DRAWING

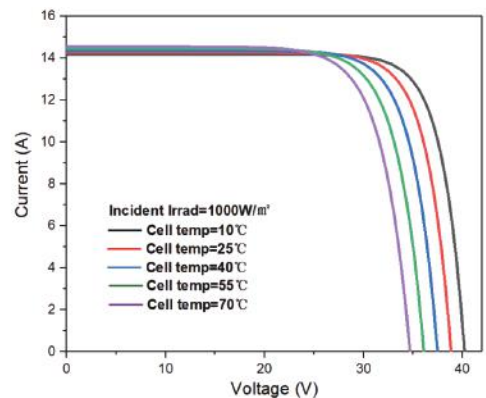


## I-V CURVE

I-V characteristics at different irradiance (SP-N16/108H 435W)



I-V characteristics at different temperatures (SP-N16/108H 435W)



**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

Solar N Plus reserves the sole right of interpretation.  
Version No.2023V2.0