VSUN

Innovative & Smart

VSUN320-60M-BW

VSUN320-60M-BW VSUN315-60M-BW
VSUN310-60M-BW VSUN305-60M-BW
VSUN300-60M-BW

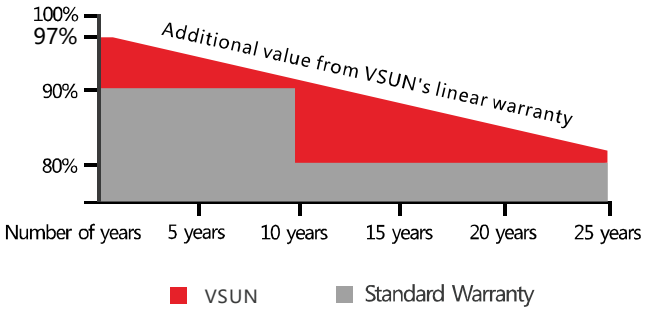
19.71%
Module efficiency

12years
Material & Workmanship warranty

320W
Highest power output

25years
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



Munich RE®

- 12-year product warranty
- 25-year linear power output warranty

Invested by Fuji Solar, VSUN is a Japanese solar module solutions provider located in Tokyo that offers Japanese quality solar technologies globally. The group's business started in Japan in 2006, later spreading to North America, Southeast Asia, and EMEA.

Innovative & Smart – VSUN has been committed to providing greener, cleaner, and more intelligent renewable energy solutions. It is focusing on the new energy market and the development of customized and high-efficiency products.

Note:

All information and data are subject to change without notice.

A Sub-company of FUJI SOLAR

Originated from **Japan**
vsun@vietnamsunergy.com
www.vsun-solar.com

Electrical Characteristics at Standard Test Conditions(STC)

Module Type	VSUN320-60M-BW	VSUN315-60M-BW	VSUN310-60M-BW	VSUN305-60M-BW	VSUN300-60M-BW
Maximum Power - Pmax (W)	320	315	310	305	300
Open Circuit Voltage - Voc (V)	40.4	40.2	40.1	39.9	39.8
Short Circuit Current - Isc (A)	10.03	9.95	9.87	9.72	9.6
Maximum Power Voltage - Vmpp (V)	33	32.8	32.6	32.4	32.2
Maximum Power Current - Impp (A)	9.7	9.61	9.52	9.42	9.31
Module Efficiency	19.71%	19.40%	19.09%	18.79%	18.48%

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	VSUN320-60M-BW	VSUN315-60M-BW	VSUN310-60M-BW	VSUN305-60M-BW	VSUN300-60M-BW
Maximum Power - Pmax (W)	237.4	233.7	230.3	226.8	223
Open Circuit Voltage - Voc (V)	37.3	37.2	37.1	36.9	36.8
Short Circuit Current - Isc (A)	8.1	8.04	7.98	7.86	7.76
Maximum Power Voltage - Vmpp (V)	31	30.8	30.6	30.5	30.4
Maximum Power Current - Impp (A)	7.66	7.59	7.52	7.42	7.33

Normal Operating Cell Temperature((NOCT) : irradiance 800W/m²; wind speed 1 m/s ; cell temperature 45℃; ambient temperature 20℃.

Measuring uncertainty of power: ±3%.

Temperature Characteristics

NOCT	45℃ (±2℃)
Voltage Temperature Coefficient	-0.29%/K
Current Temperature Coefficient	+0.05%/K
Power Temperature Coefficient	-0.39%/K

Maximum Ratings

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

Material Characteristics

Dimensions	1640×990×35mm (L×W×H)
Weight	18.3kg
Frame	Anodized aluminum profile
Front Glass	White toughened safety glass, 3.2 mm
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Glass	Composite film
Cells	6×10 pieces monocrystalline solar cells series strings (156.75mm×156.75mm)
Junction Box	Rated current≧13A, IP≧67, TUV&UL
Cable&Connector	Length 900 mm, 1×4 mm², compatible with MC4

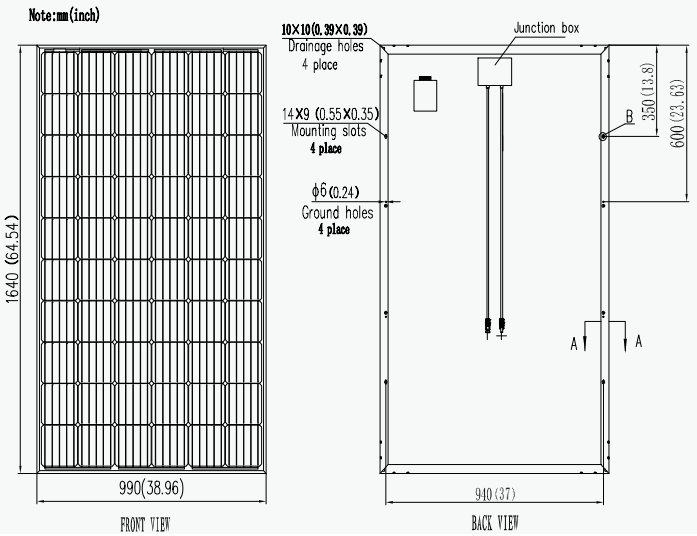
Packaging

Dimensions(L×W×H)	1680×1110×1120mm
Container 20'	360
Container 40'	840
Container 40'HC	910

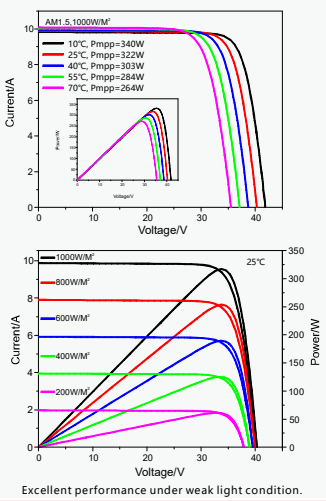
System Design

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

Dimensions



IV-Curves



Excellent performance under weak light condition.

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