

VDS-S144/M6H 166 Half Cell Series

435-460w

144-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE

Product Advantages



High Power Output

Compared to 158.75mm module, the power output can increase 25W-30W



High Reliability

Passed 3*IEC standard test



Low Hot-spot Risk

1/2 current, reducing the hot spot temperature



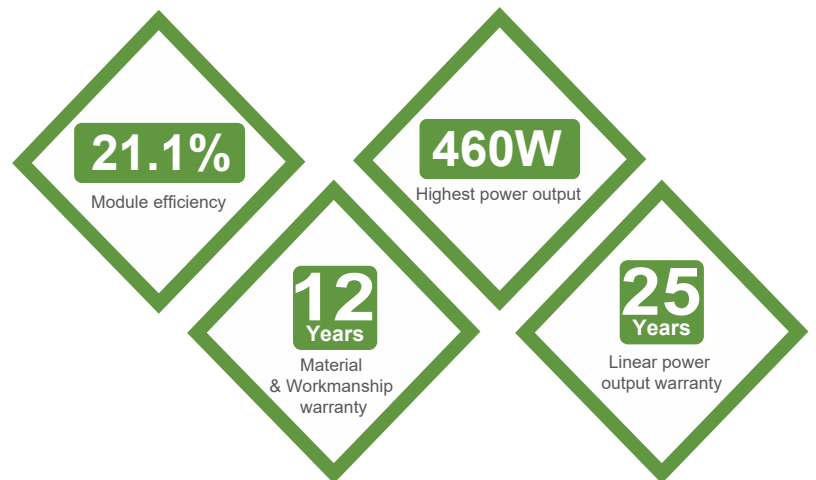
Low NMOT

As low as 43°C , improving the power generation efficiency

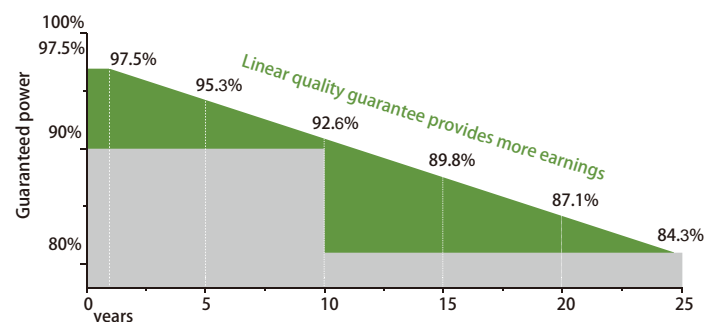


Half Cell, MBB Technology

Series-then-parallel cell connection design, more reliable soldering technology



Product Guarantee



Product Certification



VDS-S144/M6H

Electrical Characteristics

STC	460	455	450	445	440	435
Maximum Power at STC (Pmax)	460W	455W	450W	445W	440W	435W
Optimum Operating Voltage (Vmp)	41.8V	41.6V	41.4V	41.2V	41.0V	40.8V
Optimum Operating Current (Imp)	11.01A	10.94A	10.87A	10.81A	10.74A	10.67A
Open Circuit Voltage (Voc)	49.6V	49.4V	49.2V	49.0V <td 48.8V	48.6V	
Short Circuit Current (Isc)	11.75A	11.68A	11.61A	11.54A	11.47A	11.4A
Module Efficiency	21.1%	20.9%	20.7%	20.5%	20.2%	20.0%
Operating Module Temperature	-40 °C to +85 °C					
Maximum System Voltage	1500 V DC (IEC)					
Maximum Series Fuse Rating	20 A					
Power Tolerance	0/+5W					

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5; Tolerances of Pmax, Voc and Isc are all within +/- 5%.

NMOT	460	455	450	445	440	435
Maximum Power at NMOT (Pmax)	356.80W	352.24W	348.10W	335W	331.2W	327.5W
Optimum Operating Voltage (Vmp)	39.6V	39.4V	39.2V	38.5V	38.3V	38.1V
Optimum Operating Current (Imp)	9.01A	8.94A	8.88A	8.7A	8.65A	8.59A
Open Circuit Voltage (Voc)	47.8V	47.6V	47.4V	46.8V	46.6V	46.4V
Short Circuit Current (Isc)	8.96A	9.42A	9.36A	9.19A	9.14A	9.08A

NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s;

Temperature Characteristics

Nominal Module Operating Temperature(NMOT)	42 ± 2 °C
Temperature Coefficient of Pmax	-0.36 %/°C
Temperature Coefficient of Voc	-0.304%/°C
Temperature Coefficient of Isc	0.058 %/°C

Mechanical Characteristics

Solar Cell	Monocrystalline silicon 166 mm (9BB)
No. of Cells	144 (6 × 24)
Dimensions	2095 × 1039 × 35 mm
Weight	23.8 kgs
Front Glass	3.2 mm tempered glass with AR coating
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm ² , cable length 350mm or customized length

Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	31	31+2
Pallets per container	5	22
Pieces per container	155	726

Company Profile

The management of Vendato Solar has been active in the solar market in Europe for more than 10 years. We developed solar projects across Europe. Our references are in Germany, Spain, Italy, Bulgaria and other European countries. For the implementation of our projects, we are constantly improving the technology of PV modules we have made and carry out recurring tests. The quality control is especially important for us and we also have random tests for the PV modules in Germany. Our products have the currently valid test standards and certificates for the pv market.

