







# VSUN525N-132MH-BB

VSUN525N-132MH-BB VSUN520N-132MH-BB VSUN515N-132MH-BB VSUN510N-132MH-BB

**525W** 

Highest power output

1.0%

First-year degradation warranty

22.11%

Module efficiency

0.4%

Annual degradation over 30 years

TOPcon TOPcon technology

**KEY FEATURES** 

Higher output power

MBB technology with Circular Ribbon



Positive tolerance offer



Lower risk of hot spot



Better shading tolerance



Better temperature coefficient



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	VSUN525N-132MH-BB	VSUN520N-132MH-BB	VSUN515N-132MH-BB	VSUN510N-132MH-BB
Maximum Power - Pmax (W)	525	520	515	510
Open Circuit Voltage - Voc (V)	46.96	46.8	46.63	46.48
Short Circuit Current - Isc (A)	14.25	14.17	14.08	13.99
Maximum Power Voltage - Vmpp (V)	38.93	38.78	38.62	38.5
Maximum Power Current - Impp (A)	13.49	13.42	13.34	13.25
Module Efficiency	22.11%	21.90%	21.69%	21.48%

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	VSUN525N-132MH	VSUN520N-132MH	VSUN515N-132MH	VSUN510N-132MH
Maximum Power - Pmax (W)	395.7	392.2	388.2	384.4
Open Circuit Voltage - Voc (V)	44.2	44	43.9	43.8
Short Circuit Current - Isc (A)	11.51	11.44	11.37	11.3
Maximum Power Voltage - Vmpp (V)	36.5	36.4	36.2	36.1
Maximum Power Current - Impp (A)	10.85	10.79	10.72	10.65

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

### Material Characteristics

Material Charac	teristics
Dimensions	2094×1134×30mm (L×W×H) 82.44*44.65*1.18 inches (L×W×H)
Weight	26.2kg / 57.76lbs
Frame	Black anodized aluminum profile
Front Glass	AR-Coating toughened glass, 3.2 mm
Back sheet	Composite film
Cells	12×11 pcs mono solar cells series strings
Junction Box	IP68, 3 diodes
Cabla	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.)
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#### **Packaging**

 Dimensions(L×W×H)
 2120×1125×1253mm / 83.46\*44.29\*49.33inches

 Quantity per pallet
 36 pcs

 Container 20'
 180

 Container 40'
 396

Container 40'HC 792 or 684 for US

## 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	-0.26%/°C
Current Temperature Coefficient	+0.046%/°C
Power Temperature Coefficient	-0.30%/°C

## **Dimensions** IV-Curves





