

VSUN450-144BMH-DG

450W

Highest power output

20.24%

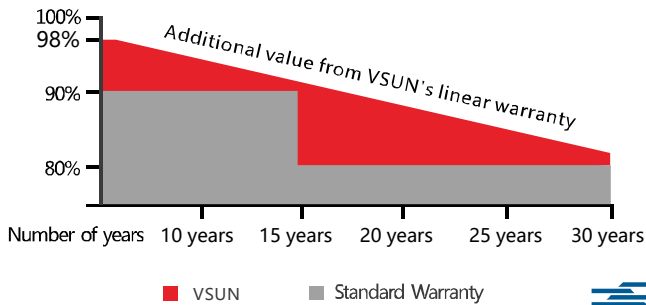
Module efficiency

12years

Material & Workmanship warranty

30years

Linear power output warranty



■ 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



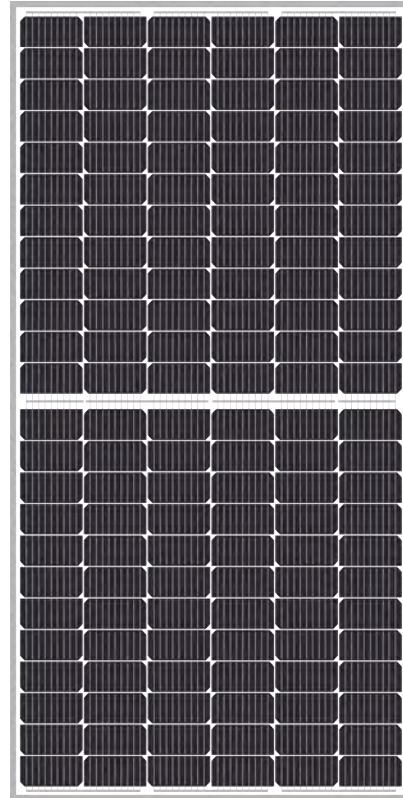
Fire safety: Class A



Load certificates: wind to 2400Pa and snow to 5400Pa



Lower LCOE



VSUN450-144BMH-DG VSUN445-144BMH-DG
VSUN440-144BMH-DG VSUN435-144BMH-DG

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-DG	VSUN445-144BMH-DG	VSUN440-144BMH-DG	VSUN435-144BMH-DG
Maximum Power - Pmax (W)	450	445	440	435
Open Circuit Voltage - Voc (V)	49.4	49.2	49.0	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	20.24%	20.01%	19.79%	19.56%

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)
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%±5%

Material Characteristics

Dimensions	2122×1048×35mm (L×W×H)
Weight	27.8kg
Frame	Silver anodized aluminum profile
Front Glass	High transparency,Antireflection coated,Semi-toughened safety glass,2.0mm
Cell Encapsulation	EVA or POE
Back Glass	Glazed & Semi-toughened safety glass,2.0mm
Cells	12×12 pieces bifacial monocrystalline solar cells series strings
Junction Box	IP68, 3 diodes
Cable&Connector	Potrait: 500 mm (cable length can be customized) , 1×4 mm 2 , Connector: PV-ZH202B

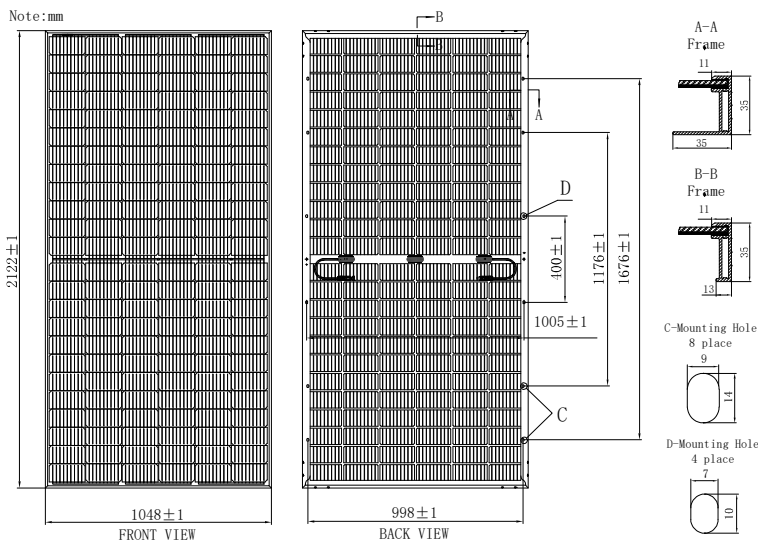
Packaging

Dimensions(L×W×H)	2170×1125×1181mm
Container 20'	150
Container 40'	330
Container 40'HC	660

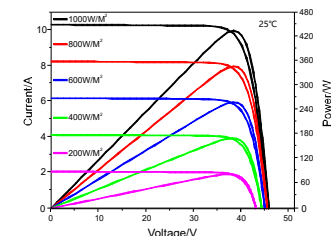
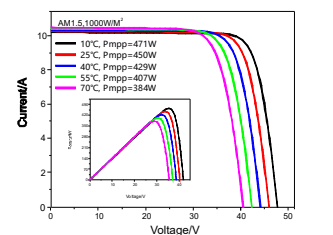
System Design

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.