

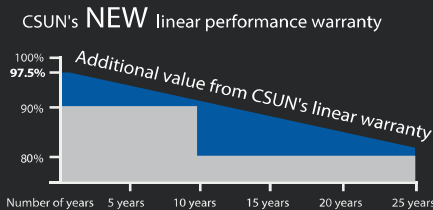
# Poly



## PowerGuard Insurance Global Coverage

The power output shall not be less than 97.5% 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.

■ CSUN    ■ Standard warranty



# CSUN 285-60P

High efficiency PERC tech for esthetic applications

Module Fire Performance: Type 1 (UL 1703)

Fire Resistance Rating: Class C (IEC 61730)

CSUN285-60P    CSUN280-60P

CSUN275-60P    CSUN270-60P

**17.55%**  
Module efficiency



Industry leading conversion efficiency

**285 W**  
Highest power output



Positive tolerance offer

**10 years**  
Material & workmanship warranty



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

**25 years**  
Linear power output warranty



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



Excellent performance under weak light condition



Good temperature coefficient enables better output in hot climates

- China Sunergy 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 subject to change without notice.



[www.csun-solar.com](http://www.csun-solar.com)



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Version 3/2014-ENG

## Electrical Characteristics at Standard Test Conditions (STC)

Module Type	CSUN 285-60P	CSUN 280-60P	CSUN 275-60P	CSUN 270-60P
Maximum Power - P <sub>mpp</sub> (W)	285	280	275	270
Positive Power Tolerance	0~3%	0~3%	0~3%	0~3%
Open Circuit Voltage - V <sub>oc</sub> (V)	38.6	38.5	38.4	38.3
Short Circuit Current - I <sub>sc</sub> (A)	9.55	9.41	9.27	9.19
Maximum Power Voltage - V <sub>mpp</sub> (V)	31.6	31.5	31.3	31.2
Maximum Power Current - I <sub>mp</sub> (A)	9.02	8.89	8.79	8.67
Module Efficiency	17.55%	17.24%	16.49%	16.63%

Electrical data relates to standard test conditions (STC) : irradiance 1000W /m<sup>2</sup>; AM 1.5 ; 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 Normal Operating Cell Temperature (NOCT)

Module Type	CSUN 285-60P	CSUN 280-60P	CSUN 275-60P	CSUN 270-60P
Maximum Power - P <sub>mpp</sub> (W)	211	207	204	200
Maximum Power Voltage - V <sub>mpp</sub> (V)	29.7	29.4	29.2	28.9
Maximum Power Current - I <sub>mp</sub> (A)	7.11	7.05	7.00	6.92
Open Circuit Voltage - V <sub>oc</sub> (V)	36.1	35.9	35.8	35.6
Short Circuit Current - I <sub>sc</sub> (A)	7.67	7.56	7.48	7.42

Electrical data relates to normal operating cell temperature (NOCT): irradiance 800W /m<sup>2</sup>; wind speed 1 m/s ; cell temperature 45°C; ambient temperature 20°C measuring uncertainty of power is within ±3%.

## Temperature Characteristics

Voltage Temperature Coefficient	-0.292%/K
Current Temperature Coefficient	+0.045%/K
Power Temperature Coefficient	-0.408%/K

## Maximum Ratings

Maximum System Voltage (V)	1000
Series Fuse Rating (A)	20
Reverse Current Overload (A)	27

## Mechanical Characteristics

Dimensions	1640 × 990 × 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 polycrystalline solar cells (4 BB or 5 BB 156.75 ×156.75 mm)
Junction Box	Rated current ≥ 13 A, IP ≥ 67 , TUV&UL
Cable	Length 900 mm, 1 × 4 mm <sup>2</sup>
Connector	Compatible with MC4

## Packaging

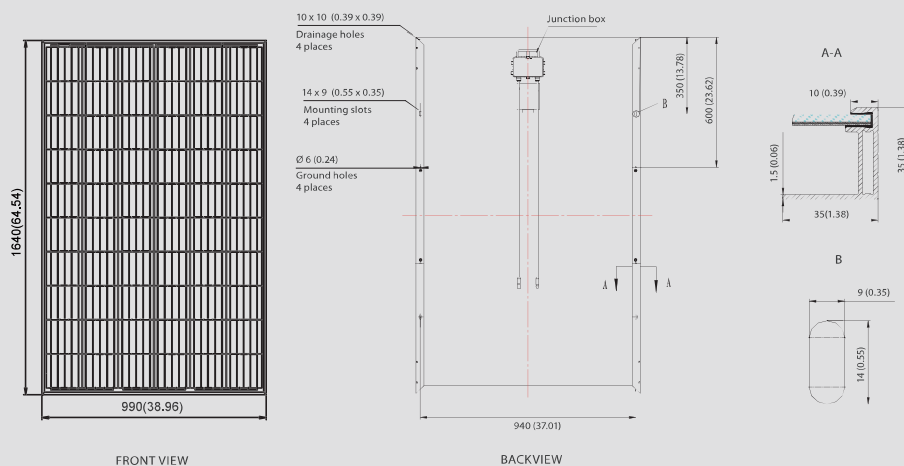
Container 20'	360 pcs.
Container 40'	840 pcs.
Container 40'HC	910 pcs.

## 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

Note: mm (inch)



## IV-Curves

