



**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



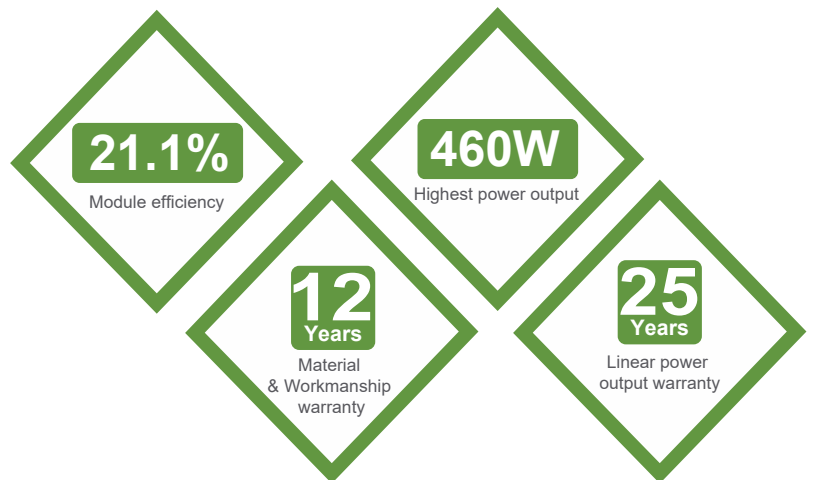
**Low Hot-spot Risk**  
1/2 current, reducing the hot spot temperature



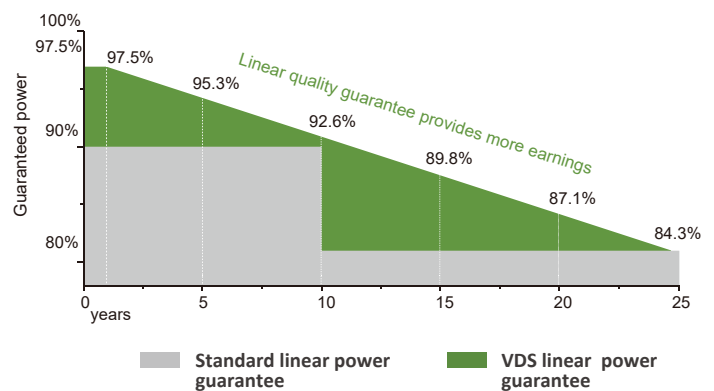
**Low NMOT**  
As low as 43°C, improving the power generation efficiency



**Half Cell, MBB Technology**  
Series-then-parallel cell connection design, more reliable soldering technology



**Product Guarantee**



**Product Certification**



# VDS-S144/M6H

## Electrical Characteristics

STC	435	440	445	450	455	460
Maximum Power at STC (Pmax)	435W	440W	445W	450W	455W	460W
Optimum Operating Voltage (Vmp)	40.8V	41.0V	41.2V	41.4V	41.6V	41.8V
Optimum Operating Current (Imp)	10.67A	10.74A	10.81A	10.87A	10.94A	11.01A
Open Circuit Voltage (Voc)	48.6V	48.8V	49.0V	49.2V	49.4V	49.6V
Short Circuit Current (Isc)	11.4A	11.47A	11.54A	11.61A	11.68A	11.75A
Module Efficiency	20.0%	20.2%	20.5%	20.7%	20.9%	21.1%
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/m<sup>2</sup>, module temperature 25 °C, AM=1.5; Measuring tolerance: ± 3%.

NMOT	435	440	445	450	455	460
Maximum Power at NMOT (Pmax)	334.9W	339.0W	343.1W	348.1W	352.2W	356.8W
Optimum Operating Voltage (Vmp)	38.5V	38.7V	38.9V	39.2V	39.4V	39.6V
Optimum Operating Current (Imp)	8.70A	8.76A	8.82A	8.88A <td 8.94A	9.01A	
Open Circuit Voltage (Voc)	46.80V	47.0V	47.2V	47.4V	47.6V	47.8V
Short Circuit Current (Isc)	9.19A	9.24A	9.30A	9.36A	9.42A	9.48A

NMOT: Irradiance 800 W/m<sup>2</sup>, 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	-0.34 %/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.040 %/°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 <sup>2</sup> , 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.

