

**12**  
YEAR  
QUALITY ASSURANCE

**30**  
YEAR  
POWER OUTPUT GUARANTEE

## VSUN550-144BMH-DG

VSUN550-144BMH-DG

VSUN545-144BMH-DG

VSUN540-144BMH-DG

VSUN535-144BMH-DG

**550W**

Highest power output

**21.29%**

Module efficiency

**2.0%**

First-year  
degradation warranty

**0.45%**

Annual degradation  
over 30 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".

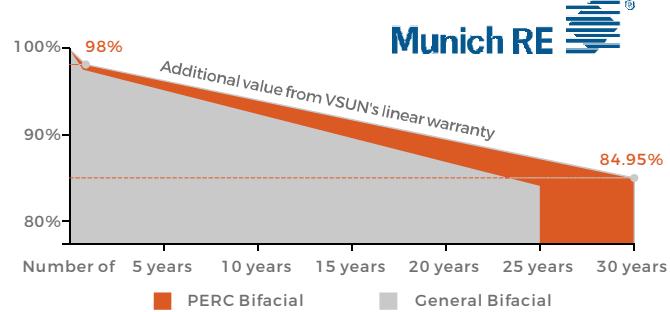
### KEY FEATURES

-  PERC MBB technology with Circular Ribbon
-  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
-  UL 61730 & CSA 61730
-  IEC 61215 & IEC 61730

### PRODUCT CERTIFICATION



### WARRANTY



Munich RE



## Electrical Characteristics at Standard Test Conditions(STC)

Module Type	VSUN550-144BMH-DG	VSUN545-144BMH-DG	VSUN540-144BMH-DG	VSUN535-144BMH-DG
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/m<sup>2</sup>; 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 545 front)

Pmax (W)	Voc (V)	Isc (A)	Vmpp (V)	Impp (A)	Pmax gain
575	49.76	14.69	41.80	13.76	5%
602	49.76	15.39	41.80	14.41	10%
656	49.81	16.79	41.75	15.72	20%
684	49.81	17.49	41.75	16.38	25%

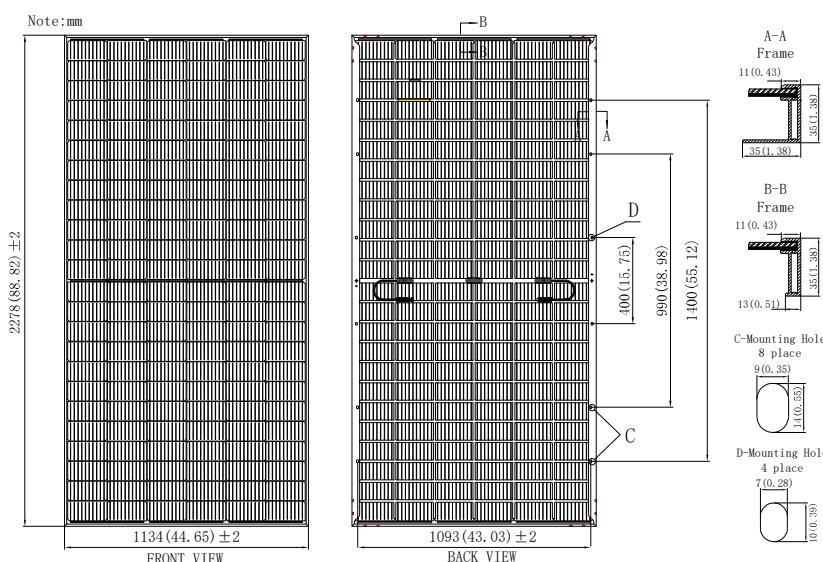
## Material Characteristics

Dimensions	2278×1134×35mm (L×W×H) 89.69*44.65*1.38 inches (L×W×H)
Weight	32.7kg / 72.09lbs
Frame	Silver anodized aluminum profile
Front Glass	AR-coating Semi-toughened glass, 2.0mm
Back Glass	Glazed & Semi-toughened glass, 2.0mm
Cells	12×12 pcs mono solar cells series strings
Junction Box	IP68, 3 diodes
Cable	Portrait: 500 mm (cable length can be customized), 1×4 mm <sup>2</sup> 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	30 pcs
Container 20'	150
Container 40'	300
Container 40'HC	600 or 540 for US

## Dimensions



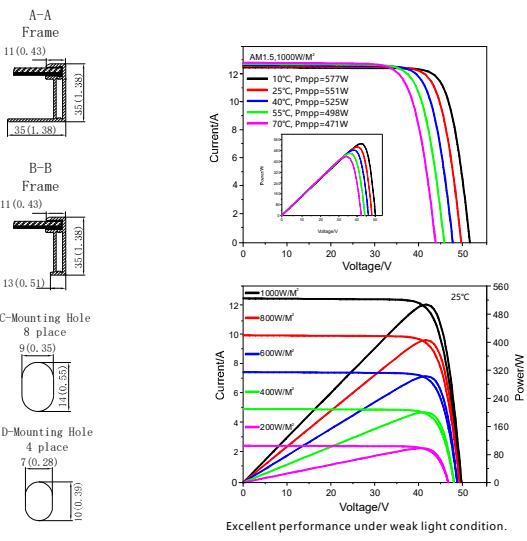
## System Design

Maximum System Voltage [V]	1500
Series Fuse Rating [A]	30
Bifaciality	70%±10%
Fire Rating	Class C for IEC and TYPE 29 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

## IV-Curves



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