



SOLAR N PLUS

SP-M10/108HG

CYGNUS

All-black monofacial

395-415W

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

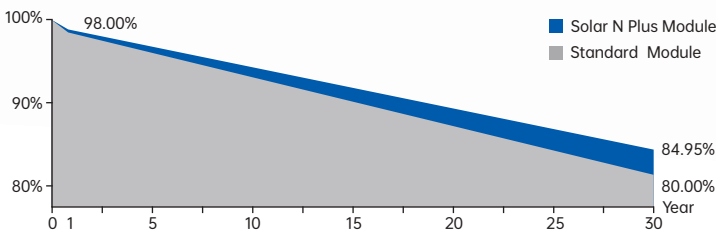
WARRANTY



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

395-415W

SP-M10/108HG

ELECTRICAL CHARACTERISTICS (STC)

Maximum Power (Pm)	W	395	400	405	410	415
Power Tolerance	W			0~+5		
Maximum Power Voltage (Vm)	V	30.60	30.80	31.00	31.20	31.40
Maximum Power Current (Im)	A	12.91	12.99	13.07	13.15	13.23
Open Circuit Voltage (Voc)	V	36.60	36.80	37.00	37.20	37.40
Short Circuit Current (Isc)	A	13.77	13.85	13.93	14.01	14.09
Module Efficiency (ηm)	%	20.20	20.50	20.70	21.00	21.30

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

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power (Pm)	W	294	298	301	305	309
Maximum Power Voltage (Vm)	V	28.54	28.74	28.94	29.14	29.34
Maximum Power Current (Im)	A	10.28	10.36	10.44	10.52	10.60
Open Circuit Voltage (Voc)	V	34.53	34.73	34.93	35.13	35.33
Short Circuit Current (Isc)	A	11.27	11.35	11.43	11.51	11.59

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

REAR SIDE POWER GAIN

5%	Max Power	415W	420W	425W	431W	436W
	Efficiency	21.24%	21.51%	21.78%	22.05%	22.31%
15%	Max Power	454W	460W	466W	472W	477W
	Efficiency	23.26%	23.56%	23.85%	24.15%	24.44%
25%	Max Power	494W	500W	506W	513W	519W
	Efficiency	25.28%	25.60%	25.93%	26.25%	26.57%

MECHANICAL SPECIFICATIONS

External Dimension (L×W×H)	1722×1134×30mm
Weight	24.1kg
Solar Cells	108 (6×18)/10BB 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

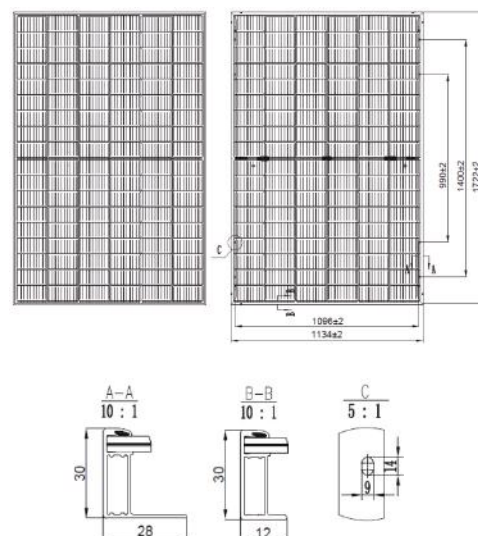
APPLICATION CONDITIONS

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	70±5%
Application Rating	Class A

TEMP CHARACTERISTICS

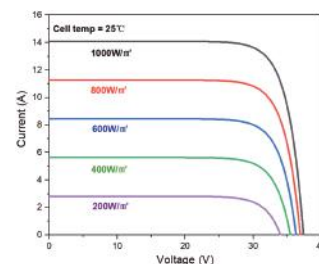
Nominal Module Operating Temperature	45±2°C
Temperature Coefficient of Pmax	-0.35%/°C
Temperature Coefficient of Voc	-0.28%/°C
Temperature Coefficient of ISC	+0.050%/°C

TECHNICAL DRAWING

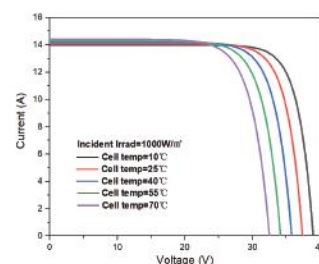


I-V CURVE

I-V characteristics at different irradiance (SP-M10/108HG415W)



I-V characteristics at different temperatures (SP-M10/108HG415W)



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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