

# VSUN440-144M-BB

**440W**

Highest power output

**19.92%**

Module efficiency

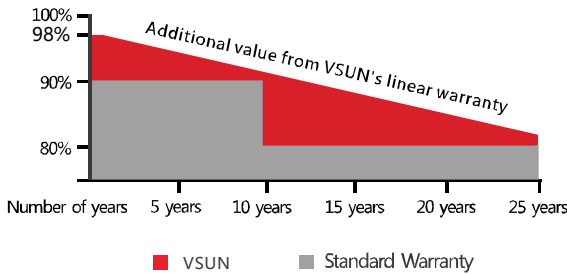
**12years**

Material & Workmanship warranty

**25years**

Linear power output warranty

VSUN440-144M-BB VSUN435-144M-BB VSUN430-144M-BB  
VSUN425-144M-BB VSUN420-144M-BB



Munich RE

166mm mono-PERC cell

MBB technology

Half-cell technology

Positive tolerance offer

Lower risk of micro-crack

Better shading tolerance

Certified for salt/ammonia corrosion resistance

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

Beautiful appearance with black frame and black backsheet

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	VSUN440-144M-BB	VSUN435-144M-BB	VSUN430-144M-BB	VSUN425-144M-BB	VSUN420-144M-BB
Maximum Power - Pmax (W)	440	435	430	425	420
Open Circuit Voltage - Voc (V)	49.6	49.4	49.2	49	48.8
Short Circuit Current - Isc (A)	11.34	11.26	11.19	11.11	11.04
Maximum Power Voltage - Vmpp (V)	41	40.8	40.6	40.4	40.2
Maximum Power Current - Imp (A)	10.74	10.67	10.6	10.52	10.45
Module Efficiency	19.92%	19.69%	19.46%	19.24%	19.01%

Standard Test Conditions (STC): irradiance 1,000 W/m<sup>2</sup>; AM 1.5; Cell 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 at Normal Operating Cell Temperature(NOCT)

Module Type	VSUN440-144M-BB	VSUN435-144M-BB	VSUN430-144M-BB	VSUN425-144M-BB	VSUN420-144M-BB
Maximum Power - Pmax (W)	328	324.3	320.7	316.8	311.1
Open Circuit Voltage - Voc (V)	46.2	46	45.9	45.7	45.5
Short Circuit Current - Isc (A)	9.16	9.09	9.04	8.97	9.13
Maximum Power Voltage - Vmpp (V)	38.1	37.9	37.7	0.6	37.9
Maximum Power Current - Imp (A)	8.61	8.55	8.5	8.43	8.38

Normal Operating Cell Temperature (NOCT) : irradiance 800W/m<sup>2</sup>; wind speed 1 m/s, ambient temperature 20°C. Measuring Tolerance: ±3%.

## Temperature Characteristics

NOCT	45°C ( ±2°C )
Voltage Temperature Coefficient	-0.27%/°C
Current Temperature Coefficient	+0.048%/°C
Power Temperature Coefficient	-0.35%/°C

## Maximum Ratings

Maximum System Voltage [V]	1000
Series Fuse Rating [A]	20

## Material Characteristics

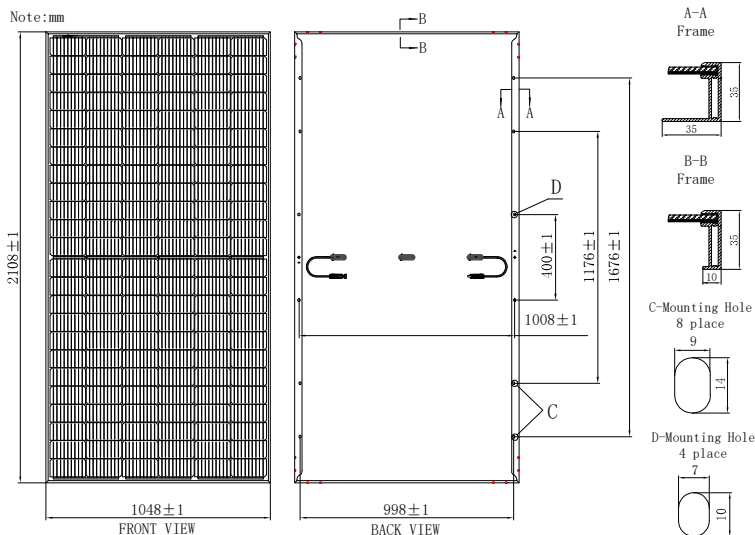
Dimensions	2108×1048×35mm (L×W×H)
Weight	24.4kg
Frame	Black anodized aluminum profile
Front Glass	White toughened safety glass, 3.2 mm
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Sheet	Composite film
Cells	12×12 pieces monocrystalline solar cells series strings
Junction Box	IP68, 3 diodes
Cable&Connector	Potrait 500 mm (cable length can be customized) , 1×4 mm <sup>2</sup> , compatible with MC4

## Packaging

Dimensions(L×W×H)	2140×1125×1181mm	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		5,400 Pa
Container 40'HC	682	Maximum Surface Load	Class A
		Application class	

## System Design

## Dimensions



## IV-Curves

