







VSUN550-144MH

VSUN550-144MH VSUN545-144MH VSUN540-144MH VSUN535-144MH

21.29% **550W** Module efficiency Highest power output

2.0% First-year degradation warranty

0.45% Annual degradation over 25 years

KEY FEATURES

MBB technology with Circular Ribbon PERC

Higher output power

Half-cell Technology

Positive tolerance offer

Lower risk of hot spot

Better shading tolerance

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

Lower LCOE

UL 61730 & CSA 61730 IEC 61215 & IEC 61730

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





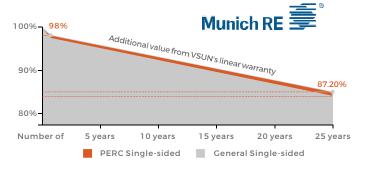








WARRANTY



Electrical Characteristics at Standard Test Conditions(STC)

Module Type	VSUN550-144MH	VSUN545-144MH	VSUN540-144MH	VSUN535-144MH
Maximum Power - Pmax (W)	550	545	540	535
Open Circuit Voltage - Voc (V)	49.92	49.81	49.65	49.5
Short Circuit Current - Isc (A)	13.99	13.92	13.85	13.78
Maximum Power Voltage - Vmpp (V)	42	41.8	41.65	41.5
Maximum Power Current - Impp (A)	13.1	13.04	12.97	12.9
Module Efficiency	21.29%	21.10%	20.90%	20.71%

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 at Normal Operating Cell Temperature(NOCT)

Module Type	VSUN550-144MH	VSUN545-144MH	VSUN540-144MH	VSUN535-144MH
Maximum Power - Pmax (W)	412.4	408.3	404.6	400.9
Open Circuit Voltage - Voc (V)	46.8	46.7	46.5	46.4
Short Circuit Current - Isc (A)	11.3	11.24	11.19	11.13
Maximum Power Voltage - Vmpp (V)	38.6	38.5	38.3	38.2
Maximum Power Current - Impp (A)	10.67	10.61	10.55	10.49

Normal Operating Cell Temperature ((NOCT): irradiance 800W/m2; wind speed 1 m/s; ambient temperature 20/°C. Measuring Tolercance: ±3%.

Material Characteristics

Dimensions	2278×1134×35mm (L×W×H)
	89.69*44.65*1.38 inches (L×W×H)
Weight	28.8kg / 63.49lbs
Frame	Silver anodized aluminum profile
Front Glass	AR-Coating toughened glass, 3.2 mm
Back sheet	Composite film
Cells	12×12 pcs mono solar cells series strings
Junction Box	IP68, 3 diodes
Juliotion Box	Potrait: 500 mm (cable length can be customized), 1×4
Cable	mm2 or 12AWG, Connector: PV-ZH202B(Manufacturer by
	Zhejiang Zhonghuan Sunter PV Technology Co., Ltd.)

Packaging

 Dimensions(L×W×H)
 2310×1125×1253mm / 90.94*44.29*49.33inches

 Quantity per pallet
 31 pcs

 Container 20'
 155

 Container 40'
 310

 Container 40'HC
 620

System Design

Maximum System Voltage [V]	1500	
Series Fuse Rating [A]	30	
Fire Rating	Class C for IEC and TYPE 1 for US	
Protection Class	Class II	
Temperature Range	-40 °C to + 85 °C	
Maximum Surface Load	+5400/-2400 Pa +113/-50 psf	
Application class	Class A	
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m/s	

Temperature Characteristics

NOCT	45°C(±2°C)
Voltage Temperature Coefficient	-0.27%/°C
Voltage Temperature Coefficient	0.27707 C
Current Temperature Coefficient	+0.048%/°C
Power Temperature Coefficient	-0.32%/°C

Dimensions IV-Curves

