

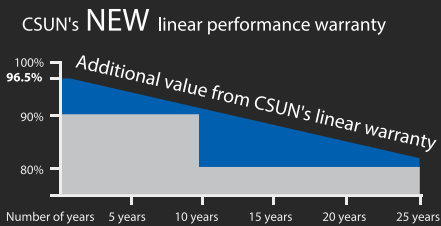
# Mono



## 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 25<sup>th</sup> year.

■ CSUN    ■ Standard warranty



## CSUN250-60M

Standard Solar Product

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



**15.40%**  
Module efficiency

**250 W**  
Highest power output

**10 years**  
Material & workmanship warranty

**25 years**  
Linear power output warranty

- Industry leading conversion efficiency
- Positive tolerance offer
- Passed salt mist, ammonia corrosion, blowing sand and hail testing
- Certificated to withstand wind (2400 Pa) and snow load (5400 Pa)
- Excellent performance under weak light conditions
- Good temperature coefficient enables better output in the high-temperature regions

- CSUN, established in 2004, is a high-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 1.4GW solar products to residential, commercial, utility and off-grid projects all around the world.
- Through strict selection of raw materials, stringent quality control and tests in state of the art facilities in Istanbul, 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	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%	0~3%	0~3%	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
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	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
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 pieces monocrystalline solar cells series strings (156 mm × 156 mm)
Junction Box	Rated current ≥ 12A, IP ≥ 65, TUV&UL
Cable	Length 900 mm, 1 × 4 mm <sup>2</sup>
Connector	MC4/ compatible with MC4

## Packaging

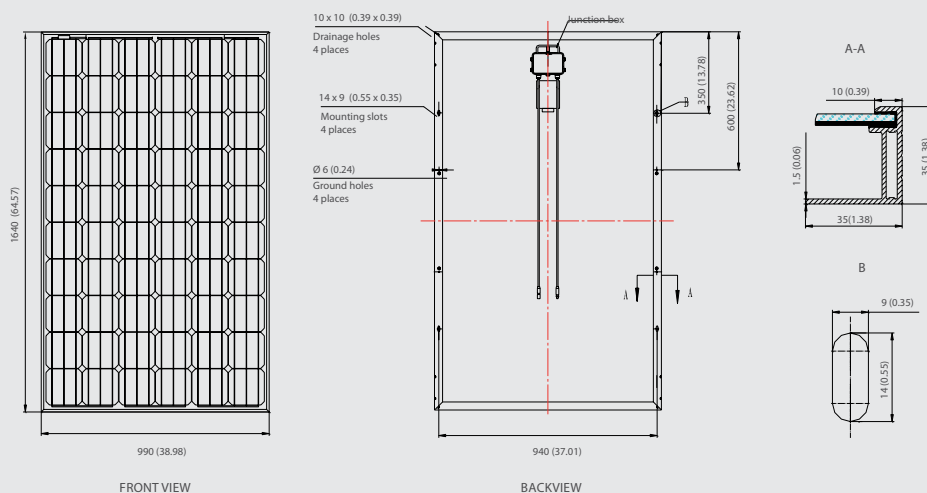
Container 20'	360 pcs.
Container 40'	840 pcs.
Container 40'HC	910 (Turkey)/ 896 pcs. (China)

## System Design

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

## Dimensions

Note: Module layout below only valid for modules with 35mm thickness. Dimensions in mm (inch).



## IV-Curves

