

**VSUN**  
Innovative & Smart

**25**  
YEAR  
QUALITY ASSURANCE

**30**  
YEAR  
POWER OUTPUT GUARANTEE

## VSUN670-132BMH-DG

VSUN670-132BMH-DG

VSUN665-132BMH-DG

VSUN660-132BMH-DG

VSUN655-132BMH-DG

**670W**

Highest power output

**21.57%**

Module efficiency

**2.0%**

First-year degradation warranty

**0.45%**

Annual degradation over 30 years

### 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

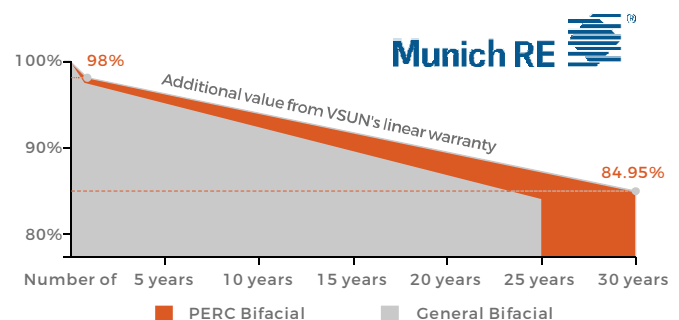
### ABOUT VSUN

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	VSUN670-132BMH-DG	VSUN665-132BMH-DG	VSUN660-132BMH-DG	VSUN655-132BMH-DG
Maximum Power - Pmax (W)	670	665	660	655
Open Circuit Voltage - Voc (V)	45.61	45.46	45.32	45.15
Short Circuit Current - Isc (A)	18.8	18.73	18.65	18.59
Maximum Power Voltage - Vmpp (V)	37.94	37.79	37.65	37.48
Maximum Power Current - Impp (A)	17.66	17.6	17.53	17.48
Module Efficiency	21.57%	21.41%	21.25%	21.09%

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 665 front)

Pmax (W)	Voc (V)	Isc (A)	Vmpp (V)	Impp (A)	Pmax gain
698	45.46	19.67	37.79	18.48	5%
732	45.46	20.60	37.79	19.36	10%
798	45.51	22.48	37.73	21.12	20%
831	45.51	23.41	37.73	22.00	25%

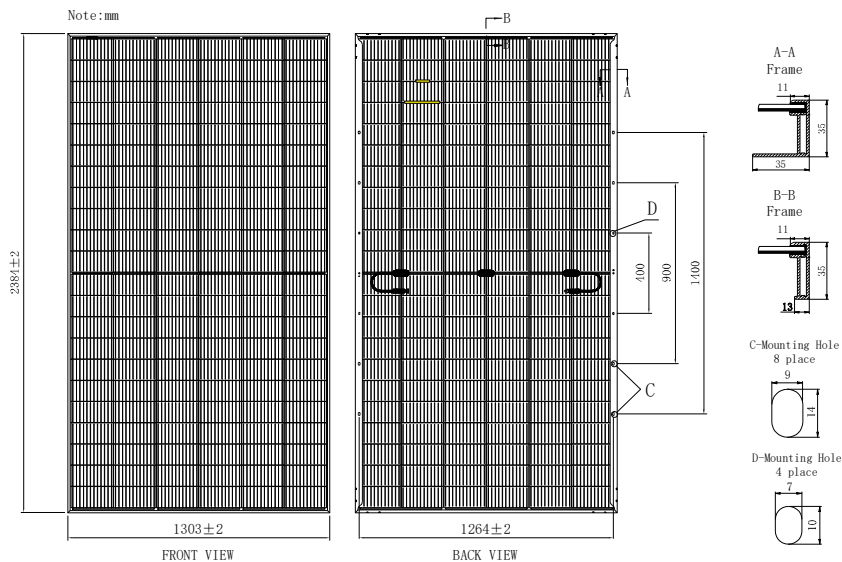
## Material Characteristics

Dimensions	2384×1303×35mm (L×W×H)
Weight	38.5kg
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
Cells	12×11 pieces mono solar cells series strings
Junction Box	IP68, 3 diodes
Cable&Connector	Potrait: 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)	1325×1125×2510mm
Container 20'	/
Container 40'	/
Container 40'HC	540

## 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
PV module classification	Class II
Temperature Range	-40 °C to + 85 °C
Maximum Surface Load	5,400 Pa
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	-0.25%/°C
Current Temperature Coefficient	+0.04%/°C
Power Temperature Coefficient	-0.34%/°C

