CSUN
energy for today

CSUN410-72MH

The Large Scale Project Solution

CSUN410-72MH	CSUN405-72MH
CSUN400-72MH	CSUN395-72MH
CSUN390-72MH	CSUN385-72MH

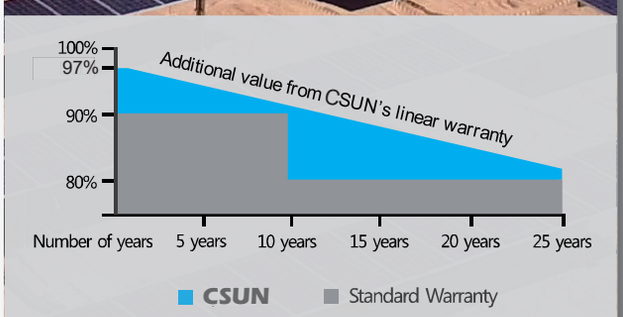
21.17%
Module efficiency

410W
Highest power output

10 years
Material & Workmanship warranty

25 years
Linear power output warranty

- PID-free
- World class mono efficiency
- Tighter product performance distribution and current sorting reduces the mismatch power loss in system operation
- Positive tolerance offer
- Good temperature coefficient enables higher output in high temperature regions
- Excellent performance under low light conditions
- Certified for salt/ammonia corrosion resistance
- Load certificates: wind to 2400Pa and snow to 5400Pa



Sunergy Califronia LLC is a CSUN-brand-licensed manufacturer in USA.

As one of the leading PV enterprises, CSUN has delivered more than 8GW of solar products to residential, commericial, utility and off-grid projects all around the world.

Electrical Characteristics at Standard Test Conditions(STC)

Module Type	CSUN410-72MH	CSUN405-72MH	CSUN400-72MH	CSUN395-72MH	CSUN390-72MH	CSUN385-72MH
Maximum Power - Pmax (W)	410	405	400	395	390	385
Open Circuit Voltage - Voc (V)	48.9	48.7	48.5	48.3	48.1	47.9
Short Circuit Current - Isc (A)	10.52	10.44	10.36	10.29	10.21	10.14
Maximum Power Voltage - Vmpp (V)	40.5	40.3	40.1	39.9	39.7	39.5
Maximum Power Current - Impp (A)	10.13	10.05	9.98	9.91	9.83	9.75
Module Efficiency	21.17%	20.91%	20.66%	20.40%	20.14%	19.88%

Standard Test Conditions (STC): irradiance 1,000 W/m²; AM 1.5; module temperature 25°C. Tolerance of Pmpp: 0~+3%.

Measuring uncertainty of power: ±3%.

Electrical Characteristics at Normal Operating Cell Temperature(NOCT)

Module Type	CSUN410-72MH	CSUN405-72M	CSUN400-72MH	CSUN395-72MH	CSUN390-72MH	CSUN385-72MH
Maximum Power - Pmax (W)	303	299	296	292	288	285
Open Circuit Voltage - Voc (V)	45.1	45	44.8	44.6	44.4	44.3
Short Circuit Current - Isc (A)	8.5	8.43	8.37	8.31	8.25	8.19
Maximum Power Voltage - Vmpp (V)	37.8	37.6	37.4	37.2	37.1	36.8
Maximum Power Current - Impp (A)	8.02	7.96	7.9	7.85	7.78	7.73

Normal Operating Cell Temperature((NOCT) : irradiance 800W/m^2; wind speed 1 m/s ; cell temperature 45℃; ambient temperature 20℃.

Measuring uncertainty of power: ±3%.

Temperature Characteristics

NOCT	45℃ (±2℃)
Voltage Temperature Coefficient	-0.307%/K
Current Temperature Coefficient	+0.039%/K
Power Temperature Coefficient	-0.423%/K

Maximum Ratings

Maximum System Voltage [V]	1500
Series Fuse Rating [A]	20

Material Characteristics

Dimensions	1982×1002×40mm(L×W×H)
Weight	22.4kg
Frame	Anodized aluminum profile
Front Glass	White toughened safety glass, 3.2 mm
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Sheet	Composite film
Cells	6×12 pieces monocrystalline solar cells series strings (158.75mm×158.75mm)
Junction Box	Rated current≧13A, IP≧67, TUV&UL
Cable&Connector	Length 1200 mm, 1×4 mm^2, compatible with MC4

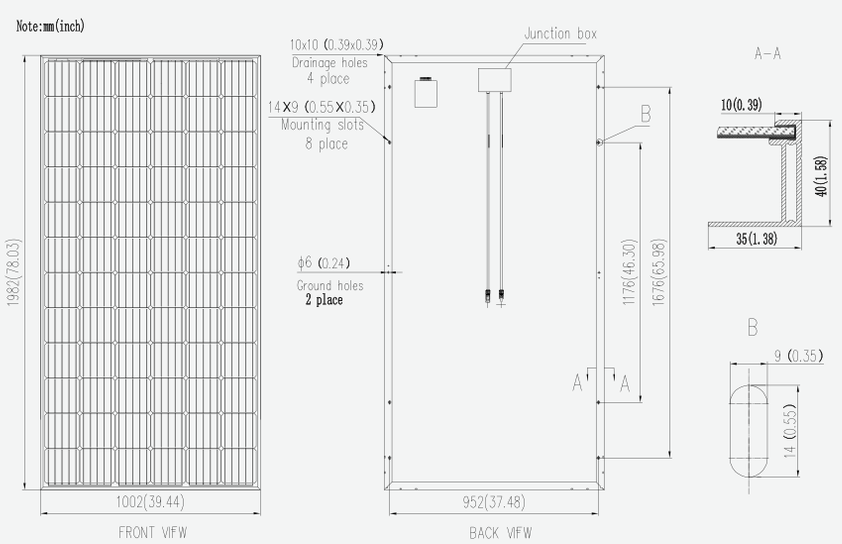
Packaging

Dimensions(L×W×H)	2010×1130×1120mm
Container20'	270
Container40'	648
Container40'HC	708

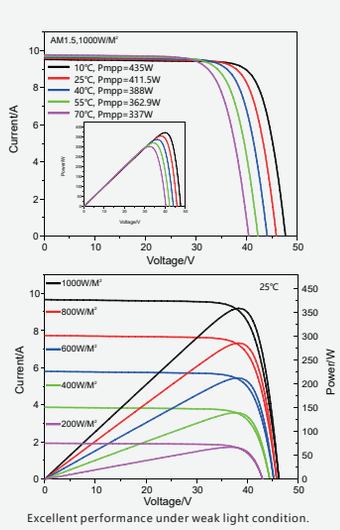
System Design

Temperature Range	-40 °C to + 85 °C
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m·s-1
Maximum Surface Load	5,400 Pa
Application class	class A

Dimensions



IV-Curves



Excellent performance under weak light condition.