







# VSUN430N-108BMH-BB

VSUN430N-108BMH-BB VSUN425N-108BMH-BB VSUN420N-108BMH-BB VSUN415N-108BMH-BB

430W

Highest power output

1.0%

First-year degradation warranty

22.02%

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



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**







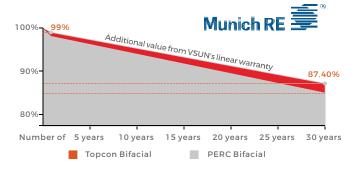








#### **WARRANTY**



## **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 - Impp (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/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 with different rear side power gain(reference to 425 front)

| Pmax (W) | Voc (V) | Isc (A) | Vmpp (V) | Impp (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)          |  |
|--------------|---------------------------------|--|
| Differisions | 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.

Front Glass AR-Coating toughened glass, 3.2 mm

Back Sheet Transparent black mach backsheet

Transparent black-mesh backsheet

Cells 12×9 pcs mono solar cells series strings

Junction Box IP68, 3 diodes

Potrait: 500 mm (cable length can be Cable customized), 1×4 mm2 or 12AWG, Connector:

PV-ZH202B(Manufacturer by Zhejiang Zhonghuan Sunter PV Technology Co., Ltd.)

### **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

## **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<br>+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

