

VSUN450-144BMH

450W

Highest power output

20.37%

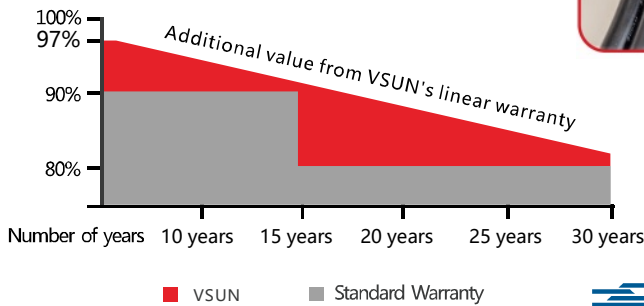
Module efficiency

25years

Material & Workmanship warranty

30years

Linear power output warranty



Integrated Wire Management



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



Engineered in Japan
www.vsun-solar.com

Electrical Characteristics at Standard Test Conditions(STC)

Module Type	VSUN450-144BMH	VSUN445-144BMH	VSUN440-144BMH	VSUN435-144BMH
Maximum Power - Pmax (W)	450	445	440	435
Open Circuit Voltage - Voc (V)	49.4	49.2	49	48.8
Short Circuit Current - Isc (A)	11.52	11.44	11.36	11.28
Maximum Power Voltage - Vmpp (V)	41.2	41	40.8	40.6
Maximum Power Current - Imp (A)	10.93	10.86	10.79	10.72
Module Efficiency	20.37%	20.14%	19.92%	19.69%

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 445 front)

Pmax (W)	Voc (V)	Isc (A)	Vmpp (V)	Imp (A)	Pmax gain
468	49.2	12.01	41	11.40	5%
490	49.2	12.58	41	11.95	10%
533	49.30	13.73	40.90	13.03	20%
555	49.30	14.30	40.90	13.58	25%

Temperature Characteristics

NOCT	45°C(±2°C)	Maximum System Voltage [V]	1500
Voltage Temperature Coefficient	-0.26%/°C	Series Fuse Rating [A]	20
Current Temperature Coefficient	+0.054%/°C	Bifaciality	70%±10%
Power Temperature Coefficient	-0.32%/°C		

Maximum Ratings

Material Characteristics

Dimensions (L*W*H)	2108 x 1048 x 35mm / 82.99 x 41.26 x 1.38 in
Weight	24.4kg / 53.79lbs
Frame	Black anodized aluminum profile
Front Glass	AR-Coating toughened glass, 3.2mm
Cell Encapsulation Back Sheet	EVA or POE
Sheet	Transparent black-mesh backsheet
Cells	12×12 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

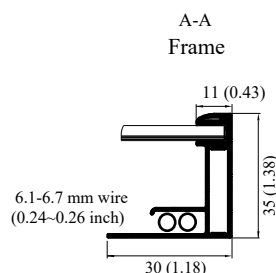
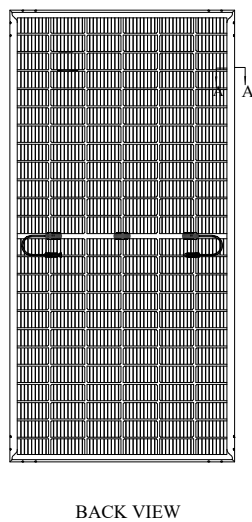
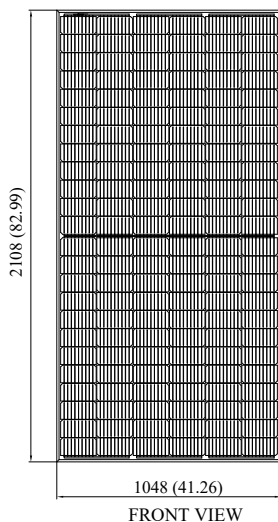
Packaging

Dimensions (L*W*H)	2140x1125x1181mm 84.25x44.29x46.50 in	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'	341	Maximum Surface Load	5,400 Pa
Container 40'HC	682	Application class	class A

System Design

Dimensions

Note:mm (inch)



IV-Curves

