VSUN
Innovative & Smart

# VSUN405-108BMH

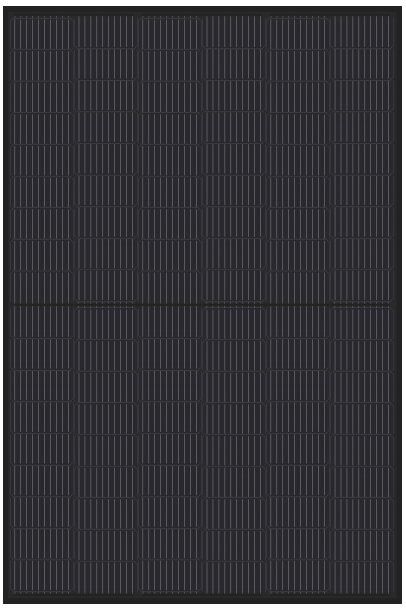
**405W**
Highest power output

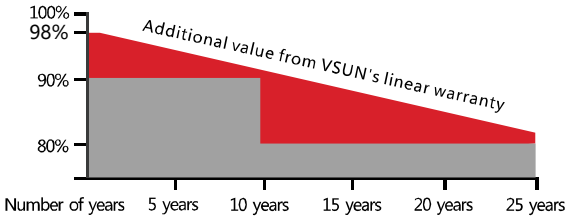
**20.74%**
Module efficiency

**25years**
Material & Workmanship warranty

**30years**
Linear power output warranty

VSUN405-108BMH VSUN400-108BMH
VSUN395-108BMH VSUN390-108BMH






Munich RE

- MBB technology with Circular Ribbon
- Higher output power
- Half-cell Technology
- Positive tolerance offer
- Micro Gap
- Up to 30% extra power generation yield from the back side
- Certified for salt/ammonia corrosion resistance
- Load certificates: wind to 2400Pa and snow to 5400Pa
- Lower LCOE

VSUN, a BNEF Tier-1 PV module manufacturer invested by Fuji Solar, has been committed to providing greener, cleaner and more intelligent renewable energy solutions. VSUN is dedicated to bringing reliable, customized and high-efficient products into various markets and customers worldwide

Engineered in Japan
www.vsun-solar.com

## Electrical Characteristics at Standard Test Conditions(STC)

| Module Type | VSUN405-108BMH | VSUN400-108BMH | VSUN395-108BMH | VSUN390-108BMH |
|---|---|---|---|---|
| Maximum Power - Pmax (W) | 405 | 400 | 395 | 390 |
| Open Circuit Voltage - Voc (V) | 37.36 | 37.2 | 37.03 | 36.84 |
| Short Circuit Current - Isc (A) | 13.78 | 13.68 | 13.59 | 13.5 |
| Maximum Power Voltage - Vmpp (V) | 31.36 | 31.17 | 31 | 30.82 |
| Maximum Power Current - Impp (A) | 12.92 | 12.84 | 12.75 | 12.66 |
| Module Efficiency | 20.74% | 20.48% | 20.23% | 19.97% |

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 400 front)

| Pmax (W) | Voc (V) | Isc (A) | Vmpp (V) | Impp (A) | Pmax gain |
|---|---|---|---|---|---|
| 420 | 37.1 | 14.36 | 31.17 | 13.48 | 5% |
| 440 | 37.1 | 15.05 | 31.17 | 14.12 | 10% |
| 479 | 37.2 | 16.42 | 31.12 | 15.41 | 20% |
| 499 | 37.2 | 17.10 | 31.12 | 16.05 | 25% |

## 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 |

## Maximum Ratings

| | |
|---|---|
| Maximum System Voltage [V] | 1500 |
| Series Fuse Rating [A] | 30 |
| Bifaciality | 70%±10% |

## Material Characteristics

| | |
|---|---|
| Dimensions | 1722×1134×30mm (L×W×H |
| Weight | 21.4kg |
| Frame | Black anodized aluminum profile |
| Front Glass | White toughened safety glass, 3.2 mm |
| Cell Encapsulation | EVA (Ethylene-Vinyl-Acetate) or POE |
| Back Sheet | Transparent black-mesh backsheet |
| Cells | 12×9 pieces monocrystalline solar cells series strings |
| Junction Box | IP68, 3 diodes |
| Cable&Connector | Landscape: 1200 mm (cable length can be customized, 1×4 mm2, Staubli MC4) |

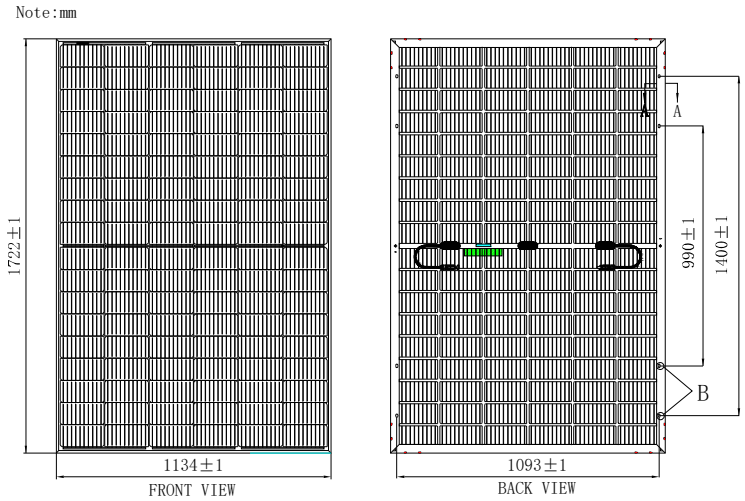
## Packaging

| | |
|---|---|
| Dimensions(L×W×H) | 1760×1125×1253mm |
| Container 20' | 216 |
| Container 40' | 468 |
| Container 40'HC | 936 |

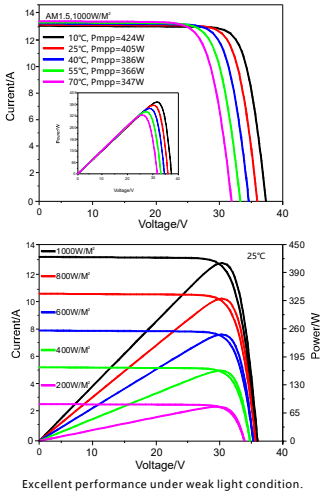
## System Design

| | |
|---|---|
| Temperature Range | -40 °C to + 85 °C |
| Withstanding Hail | Maximum diameter of 25 mm with impact speed of 23 m/s |
| Maximum Surface Load | 5,400 Pa |
| Application class | class A |

## Dimensions




## IV-Curves




Excellent performance under weak light condition.