

VSUN455-144BMH

455W

Highest power output

20.60%

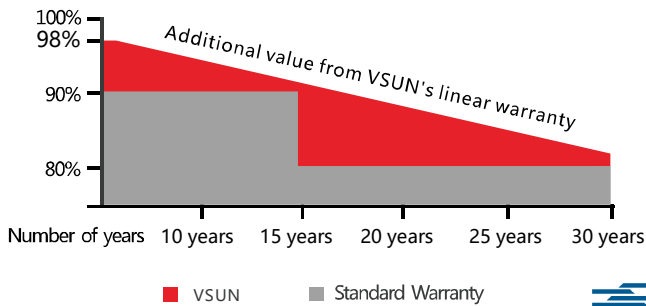
Module efficiency

25 years

Material & Workmanship warranty

30 years

Linear power output warranty



■ VSUN

■ Standard Warranty

Munich RE 



PERC Cell Technology



Higher output power

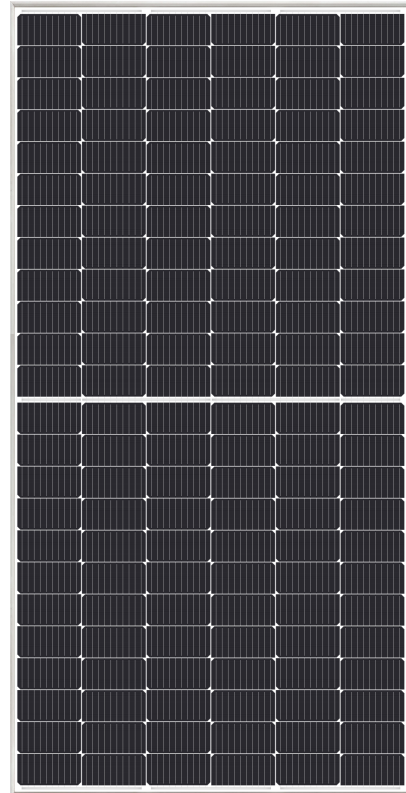


Lower risk of micro-crack



Positive tolerance offer

VSUN455-144BMH VSUN450-144BMH
VSUN445-144BMH VSUN440-144BMH



Lower risk of hot spot



Better shading tolerance



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	VSUN455-144BMH	VSUN450-144BMH	VSUN445-144BMH	VSUN440-144BMH
Maximum Power - Pmax (W)	455	450	445	440
Open Circuit Voltage - Voc (V)	49.6	49.4	49.2	49
Short Circuit Current - Isc (A)	11.6	11.52	11.44	11.36
Maximum Power Voltage - Vmpp (V)	41.4	41.2	41	40.8
Maximum Power Current - Imp (A)	11	10.93	10.86	10.79
Module Efficiency	20.60%	20.37%	20.14%	19.92%

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 450 front)

Pmax (W)	Voc (V)	Isc (A)	Vmpp (V)	Imp (A)	Pmax gain
475	49.6	12.10	41.4	11.48	5%
498	49.6	12.67	41.4	12.02	10%
542	49.7	13.82	41.3	13.12	20%
564	49.7	14.40	41.3	13.66	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	2108×1048×35mm (L×W×H) 82.99" x 41.26" x 1.38"
Weight	24.4kg
Frame	Silver anodized aluminum profile
Front Glass	White toughened safety glass, 3.2 mm
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate) or POE
Back Sheet Van Meter Exclusive	Transparent mesh backsheet
Cells	12×12 pieces bifacial monocrystalline solar cells series strings
Junction Box	IP68, 3 diodes
Cable&Connector Van Meter Exclusive	Potrait: 2100mm, Staubli MC4

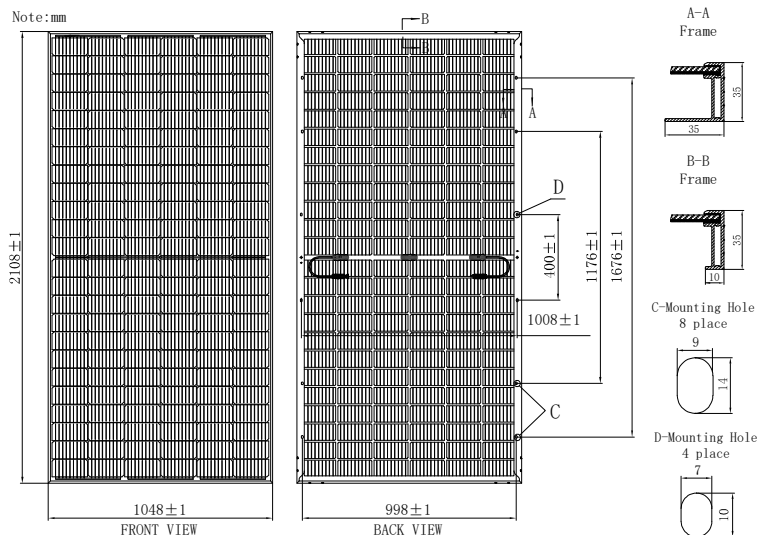
Packaging

Dimensions(L×W×H)	2140×1125×1181mm
Container 20'	155
Container 40'	341
Container 40'HC	682

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

