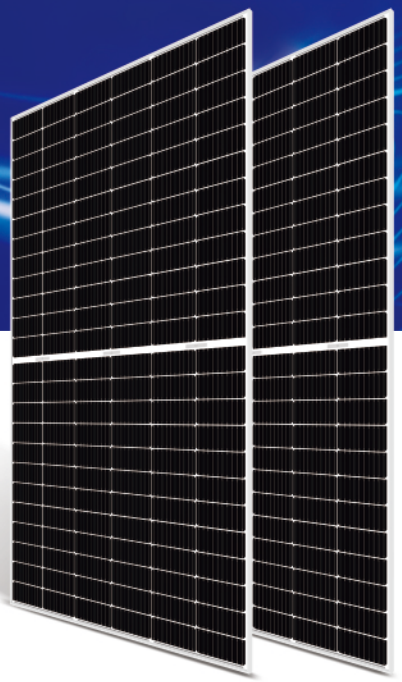
SOLAR PLUS

SunPlus High-efficiency 182 PERC Module



390W-410W

KEY FEATURES

High Efficiency

By utilizing MBB half-cell technology to increase energy density, the conversion efficiency can reach 21.86%.

High Reliability

3 times IEC's new standard testing, a 12-year material warranty and a 25-year power warranty to ensure high reliability.

Anti-PID

By utilizing advanced cell production technology and rigorous materials control, the attenuation caused by PID can be minimized.

Low Risk of Micro-cracks

Lower the risk of micro-cracking and broken busbar due to MBB cells.

Load Capacity

2400 Pa wind load and 5400 Pa snow load.

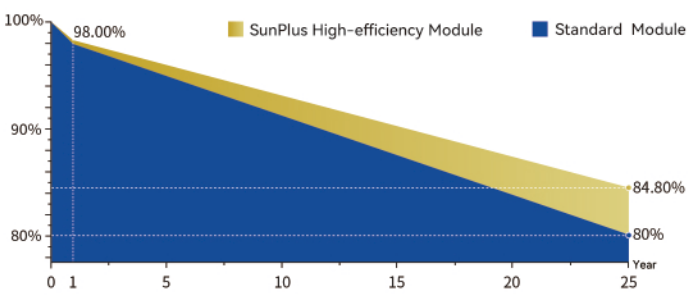
Excellent Low-light Performance

Higher power output under weak light conditions such as haze and cloudy weather.

PRODUCT CERTIFICATION

- Through various long-term reliability tests
- EL testing before and after lamination to ensure the reliability.
- Adhering to strict international standard management systems ISO 9001, ISO 14001 and OHSAS 18001
- Passing various rigorous environmental tests (salt spray, ammonia, and dust-proof testing such as IEC 61701, IEC 62716, DIN EN 60068-2-68)

WARRANTY



12 YEARS Guarantee on product material and workmanship

25 YEARS Linear power output warranty

0.55 % Linear degradation per year within 25 years.

SP-M10/108H390W-410W

ELECTRICAL CHARACTERISTICS (STC)

Maximum Power (Pm)	W	390	395	400	405	410
Power Tolerance	W			0 ~ +5W		
Maximum Power Voltage (Vm)	V	30.76	30.98	31.18	31.38	31.59
Maximum Power Current (Im)	A	12.69	12.76	12.83	12.91	12.98
Open Circuit Voltage (Voc)	V	36.62	36.84	37.04	27.24	37.45
Short Circuit Curren (Isc)	A	13.59	13.66	13.73	13.81	13.88
Module Efficiency (ηm)	%	19.90	20.20	20.50	20.70	21.00

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

ELECTRICAL CHARACTERISTICS (NOCT)

Maximum Power (Pm)	W	294	298	302	306	309
Maximum Power Voltage (Vm)	V	28.40	28.60	28.80	29.00	29.20
Maximum Power Current (Im)	A	10.38	10.44	10.50	10.56	10.62
Open Circuit Voltage (Voc)	V	34.40	34.60	34.80	35.00	35.20
Short Circuit Curren (Isc)	A	10.93	10.98	11.04	11.10	11.16

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

MECHANICAL SPECIFICATIONS

External Dimension (L×W×H)	1722m×1134m×35mm
Solar Cells	108-cell (6x18)/Mono/10BB(182mm)
Weight	22.0kg
Glass	3.2mm High-transparency anti-reflective coated tempered glass
Frame	Anodized aluminum alloy, silver color
Junction Box	IP68
Output Cables	300mm(+)/300mm(-) , 4mm² or Customized Length
Connector	Compatible with MC4 or MC

APPLICATION CONDITIONS

Maximum System Voltage	1500V DC-[H]
Maximum Series Fuse Rating	20A
Operating Temperature	-40℃ ~ +85℃
Mechanical Load	5400Pa/2400Pa

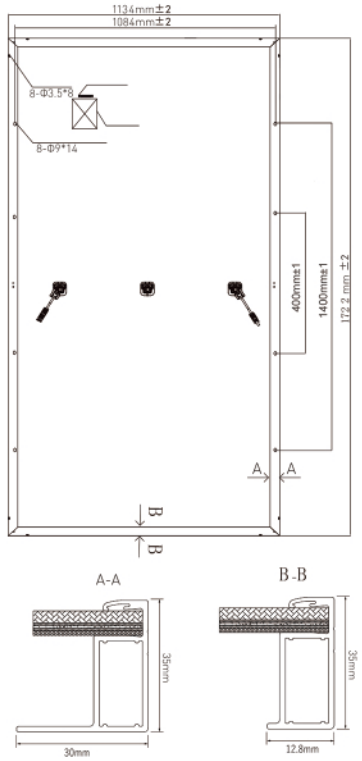
TEMP CHARACTERISTICS

Nominal Module Operating Temperature	44±2℃
Temperature Coefficient of Power	-0.350%/℃
Temperature Coefficient of Voltage	-0.270%/℃
Temperature Coefficient of Current	+ 0.048%/℃

PACKING CONFIGURATION

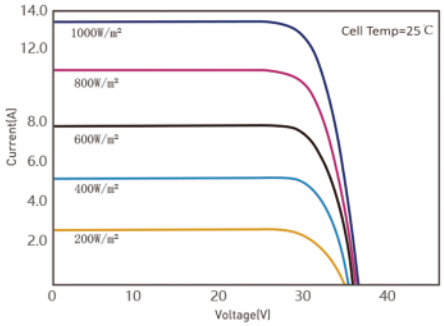
Pieces per Pallet	31
Pieces per 40'HC	936

TECHNICAL DRAWING

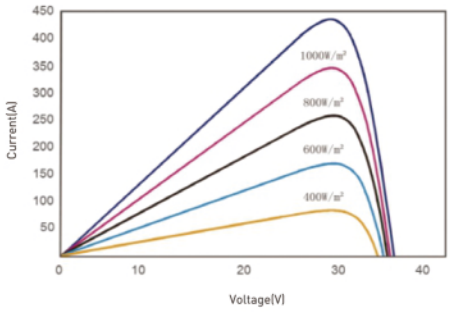


I-V CURVE

Current-voltage Curve (405W)



Current/Power-voltage Curve (405W)



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