

SP-N16/108HG

SIRIUS

All-black Bifacial

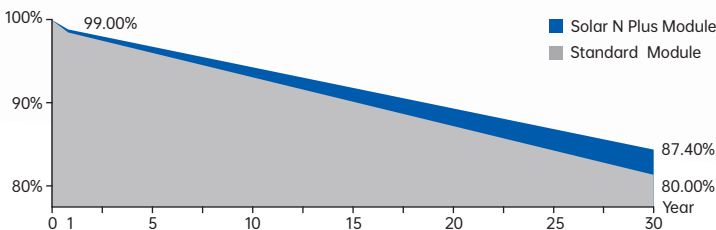
415-435W

-  **HIGHER EFFICIENCY**
-  **LOWER TEMPERATURE COEFFICIENT**
-  **LOW ATTENUATION, LONG WARRANTY**
-  **HIGHER BIFACIALITY**

WARRANTY

12 YEARS Guarantee on product material and workmanship

30 YEARS 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-N16/108HG

ELECTRICAL CHARACTERISTICS (STC)

Maximum Power (Pm)	W	415	420	425	430	435
Power Tolerance	W			0~+5		
Maximum Power Voltage (Vm)	V	31.49	31.70	31.91	32.12	32.30
Maximum Power Current (Im)	A	13.18	13.25	13.32	13.39	13.47
Open Circuit Voltage (Voc)	V	38.11	38.32	38.53	38.74	38.85
Short Circuit Current (Isc)	A	13.92	14.00	14.08	14.16	14.24
Module Efficiency (ηm)	%	21.30	21.50	21.80	22.00	22.30

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

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power (Pm)	W	312	316	320	324	328
Maximum Power Voltage (Vm)	V	29.59	29.80	30.01	30.22	30.40
Maximum Power Current (Im)	A	10.48	10.55	10.62	10.69	10.76
Open Circuit Voltage (Voc)	V	36.21	36.42	36.63	36.84	37.05
Short Circuit Current (Isc)	A	11.22	11.30	11.38	11.46	11.54

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

REAR SIDE POWER GAIN

5%	Max Power	436W	441W	446W	452W	457W
	Efficiency	22.31%	22.58%	22.85%	23.12%	23.39%
15%	Max Power	477W	483W	489W	495W	500W
	Efficiency	24.44%	24.73%	25.03%	25.32%	25.62%
25%	Max Power	519W	525W	531W	538W	544W
	Efficiency	26.57%	26.89%	27.21%	27.53%	27.85%

MECHANICAL SPECIFICATIONS

External Dimension (L×W×H)	1722×1134×30mm
Weight	24.1kg
Solar Cells	108 (6×18)/16BB Mono/182×91mm
Front Glass	2.0mm AR-coating heat-strengthened glass
Rear Glass	2.0mm heat-strengthened glass
Frame	Anodized aluminum alloy, black color
Junction Box	IP68
Output Cables	4.0mm ² , 300mm or customized length
Connector	MC4 Compatible

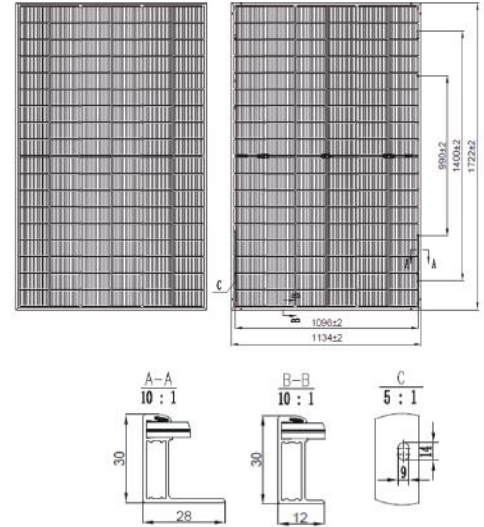
APPLICATION CONDITIONS

Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	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

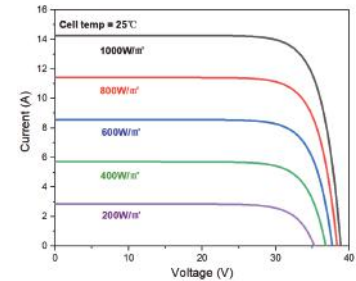
Nominal Module Operating Temperature	42±2°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of ISC	+0.045%/°C

TECHNICAL DRAWING

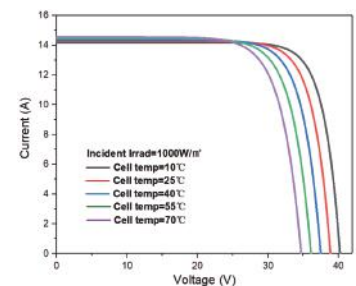


I-V CURVE

I-V characteristics at different irradiance (SP-N16/108HG435W)



I-V characteristics at different temperatures (SP-N16/108HG435W)



PACKING CONFIGURATION

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



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