

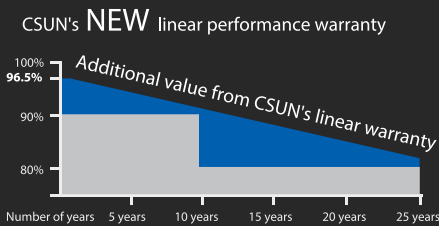
# Mono



## Powerguard insurance global coverage

Within the first year, the output power shall not be less than 96.5% of the minimum output power in CSUN's product datasheet, thereafter the loss of output power shall not exceed 0.68% per year, ending with 80.18% in the 25th year.

■ CSUN    ■ Standard warranty



## CSUN250-60M

Standard Solar Product

- CSUN250-60M
- CSUN245-60M
- CSUN240-60M
- CSUN235-60M

**15.40%**  
Module efficiency



Industry leading conversion efficiency

**250 W**  
Highest power output



Positive tolerance offer

**10 years**  
Material & workmanship warranty



Passed salt mist corrosion and ammonia corrosion testing

**25 years**  
Linear power output warranty



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



Excellent performance under weak light conditions



Good temperature coefficient performance enables better output in the tropical zone

- China Sunergy (Nanjing) Co., Ltd. (NASDAQ: CSUN), established in 2004, is a hi-tech corporation with its core business in R&D, manufacturing, and sale of high efficiency silicon based solar cells and modules.
- As one of the leading PV enterprises in the world, CSUN has delivered more than 1GW solar products, to residential, commercial, utility and off-grid projects all around the world.
- Through strict selection of raw materials, stringent quality control and rigorous test in state of the art facilities in Nanjing and Shanghai, CSUN has always committed to higher efficiency, more stable and better cost performance products.

\* 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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## Electrical characteristics at Standard Test Conditions (STC)

Module type	CSUN 250-60M	CSUN 245-60M	CSUN 240-60M	CSUN 235-60M
Maximum Power - P <sub>mpp</sub> (W)	250	245	240	235
Positive power tolerance	0~3%			
Open Circuit Voltage - Voc (V)	37.3	37.2	37.0	36.9
Short Circuit Current - Isc (A)	8.78	8.69	8.62	8.54
Maximum Power Voltage - V <sub>mpp</sub> (V)	30.1	30.0	29.8	29.6
Maximum Power Current - I <sub>mpp</sub> (A)	8.31	8.17	8.06	7.94
Practical module efficiency	17.44%	17.09%	16.74%	16.39%
Module efficiency	15.40%	15.09%	14.78%	14.47%

Electrical data relates to standard test conditions (STC): irradiance 1000 W/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 250-60M	CSUN 245-60M	CSUN 240-60M	CSUN 235-60M
Maximum Power - P <sub>mpp</sub> (W)	184	181	178	174
Maximum Power Voltage - V <sub>mpp</sub> (V)	27.8	27.7	27.4	27.0
Maximum Power Current - I <sub>mpp</sub> (A)	6.62	6.53	6.50	6.44
Open Circuit Voltage - Voc (V)	34.4	34.3	34.2	34.1
Short Circuit Current - Isc (A)	7.08	7.01	6.95	6.88

Electrical data relates to normal operating cell temperature (NOCT): irradiance 800 W/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	-0.307%/K
Current Temperature Coefficient	+0.039%/K
Power Temperature Coefficient	-0.423%/K

## Maximum Ratings

Maximum system voltage (V)	1000
Series fuse rating (A)	20

## Mechanical Characteristics

Dimensions	1640 × 990 × 35/40 mm (L × W × H)
Weight	18.3/19.1 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 mm × 156 mm)
Junction Box	With 6 bypass diodes, rated current ≥ 12A, IP ≥ 65, TUV&UL
Cable	Length 900 mm, 1 × 4 mm <sup>2</sup>

## Packaging

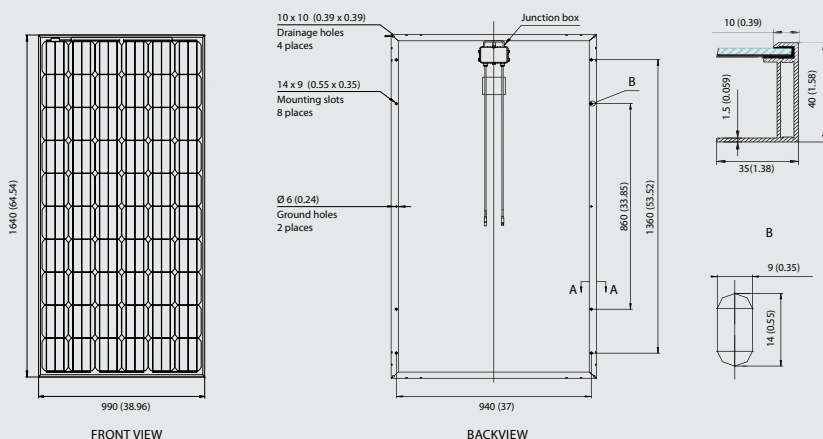
Dimensions (L × W × H)	1690 × 1120 × 112 mm
Container 20'	300
Container 20'HC	324
Container 40'	700
Container 40'HC	756

## System Design

Temperature range	-40 °C to +85 °C
Hail	maximum diameter of 25 mm with impact speed of 23 m/s (51.2 mph)
Maximum surface load capacity	5400 Pa

## Dimensions

Note: mm (inch)



## IV-Curves

