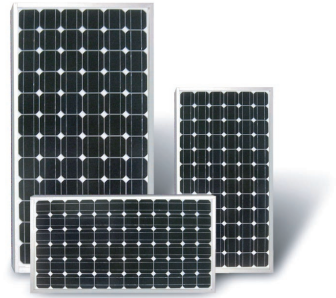


# CSUN195-72M

## Highest Module Efficiency: 16.06%

Our standard modules are designed, developed and manufactured for both residential and commercial, rooftop and ground-mounted, as well as on-grid and off-grid photovoltaic projects.

Quality of our products is the reason of CSUN's life. We select the best raw materials and conduct regular testing to ensure that they can meet our rigorous quality standards. Every module has been tested before delivery to make sure the efficiency tolerance is in a narrow range. Each link is strictly controlled to ensure the benefit of our customers.



## Features

- 72 High-Efficiency Monocrystalline Solar Cells;
- Passing mechanical load test of 5400Pa according to IEC 61215(advanced test);
- Tested to withstand hails with maximum diameter of 25mm with impact speed of 23m/s;
- The high-transparency low-iron tempered glass allows maximum light permeability while enhancing stiffness and impact resistance;
- Integrated bypass diodes to protect the solar cell circuit from hot spots during partial shadowing;
- Our module technology avoids any problems of water freezing and warping;
- Low power tolerance of  $\pm 3\%$ ;
- Black backsheet is also available.

## Quality and Certificates

- 5-year hardware warranty;
- 25-year power output warranty.\*
- Certifications:

Certification Authority	Test Standard		Power Range
TÜV Rheinland	IEC61215	IEC61730	170W-200W
TÜV InterCert	IEC61215	IEC61730	160W-200W
UL	UL1703		170W-195W
ASU-PTL	IEC61215		155W-185W
VDE	IEC61215	IEC61730	155W-180W
CSA	UL1703		155W-190W
CEC	IEC61215	UL1703	160W-190W
FSEC	IEC61215	UL1703	160W-195W
MCS	IEC61215	IEC61730	150W-200W



\* 12 year at 90% of the minimal rated power output, 20 year at 83%, and 25 year at 80%.

## Specifications

Type	205-72M	200-72M	195-72M	190-72M	185-72M
Peak Power (Pmpp)	205	200	195	190	185
Open Circuit Voltage (Voc)	45.6	45.3	45.1	45.0	44.8
Short Circuit Current (Isc)	5.82	5.72	5.63	5.56	5.48
Optimum operating Voltage (Vmpp)	38.0	37.6	37.0	36.5	35.8
Optimum operating Current (Impp)	5.40	5.32	5.28	5.21	5.17
Module efficiency	16.06%	15.67%	15.27%	14.88%	14.49%
Maximum system voltage [V]	1000(IEC)/600(UL)				
Voltage temperature coefficient	-0.307%/K				
Current temperature coefficient	+0.039%/K				
Power temperature coefficient	-0.423%/K				
Series fuse rating[A]	10				
Cells	6x12 pieces monocrystalline solar cells series strings				
Junction box	125mmx125mm (5inch)				
Cable	with 3 bypass diodes				
Front glass	length 900 mm (35.4inch), 1x4 mm <sup>2</sup> (0.16inch <sup>2</sup> )				
Cell encapsulation	white toughened safety glass, 3.2 mm (1/8inch)				
Cell encapsulation	EVA (Ethylene-Vinyl-Acetate)				
Back sheet	composite film				
Frame	anodised aluminium profile				
Dimensions	1580x808x35mm (LxWxH) [62.2x31.81x1.38inch]				
Weight	15.6kg (34.4lbs)				

The electrical data relates to standard test conditions [STC]: 1,000 W/m<sup>2</sup>; AM 1.5; 25°C.

Performance deviation of Pmpp: ± 3%; Performance deviation of Voc, Isc, Vmp and Imp: ± 10%.

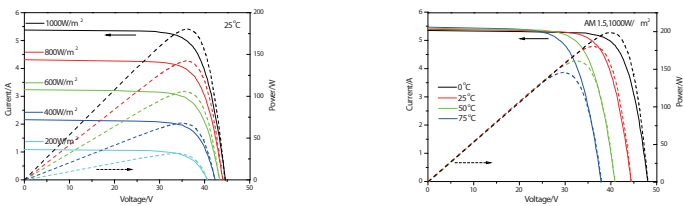
Certified in accordance with IEC61215, IEC61730-1/2 and UL1703.

## Operating Condition & Packaging

Maximum surface load capacity	tested up to 5,400 Pa according to IEC 61215
Hail	maximum diameter of 25 mm with impact speed of 23 m/s (51.2mph)
Temperature range	- 40 °C to + 85 °C

Dimensions(LxWxH)	Container 20'	Container20'HC	Container40'	Container40'HC
1580x808x35mm	384	408	896	952

## IV-Curves



## Dimensions

