







VSUN610-132BMH-DG

VSUN610-120BMH-DG VSUN605-120BMH-DG VSUN600-120BMH-DG VSUN595-120BMH-DG

610W

Highest power output

2.0%

First-year degradation warranty 21.55%

Module dfficiency

0.45%

Annual degradation over 30 years

KEY FEATURES

MBB technology with Circular Ribbon PERC



Higher output power



Half-cell Technology



Positive tolerance offer



Bifacial cells, converting more sunlight into electricity



Better shading tolerance



Load certificates: wind to 2400Pa and snow to 5400Pa



Lower LCOE

ABOUT VSUN

Invested by Fuji Solar, VSUN SOLAR is a solar solution provider with headquartered in Tokyo, Japan that offers reliability, high efficiency solar products and technology globally. VSUN is rated as BNEF Tier 1 PV module manufacturer, PVEL Lab "Best performer" and EcoVadis "Bronze Award".

PRODUCT CERTIFICATION













WARRANTY



Electrical Characteristics at Standard Test Conditions(STC)

Module Type	VSUN610-120BMH-DG	VSUN605-120BMH-DG	VSUN600-120BMH-DG	VSUN595-120BMH-DG
Maximum Power - Pmax (W)	610	605	600	595
Open Circuit Voltage - Voc (V)	41.82	41.65	41.48	41.3
Short Circuit Current - Isc (A)	18.69	18.62	18.57	18.51
Maximum Power Voltage - Vmpp (V)	34.73	34.56	34.39	34.21
Maximum Power Current - Impp (A)	17.57	17.51	17.45	17.4
Module Efficiency	21.55%	21.38%	21.20%	21.02%

Standard Test Conditions (STC): irradiance 1,000 W/m²; AM 1,5; module temperature 25°C. Pmax Sorting: 0~5W. Measuring Tolerance: ±3%. Remark: Electrical data do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

Electrical Characteristics with different rear side power gain(reference to 605 front)

Pmax (W)	Voc (V)	Isc (A)	Vmpp (V)	Impp (A)	Pmax gain
635	41.65	19.55	34.56	18.39	5%
666	41.65	20.48	34.56	19.26	10%
724	41.73	22.34	34.48	21.01	20%
755	41.73	23.28	34.48	21.89	25%

Material Characteristics

Dimensions	2172×1303×35mm (L×W×H)
Difficusions	2112 × 1303 × 3311111 (L × VV × 11)

Weight 36.4kg

Frame Silver anodized aluminum profile

Front Glass AR-coating Semi-toughened glass, 2.0mm

Cell Encapsulation EVA (Ethylene-Vinyl-Acetate) or POE

Back Glass Glazed & Semi-toughened glass, 2.0mm

12×10 pieces monocrystalline solar cells series

strings

Junction Box IP68, 3 diodes

Potrait: 500 mm (cable length can be customized), 1×4 mm2 or 12AWG, Connector: PV-ZH202B(Manufacturer

Cable mm2 or 12AWG, Connector: PV-ZH202B(Manufacturer by Zhejiang Zhonghuan Sunter PV Technology Co., Ltd.)

Packaging

Cells

Dimensions(L×W×H) 1325×1125×2510mm

Container 20' /
Container 40' /
Container 40'HC 540

System Design

IV-Curves

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Maximum System Voltage [V]	1500		
Series Fuse Rating [A]	30		
Bifaciality	70%±10%		
Fire Rating	Class C for IEC and TYPE 29 for US		
PV module classification	Class II		
Temperature Range	-40 °C to + 85 °C		
Maximum Surface Load	5,400 Pa		
Application class	Class A		
	Maximum diameter of 25 mm with		

Withstanding Hail impact speed of 23 m/s

Temperature Characteristics

NOCT $45^{\circ}\text{C}(\pm 2^{\circ}\text{C})$ Voltage Temperature Coefficient $-0.25\%/^{\circ}\text{C}$ Current Temperature Coefficient $+0.04\%/^{\circ}\text{C}$ Power Temperature Coefficient $-0.34\%/^{\circ}\text{C}$

Dimensions



