

# VSUN415-132BMH

**415W**

Highest power output

**20.54%**

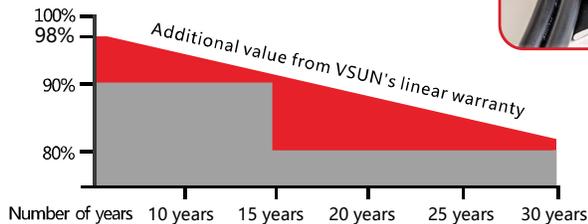
Module efficiency

**25years**

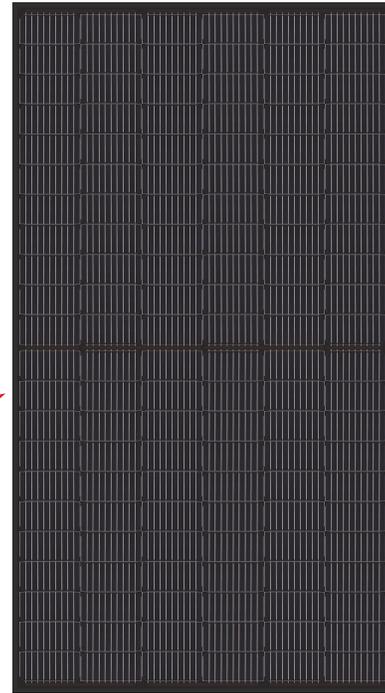
Material & Workmanship warranty

**30years**

Linear power output warranty



Integrated Wire Management



VSUN415-132BMH VSUN410-132BMH  
VSUN405-132BMH VSUN400-132BMH



PERC Cell Technology



Higher output power



Lower risk of micro-crack



Positive tolerance offer



Lower risk of hot spot



Better shading tolerance



**IEC61215 IEC61730  
UL61730 certificate**



Certified for salt/ammonia  
corrosion resistance



Lower LCOE

■ VSUN

■ Standard Warranty

**Munich RE**

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](http://www.vsun-solar.com)

## Electrical Characteristics at Standard Test Conditions(STC)

Module Type	VSUN415-132BMH	VSUN410-132BMH	VSUN405-132BMH	VSUN400-132BMH
Maximum Power - Pmax (W)	415	410	405	400
Open Circuit Voltage - Voc (V)	45.5	45.3	45.1	44.9
Short Circuit Current - Isc (A)	11.57	11.5	11.42	11.35
Maximum Power Voltage - Vmpp (V)	37.6	37.4	37.2	37
Maximum Power Current - Imp (A)	11.04	10.97	10.89	10.82
Module Efficiency	20.54%	20.29%	20.04%	19.80%

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 410 front)

Pmax (W)	Voc (V)	Isc (A)	Vmpp (V)	Imp (A)	Pmax gain
431	45.3	12.08	37.4	11.52	5%
451	45.3	12.65	37.4	12.07	10%
492	45.4	13.80	37.30	13.16	20%
513	45.4	14.38	37.30	13.71	25%

## Temperature Characteristics

NOCT	45°C(±2°C)
Voltage Temperature Coefficient	-0.26%/°C
Current Temperature Coefficient	+0.054%/°C
Power Temperature Coefficient	-0.32%/°C

## Maximum Ratings

Maximum System Voltage [V]	1500
Series Fuse Rating [A]	20
Bifaciality	70%±10%

## Material Characteristics

Dimensions (L*W*H)	1928 x 1048 x 35mm / 75.91 x 41.26 x 1.38 inches
Weight	21.9kg / 48.28lbs
Frame	Black anodized aluminum profile
Front Glass	AR-Coating toughened glass, 3.2 mm
Cell Encapsulation Back Sheet	EVA or POE
Sheet	Transparent black-mesh backsheets
Cells	11×12 pieces bifacial monocrystalline solar cells series strings
Junction Box	IP68, 3 diodes,
Cable&Connector Wire Management	Cable length 2400 mm, Staubli MC4 connector Wire management system fits 6.1-6.7 mm OD wires including Solaredge and Enphase Cables

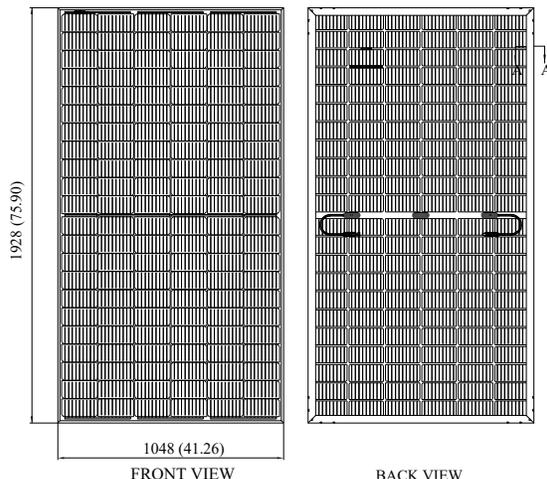
## Packaging

Dimensions (L*W*H)	1950×1125×1181mm 76.77*44.29*46.50 inches	Temperature Range	-40 °C to + 85 °C
Container 20'	155	Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m/s
Container 40'	744	Maximum Surface Load	5,400 Pa
Container 40'HC	744	Application class	class A

## System Design

## Dimensions

Note:mm (inch)



## IV-Curves

