

VSUN415-132BMH

415W

Highest power output

20.54%

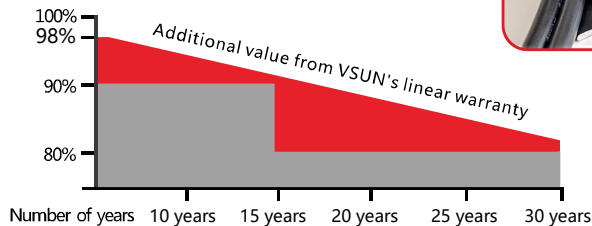
Module efficiency

25years

Material & Workmanship warranty

30years

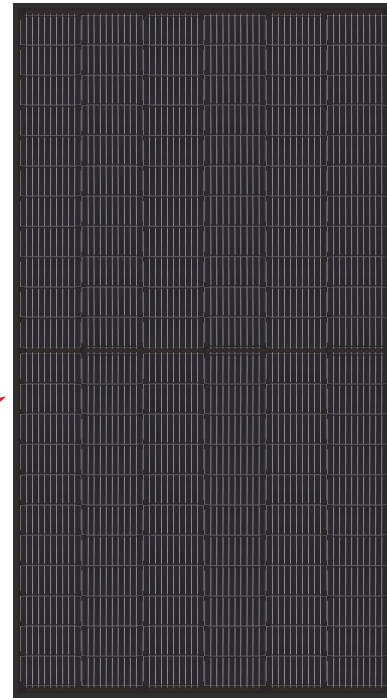
Linear power output warranty



Integrated Wire Management



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



■ VSUN ■ Standard Warranty
Munich RE



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, 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

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/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 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

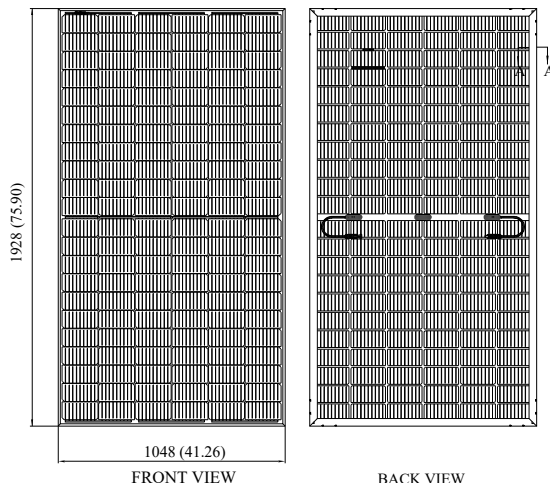
Packaging

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

