

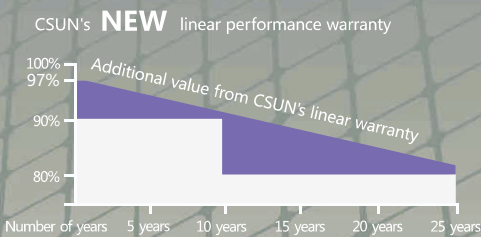
MONO



PowerGuard Insurance Global Coverage

The power output shall not be less than 97% of the minimum power output stated in the product data sheet in the first year of the product's life cycle. The loss of power output shall not exceed 0.68% per year thereafter, ending with 80.68% in the 25th year.

■ CSUN ■ Standard Warranty



CSUN320-60M

High efficiency PERC technology
for esthetic applications

CSUN320-60M CSUN315-60M
CSUN310-60M CSUN305-60M
CSUN300-60M

19.71%
Module efficiency

320W
Highest power output

10years
Material & Workmanship warranty

25years
Linear power output warranty



PID-free



World class mono efficiency



Tighter product performance distribution and current sorting reduces the mismatch power loss in system operation



Positive tolerance offer



Good temperature coefficient enables higher output in high temperature regions



Excellent performance under low light conditions



Certified for salt/ammonia corrosion resistance



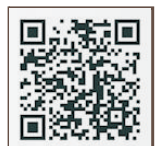
Load certificates: wind to 2400Pa and snow to 5400Pa

- China Sunergy Co., Ltd. designs, manufactures and delivers high efficient solar cells and modules to the world from its production centers based in China, Turkey, South Korea and Vietnam.
- Founded in 2004, China Sunergy is well known for its advanced solar cell technology reliable product quality and excellent customer service.
- As one of leading PV enterprises, China Sunergy has delivered more than 4.0GW of solar products to residential, commercial, utility and off-grid projects all around the world.

- Note:
All specifications, warranties, certifications about module of "CSUN" series also apply to that of "SST".

All information and data are subject to change without notice.

Right 2019



Electrical Characteristics at Standard Test Conditions(STC)

Module Type	CSUN320-60M	CSUN315-60M	CSUN310-60M	CSUN305-60M	CSUN300-60M
Maximum Power - Pmax (W)	320	315	310	305	300
Open Circuit Voltage - Voc (V)	40.4	40.2	40.1	39.9	39.8
Short Circuit Current - Isc (A)	10.03	9.95	9.87	9.72	9.6
Maximum Power Voltage - Vmpp (V)	33	32.8	32.6	32.4	32.2
Maximum Power Current - Impp (A)	9.7	9.61	9.52	9.42	9.31
Module Efficiency	19.71%	19.40%	19.09%	18.79%	18.48%

Standard Test Conditions (STC): irradiance 1,000 W/m²; AM 1.5; module temperature 25°C. Tolerance of Pmpp: 0~ +5W.

Measuring uncertainty of power: ±3%.

Electrical Characteristics at Normal Operating Cell Temperature(NOCT)

Module Type	CSUN320-60M	CSUN315-60M	CSUN310-60M	CSUN305-60M	CSUN300-60M
Maximum Power - Pmax (W)	237	234	230	227	223
Open Circuit Voltage - Voc (V)	37.3	37.2	37.1	36.9	36.8
Short Circuit Current - Isc (A)	8.1	8.04	7.98	7.86	7.76
Maximum Power Voltage - Vmpp (V)	31	30.8	30.6	30.5	30.4
Maximum Power Current - Impp (A)	7.66	7.59	7.52	7.42	7.33

Normal Operating Cell Temperature (NOCT) : irradiance 800W/m²; wind speed 1 m/s ; cell temperature 45°C; ambient temperature 20°C.

Measuring uncertainty of power: ±3%.

Temperature Characteristics

NOTC	45°C (±2°C)	Maximum System Voltage [V]	1000
Voltage Temperature Coefficient	-0.29%/K	Series Fuse Rating [A]	20
Current Temperature Coefficient	+0.05%/K		
Power Temperature Coefficient	-0.39%/K		

Maximum Ratings

Material Characteristics

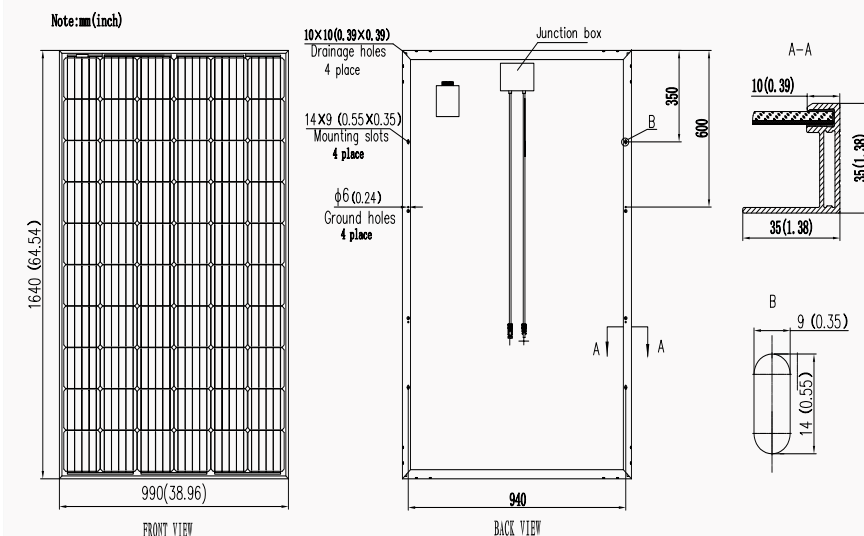
Dimensions	1640×990×35mm (L×W×H)
Weight	18.3kg
Frame	Anodized aluminum profile
Front Glass	White toughened safety glass, 3.2 mm
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Sheet	Composite film
Cells	6×10 pieces polycrystalline solar cells series strings (156.75mm×156.75mm)
Junction Box	Rated current≥13A, IP≥67, TUV&UL
Cable&Connector	Length 900 mm, 1×4 mm ² , compatible with MC4

Packaging

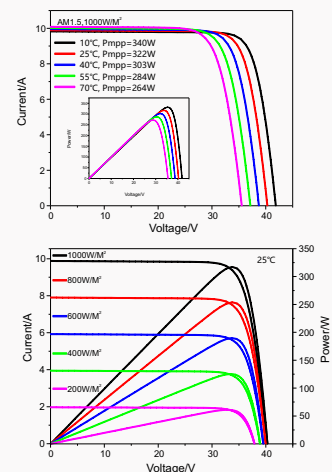
Dimensions(L×W×H)	1680×1110×1120mm	Temperature Range	-40 °C to + 85 °C
Container20'	360	Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m-s-1
Container40'	840	Maximum Surface Load	5,400 Pa
Container40'HC	910	Application class	class A

System Design

Dimensions



IV-Curves



Excellent performance under weak light condition.