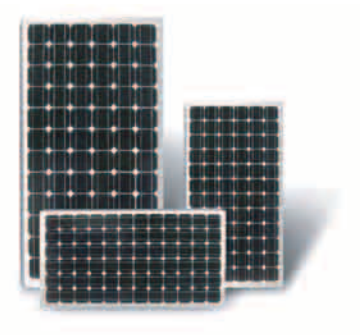
CSUN
energy for the future

CSUN200-72M

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;
- Black backsheet or black frame is also available.

Quality and Certificates

- 10-year limited product 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
Intertek	UL1703	170W-210W
CEC	IEC61215 UL1703	160W-190W
FSEC	IEC61215 UL1703	160W-195W
MCS	IEC61215 IEC61730	170W-200W
CGC	IEC61215 IEC61730	170W-200W

* 12 year at 90% of the minimal rated power output, 20 year at 83%, and 25 year at 80%
**Note: All specifications, warranties, certifications about module of "CSUN" series also apply to that of "SST".

Specifications

Type	205-72M	200-72M	195-72M	190-72M	185-72M
	Electrical typical data				
Pmpp [W]	205	200	195	190	185
Voc [V]	45.6	45.3	45.1	45.0	44.8
Isc [A]	5.82	5.72	5.63	5.56	5.48
Vmpp [V]	38.0	37.6	37.0	36.5	35.8
Impp [A]	5.40	5.32	5.28	5.21	5.17
Practical module efficiency	18.39%	17.94%	17.49%	17.05%	16.60%
Module efficiency	16.06%	15.67%	15.27%	14.88%	14.49%
Maximum system voltage [V]	1000				
Voltage temperature coefficient	-0.307%/K				
Current temperature coefficient	+0.039%/K				
Power temperature coefficient	-0.423%/K				
Series fuse rating [A]	10				
Cells	6×12 pieces monocrystalline solar cells series strings (125mm×125mm)				
Junction box	with 3 bypass diodes				
Cable	length 900 mm, 1×4 mm^2				
Front glass	White toughened safety glass, 3.2 mm				
Cell encapsulation	EVA (Ethylene-Vinyl-Acetate)				
Back sheet	composite film				
Frame	Anodized aluminum profile				
Dimensions	1580×808×35mm (L×W×H)				
Maximum surface load capacity	5400 Pa				
Hail	maximum diameter of 25 mm with impact speed of 23 $m \cdot s^{-1}$				
Temperature range	– 40 °C to + 85 °C				

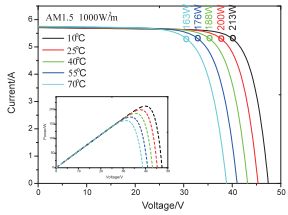
The electrical data relates to standard test conditions [STC]: 1,000 W/m^2; AM 1,5; 25°C.
Performance deviation of Pmpp: ±3%. performance deviation of Voc[V],Isc[A],Vmpp [V] and Impp [A]: ±10%.
Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

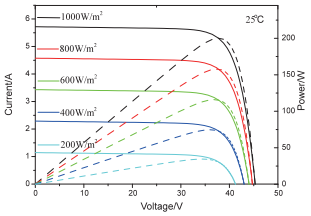
Operating Condition & Packaging

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(L×W×H)	Container 20′	Container20′HC	Container40′	Container40′HC
1580×808×35mm	384	408	896	952

IV-Curves





Dimensions