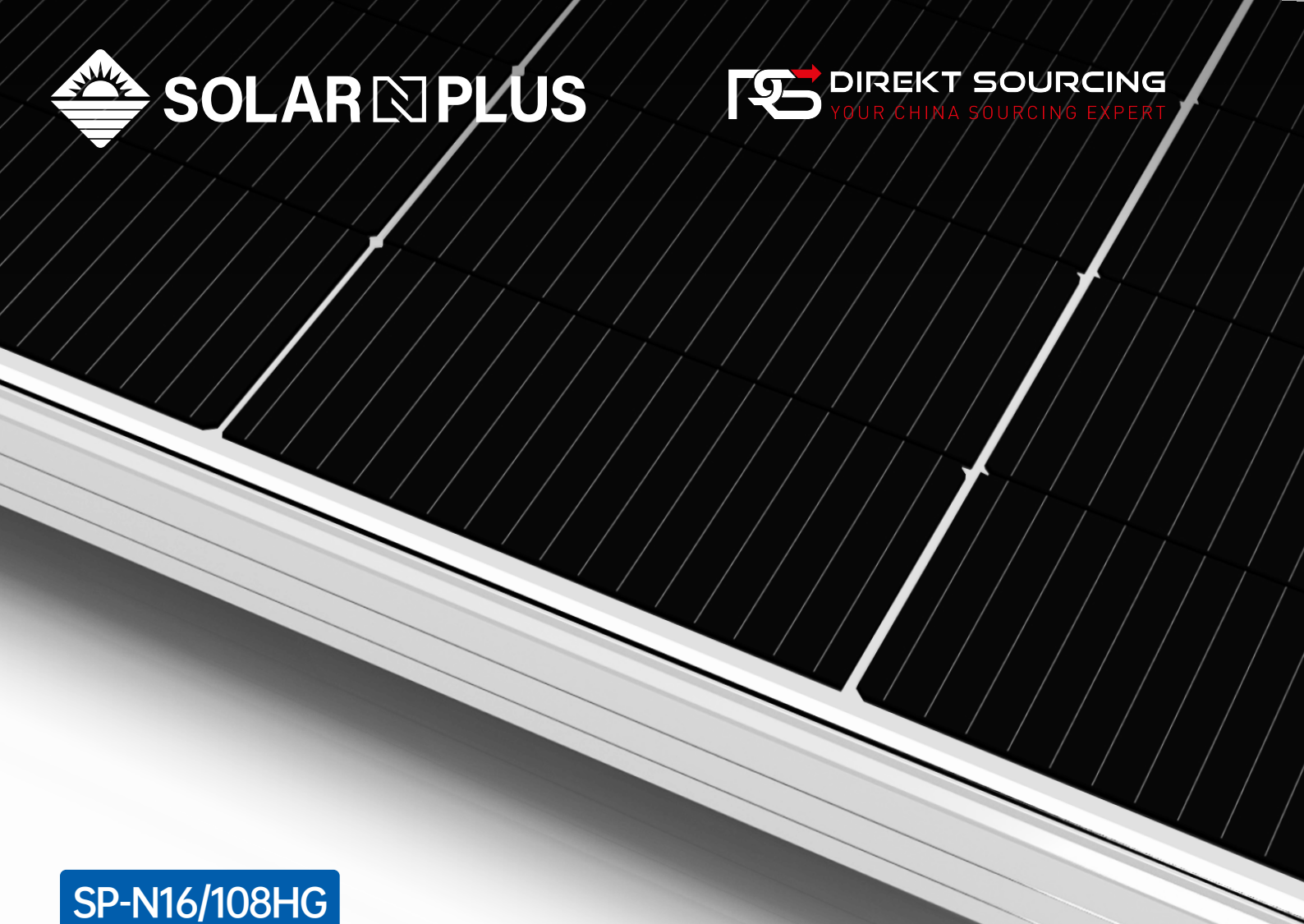
SOLAR N PLUS

DIREKT SOURCING
YOUR CHINA SOURCING EXPERT



SP-N16/108HG

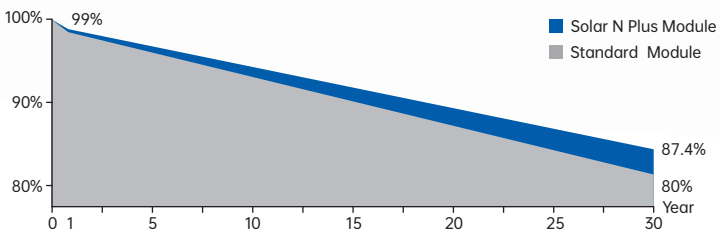
TOPcon Bifacial 420-450W

- 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

Ariel Re

中国平安 PING AN

CERTIFICATION

TÜV NORD Type Tested

CE

ISO

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

420-450W SP-N16/108HG

ELECTRICAL CHARACTERISTICS (STC)

Maximum Power (Pm)	W	420	425	430	435	440	445	450
Power Tolerance	W				0~+5			
Maximum Power Voltage (Vm)	V	33.3	33.5	33.7	33.9	34.1	34.3	34.5
Maximum Power Current (Im)	A	12.61	12.69	12.76	12.83	12.91	12.98	13.05
Open Circuit Voltage (Voc)	V	38.85	39.05	39.25	39.45	39.65	39.85	40.05
Short Circuit Curren (Isc)	A	13.46	13.51	13.56	13.61	13.66	13.71	13.76
Module Efficiency (ηm)	%	21.5	21.8	22.0	22.3	22.5	22.8	23.0

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

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power (Pm)	W	316	320	324	328	332	336	340
Maximum Power Voltage (Vm)	V	30.44	30.68	30.92	31.15	31.35	31.55	31.72
Maximum Power Current (Im)	A	10.38	10.43	10.48	10.53	10.59	10.65	10.72
Open Circuit Voltage (Voc)	V	36.70	36.90	37.10	37.30	37.50	37.70	37.89
Short Circuit Current (Isc)	A	10.81	10.86	10.91	10.96	11.00	11.05	11.10

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

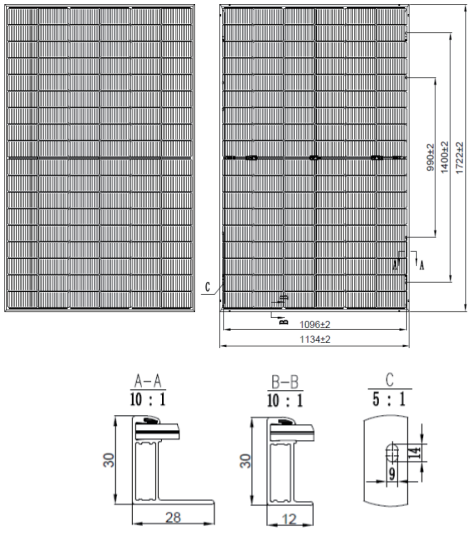
REAR SIDE POWER GAIN

5%	Max Power	441W	446W	452W	457W	462W	467W	473W
	Efficiency	17.07%	17.27%	17.48%	17.68%	17.88%	18.09%	18.29%
15%	Max Power	483W	489W	495W	500W	506W	512W	518W
	Efficiency	18.70%	18.92%	19.14%	19.37%	19.59%	19.81%	20.03%
25%	Max Power	525W	531W	538W	544W	550W	556W	563W
	Efficiency	20.32%	20.57%	20.81%	21.05%	21.29%	21.53%	21.77%

MECHANICAL SPECIFICATIONS

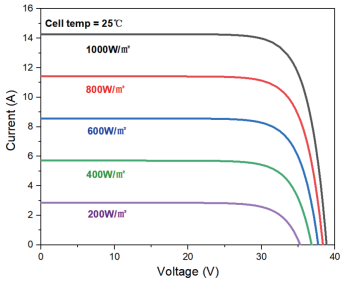
External Dimension (L×W×H)	1722×1134×30mm
Weight	24kg
Number of Cells	108 (6x18)
Front Glass	2.0mm AR-coating heat-strengthened glass
Rear Glass	2.0mm heat-strengthened glass
Frame	Anodized aluminum alloy, silver color
Junction Box	IP68
Output Cables	4mm², 300mm or customized length
Connector	MC4 Compatible

TECHNICAL DRAWING

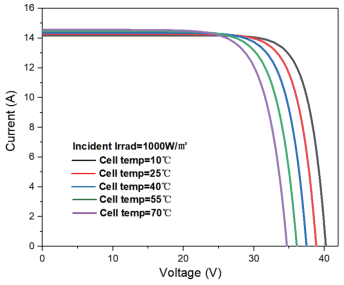


I-V CURVE

I-V characteristics at different irradiance (SP-N16/108HG450W)



I-V characteristics at different temperatures (SP-N16/108HG450W)



APPLICATION CONDITIONS

Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	25A
Operating Temperature	-40℃ ~ +85℃
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℃
Temperature Coefficient of Pmax	-0.29%/℃
Temperature Coefficient of Voc	-0.25%/℃
Temperature Coefficient of ISC	0.045%/℃

PACKING CONFIGURATION

Container	40'HC
Pieces per Pallet	36 pcs
Packaging box Size	1779×1145×1260mm
Pieces per Container	936 pcs

DIREKT SOURCING
YOUR CHINA SOURCING EXPERT
Austria, 2191 Schrick, Sommergasse 6
office@direktsourcing.com | +43-670-3574328

Solar N Plus reserves the sole right of interpretation.
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