

# VSUN

Innovative & Smart

**25**  
YEAR  
QUALITY ASSURANCE

**30**  
YEAR  
POWER OUTPUT GUARANTEE

## VSUN430N-108BMH-BB

VSUN430N-108BMH-BB

VSUN425N-108BMH-BB

VSUN420N-108BMH-BB

VSUN415N-108BMH-BB

**430W**

Highest power output

**22.02%**

Module efficiency

**1.0%**

First-year degradation warranty

**0.4%**

Annual degradation over 30 years

### KEY FEATURES

**TOPcon** TOPcon technology



Higher output power



MBB technology with Circular Ribbon



Positive tolerance offer



Bifacial cells, converting more sunlight into electricity



Better shading tolerance



Better temperature coefficient



Lower LCOE

UL 61730 & CSA 61730  
IEC 61215 & IEC 61730

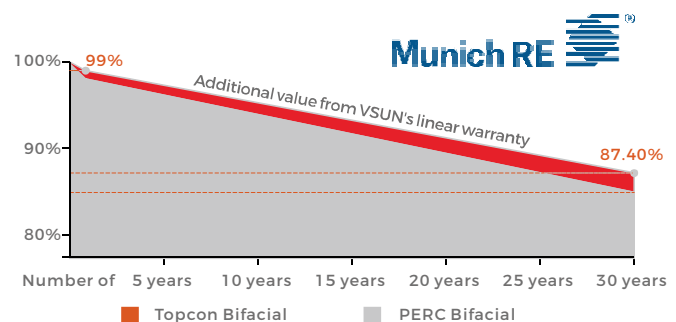
### ABOUT VSUN

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	VSUN430N-108BMH-BB	VSUN425N-108BMH-BB	VSUN420N-108BMH-BB	VSUN415N-108BMH-BB
Maximum Power - Pmax (W)	430	425	420	415
Open Circuit Voltage - Voc (V)	38.5	38.4	38.11	37.92
Short Circuit Current - Isc (A)	14.23	14.16	14.07	13.99
Maximum Power Voltage - Vmpp (V)	31.89	31.72	31.52	31.33
Maximum Power Current - Imp (A)	13.5	13.4	13.32	13.24
Module Efficiency	22.02%	21.76%	21.51%	21.25%

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 425 front)

Pmax (W)	Voc (V)	Isc (A)	Vmpp (V)	Imp (A)	Pmax gain
446	38.40	14.87	31.72	14.07	5%
468	38.40	15.58	31.72	14.74	10%
509	38.47	16.99	31.67	16.08	20%
530	38.47	17.70	31.67	16.75	25%

## Material Characteristics

Dimensions	1722×1134×30mm (L×W×H) 67.80×44.65×1.18 inches (L×W×H)
Weight	21.4kg / 47.18lbs
Frame	Black anodized aluminum profile
Front Glass	AR-Coating toughened glass, 3.2 mm
Back Sheet	Transparent black-mesh backsheet
Cells	12×9 pcs mono solar cells series strings
Junction Box	IP68, 3 diodes
Cable	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.)

## System Design

Maximum System Voltage [V]	1500
Series Fuse Rating [A]	30
Bifaciality	80%±5%
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

## Packaging

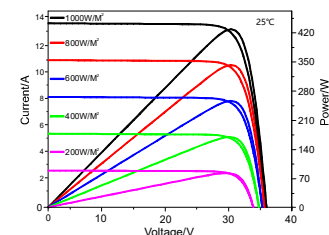
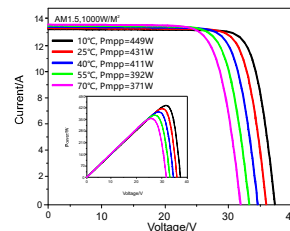
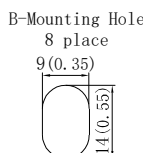
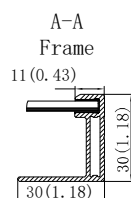
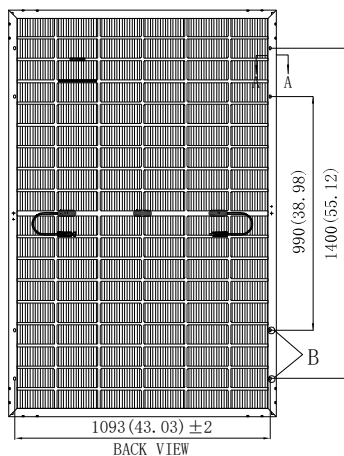
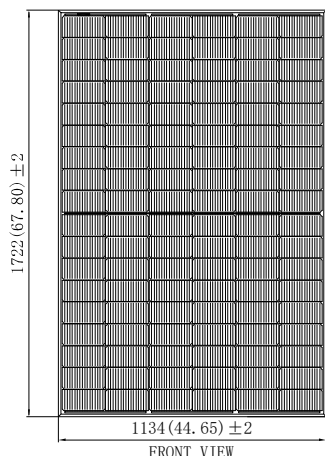
Dimensions(L×W×H)	1760×1125×1253mm / 69.29×44.29×49.33inches
Quantity per pallet	36 pcs
Container 20'	216
Container 40'	468
Container 40'HC	936 or 828 for US

## 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

Note:mm (inch)



Excellent performance under weak light condition.