



# Powerguard Insurance Global Coverage

The power output shall not be less than 96.5% 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 0.7% per year thereafter, ending with 80.7% in the 25th year.









### **CSUN300-60M**

## High Efficiency PERC Technology for Esthetic Applications

Module Fire Performance: Type 1(UL 1703) Fire Resistance Rating: Class C(IEC 61730)

CSUN300-60M CSUN295-60M CSUN290-60M

18.48% Module efficiency

Module efficiency

Highest power output

10 Years Material & Workmanship warranty

25 Years
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 better output in hot climates



Excellent performance under weak light condition



Passed salt mist & ammonia corrosion, blowing sand and hail testing



Certificated to withstand wind (2400 Pa) and snow load (5400 Pa)

- China Sunergy (Nanjing) Co., Ltd. designs, manufactures and delivers high efficiency 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 subjects to change without notice.

#### **Electrical Characteristics at Standard Test Conditions (STC)**

Module Type	CSUN 300-60M	CSUN 295-60M	CSUN 290-60M
Maximum Power - Pmax (W)	300	295	290
Positive Power Tolerance	0~3%	0~3%	0~3%
Open Circuit Voltage - Voc (V)	39.8	39.6	39.5
Short Circuit Current - Isc (A)	9.60	9.54	9.47
Maximum Power Voltage - Vmpp (V)	32.2	32.0	31.9
Maximum Power Current - Impp (A)	9.31	9.22	9.10
Module Efficiency	18.48%	18.16%	17.86%

Standard test conditions (STC): irradiance 1000W/m²; AM 1.5G; cell temperature 25°C. Measuring uncertainty of power is within ±3%. Certified in accordance with IEC61215, IEC61730-1/2 and UL 1703.

### **Electrical Characteristics at Nominal Operating Cell Temperature (NOCT)**

Module Type	CSUN 300-60M	CSUN 295-60M	CSUN 290-60M
Maximum Power - Pmax (W)	227	222	214
Open Circuit Voltage - Voc (V)	37.3	37.1	36.1
Short Circuit Current - Isc (A)	7.74	7.69	7.60
Maximum Power Voltage - Vmpp (V)	31.0	30.6	30.0
Maximum Power Current - Impp (A)	7.32	7.25	7.13

Nominal operating cell temperature (NOCT): irradiance 800W/m²; wind speed 1 m/s; ambient temperature 20°C Measuring uncertainty of power is within ±3%. Certified in accordance with IEC61215, IEC61730-1/2 and UL 1703.

#### **Temperature Characteristics**

Voltage Temperature Coefficient	-0.307%/K
Current Temperature Coefficient	+0.039%/K
Power Temperature Coefficient	-0.423%/K
NOCT	45 ±2°C

#### **Maximum Ratings**

Maximum System Voltage (V)	1500
Series Fuse Rating (A)	20

#### **Mechanical Characteristics**

Dimensions (L*W*H)	1640 x 990 x 35 mm
Weight	18.3 kg
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 monocrystalline solar cells series strings (156*156mm)
Junction Box	Rated current ≥ 13A, IP ≥ 67, TUV & UL
Cable	Length 900 mm, 1x4 mm <sup>2</sup>
Connector	Compatible with MC 4

### **Packaging**

Dimensions (L*W*H)	1700 x 1140 x1137 mm
Dilliensions (L W II)	1700 X 1140 X1137 IIIIII
Container 20'	360 pcs
Container 40'HC	896 pcs

#### System Design

Temp. Range	-40°C to + 85°C
Hail	Max. diameter of 25mm with impact speed of 23m/s
Max. Capacity	Snow 5400 Pa, wind 2400 Pa
Application Class	A
Safety Class	II

#### Dimensions IV-Curves

