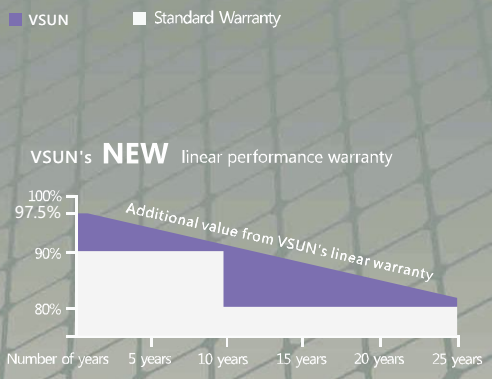
POLY

PowerGuard
SPECIALTY INSURANCE SERVICES

Powerguard Insurance Global Coverage

The power output shall not be less than 97.5%of the minimum power output stated in the product data sheet in the first year of the product' s life cycle. The loss of power output shall not exceed 0.68% per year thereafter, ending with 80.7% in the 25th year.



VSUN
energy for today

VSUN325-72P

The Large Scale Project Solution

VSUN325-72P VSUN320-72P VSUN315-72P
VSUN310-72P

16.78%
Module efficiency

325W
Highest power output

10years
Material & Workmanship warranty

25years
Linear power output warranty

- PID-free
- World class poly efficiency
- Tighter porduct 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

Vietnam Sunergy Company Limited,founded in 2015,is a high efficiency photovoltaic module manufacturer with its core business in manufacturing high quality solar panels and providingbest services to customers.

With an elaborate plan on capacity, VSUN will deliver more than 500MW/year solar products to residential, commerical, utility and off-grid projects all around the world.

Through strict selection of raw materials, stringent quality control and rigorous tests, VSUN has always committed to higher efficiency, more stable and better cost effective products supply.

Note:
All information and date are subject to change without notice.

Electrical characteristics at Standard Test Conditions(STC)

Module Type	VSUN325-72P	VSUN320-72P	VSUN315-72P	VSUN310-72P
Maximum Power - Pmax (W)	325	320	315	310
Open Circuit Voltage - Voc (V)	46	45.9	45.7	45.6
Short Circuit Current - Isc (A)	9.19	9.1	9.01	8.91
Maximum Power Voltage - Vmpp (V)	37.6	37.3	37.1	37
Maximum Power Current - Impp (A)	8.66	8.57	8.48	8.39
Module Efficiency	16.78%	16.53%	16.27%	16.01%

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%. Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Electrical Characteristics at Normal Operating Cell Temperature(NOCT)

Module Type	VSUN325-72P	VSUN320-72P	VSUN315-72P	VSUN310-72P
Maximum Power - Pmax (W)	239	234	232	228
Open Circuit Voltage - Voc (V)	42.7	42.5	42.3	42.2
Short Circuit Current - Isc (A)	7.42	7.35	7.28	7.2
Maximum Power Voltage - Vmpp (V)	34.9	34.7	34.6	34.4
Maximum Power Current - Impp (A)	6.85	6.76	6.7	6.62

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%. Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Temperature Characteristics

NOCT	45℃ (±2℃)
Voltage Temperature Coefficient	-0.292%/K
Current Temperature Coefficient	+0.045%/K
Power Temperature Coefficient	-0.408%/K

Maximum Ratings

Maximum System Voltage [V]	1000
Series Fuse Rating [A]	20

Material Characteristics

Dimensions	1956×990×40mm (L×W×H)
Weight	22.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	6×12 pieces polycrystalline solar cells series strings (156mm×156mm)
Junction Box	Rated current≧13A, IP≧67, TUV&UL
Cable&Connector	Length 900 mm, 1×4 mm^2, compatible with MC4

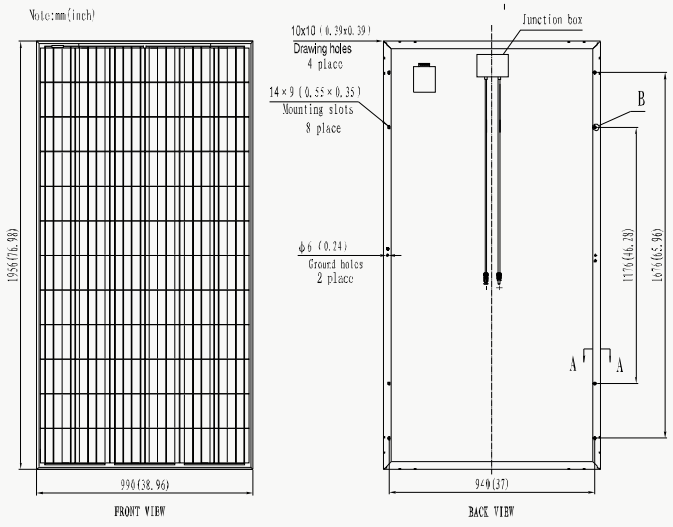
Packaging

Dimensions(L×W×H)	1990×1120×112mm
Container20'	260
Container40'	624
Container40'HC	672

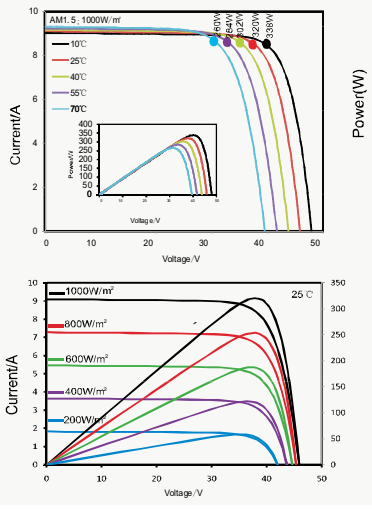
System Design

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

Dimensions



IV-Curves



Excellent performance under weak light condition.