



VSUN550-144MH

VSUN550-144MH VSUN540-144MH

550W Highest power output

2.0% First-year degradation warranty VSUN545-144MH VSUN535-144MH

> 21.29% Module efficiency

0.45% Annual degradation over 25 years

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



KEY FEATURES



Update Time:2023.5.13

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	29.9kg / 62.40lbg	
	28.8kg / 63.49lbs	
Frame	Silver anodized aluminum profile	
Front Glass	AR-Coating toughened glass, 3.2 mm	
Back sheet	Composite film	
C -ll-		
Cells	12×12 pcs mono solar cells series strings	
	IP68, 3 diodes	
Junction Box	Potrait: 500 mm (cable length can be customized), 1×4	
Cable	mm2 or 12AWG, Connector: PV-ZH202B(Manufacturer by	
Cable	Zhejiang Zhonghuan Sunter PV Technology Co., Ltd.)	

31 pcs

155 310

620

2310×1125×1253mm / 90.94*44.29*49.33inches

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			
Current Temperature Coefficient	+0.048%/°C			
Power Temperature Coefficient	-0.32%/°C			

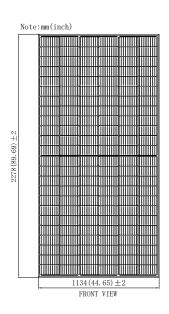
Dimensions

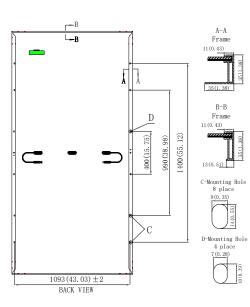
Packaging Dimensions(L×W×H)

Quantity per pallet

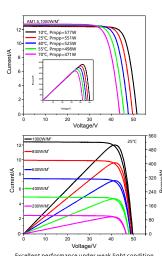
Container 20'

Container 40' Container 40'HC





IV-Curves



Excellent performance under weak light condition.