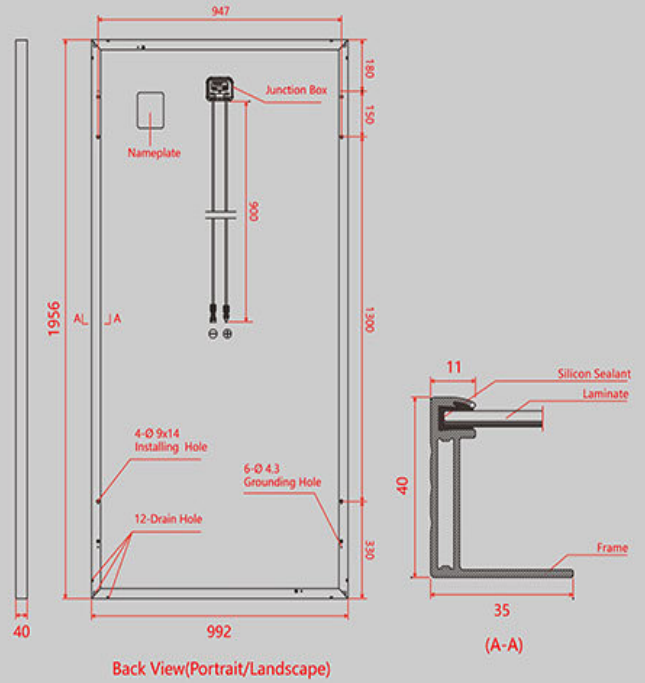


## Dimension of PV Module(mm)



⑥ GLASS

⑤ EVA

④ SOLAR CELL

③ EVA

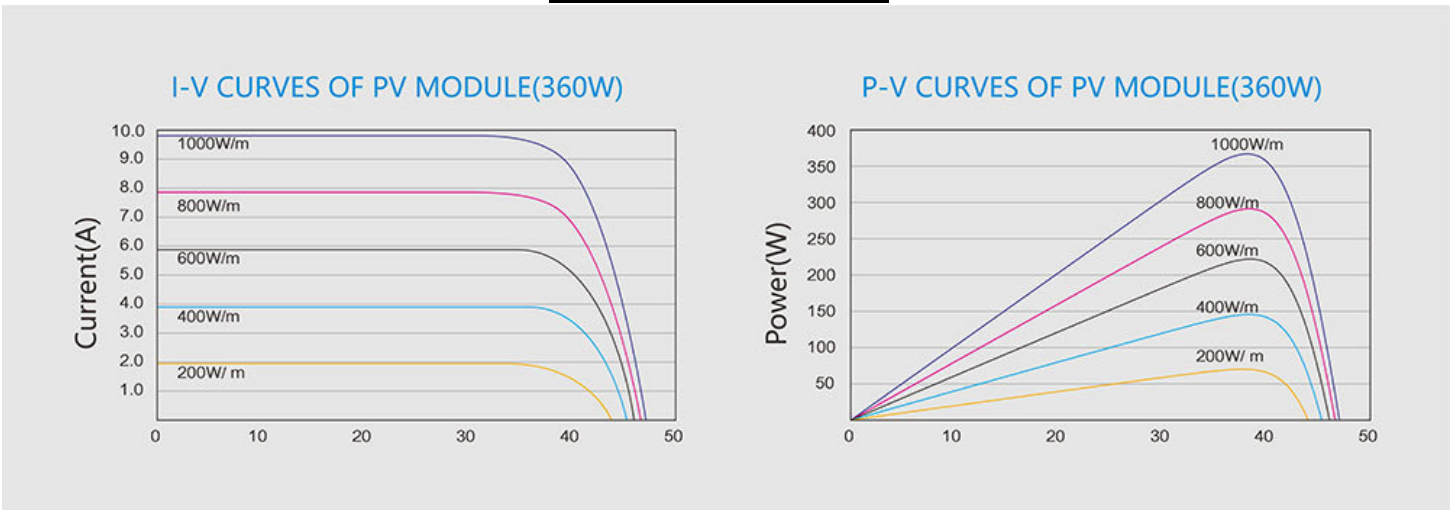
② BACKSHEET

① FRAME

### Technical Specification Data (STC) of Solar Panel


Model of Solar Panel	VE340M-60	350M-72	360M-72	VE400M-72	VE440M-144	VE500M-144
Peak Power Watts-Pmax(Wp)*	340	350	360	400	440	500
Maximum Power Voltage-Vmpp(V)	34.29	38.7	39.0	40.82	41.90	48.63
Maximum Power Current-Impp(A)	9.92	9.05	9.24	9.80	10.51	10.29
Open Circuit Voltage-Voc(V)	41.7	47.0	47.7	49.95	50.6	59.01
Short Circuit Current-Isc(A)	10.46	9.60	9.70	10.32	11.01	10.87
Module Efficiency (%)	17.5	18.0	18.5	19.0	19.3	19.51
Power Output Tolerance-Pmax(W)	0~+5					
Temperature Coefficient of Pmax	-0.39%/°C					
Temperature Coefficient of Voc	-0.29%/°C					
Temperature Coefficient of Isc	0.05%/°C					
STC	Irradiance 1000W/m <sup>2</sup> , Cell Temperature 25c , Air Mass AM1.5					

### I-V Curve of Solar Panel



# SOLAR PANEL VE 400W MONO CELL PERC






www.volts-energie.com

**Model Type:VE400M-72**






Maximum Power(Pmax)	400W	Power Tolerance	0/+5W
Open Circuit Voltage(Voc)	49.95V	Short Circuit Current(Isc)	10.32A
Max Power Voltage(Vmp)	40.82V	Max Power Current(Imp)	9.80A
Max System Voltage	1500Vdc	Max Series Fuse Rating	20A
Dimension(L*W*H)	1956*992*40mm	Weight	22Kg
Module Application	Class A	Operating Temperature	-40°C~+85°C

All technical data at standard test condition  
STC: AM=1.5 E=1000W/m<sup>2</sup> T<sub>c</sub>=25°C



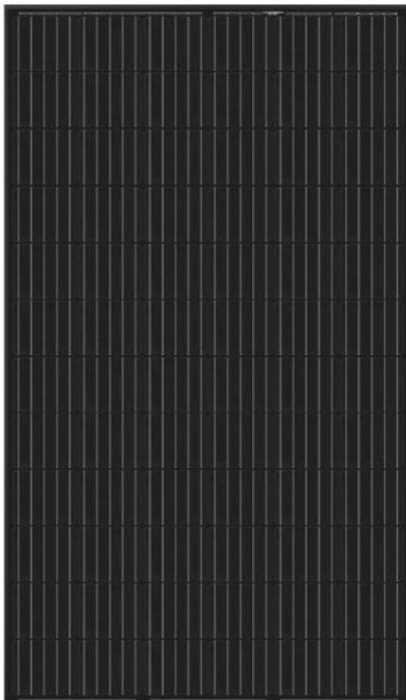
**WARNING ELECTRICAL HAZARD**  
Hazardous Electricity Can Shock Burn or Cause Death. Do not Touch Terminals.Cover glass before opening terminal junction box.


For field connections use minimum  
4mm<sup>2</sup> copper wires insulated for a minimum 90°C

ISO9001/14001,CE,TUV,IEC 61215,IEC 61730,Safety Class II

# SOLAR PANEL VE 340W MONO CELL PERC






www.volts-energie.com

**Model Type:VE340M-60**






Maximum Power(Pmax)	340W	Power Tolerance	0/+5W
Open Circuit Voltage(Voc)	41.7V	Short Circuit Current(Isc)	10.46A
Max Power Voltage(Vmp)	34.29V	Max Power Current(Imp)	9.92A
Max System Voltage	1500Vdc	Max Series Fuse Rating	20A
Dimension(L*W*H)	1640*992*35mm	Weight	18Kg
Module Application	Class A	Operating Temperature	-40°C~+85°C

All technical data at standard test condition  
STC: AM=1.5 E=1000W/m<sup>2</sup> T<sub>c</sub>=25°C



**WARNING ELECTRICAL HAZARD**  
Hazardous Electricity Can Shock Burn or Cause Death. Do not Touch Terminals.Cover glass before opening terminal junction box.

For field connections use minimum  
4mm<sup>2</sup> copper wires insulated for a minimum 90°C

ISO9001/14001,CE,TUV,IEC 61215,IEC 61730,Safety Class II

# SOLAR PANEL VE 440W MONO CELL PERC

## VE-144HC Mono 9BB(166mm) Series 435~455W

Model Number : VE-144HC Mono 9BB(166mm) Series 435~455W

Cell Orientation : 144 cells(6\*24)

Weight : 24kg

Brand Name : VOLTS ENERGIE

Size : 2115\*1052\*35mm

J-Box : IP68 rated (3 bypass diodes)

Solar cell : Monocrystalline, Cell Perc 166mm(9BB)

Warranty : 25 year Power Warranty

Backsheet : Black

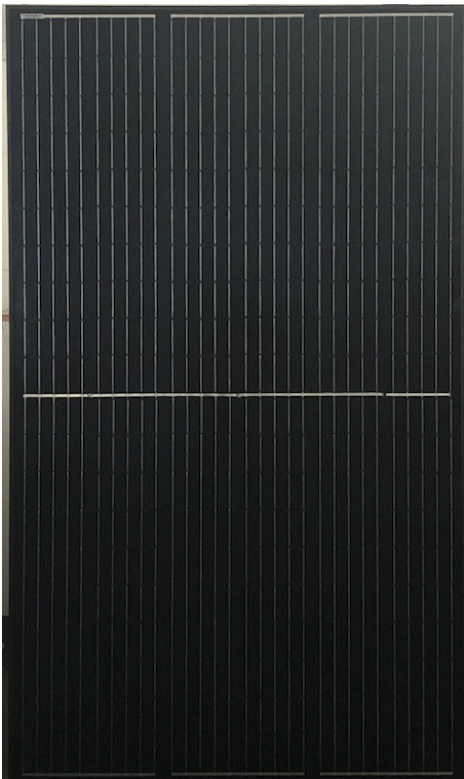
Glass : 3.2mm, High Transparency, AR Coated and Heat Tempered Solar Glass


PV Cable : 4.0 mm<sup>2</sup> , symmetrical lengths (-) 1400mm and (+) 1400 mm

Connector : MC4 Compatible /MC4 EVO2/TS4\*

Frame : Black Anodized Aluminium Alloy

Encapsulant Material : EVA/POE




  
[www.volts-energie.com](http://www.volts-energie.com)






**Model Type:VE440M-144HC**

Maximum Power(Pmax)	440W	Power Tolerance	0/+5W
Open Circuit Voltage(Voc)	50.6V	Short Circuit Current(Isc)	11.01A
Max Power Voltage(Vmp)	41.9V	Max Power Current(Imp)	10.51A
Max System Voltage	1500Vdc	Max Series Fuse Rating	20A
Dimension(L*W*H) 2024*1004*35mm		Weight	23Kg
Module Application	Class A	Operating Temperature	-40°C~+85°C

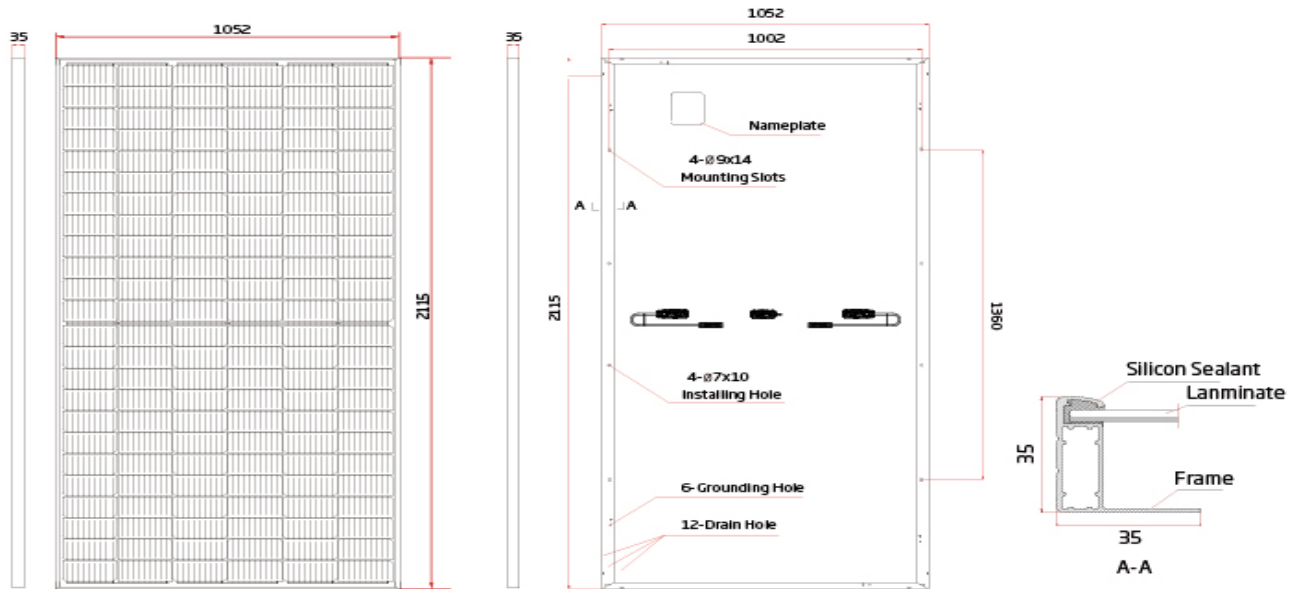
**All technical data at standard test condition**  
STC: AM=1.5 E=1000W/m<sup>2</sup> Tc=25°C

  
**WARNING ELECTRICAL HAZARD**  
Hazardous Electricity Can Shock Burn or Cause Death. Do not Touch Terminals.Cover glass before opening terminal junction box.

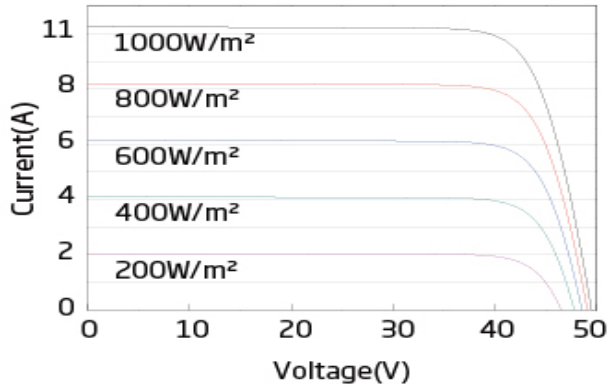
For field connections use minimum  
4mm<sup>2</sup> copper wires insulated for a minimum 90°C



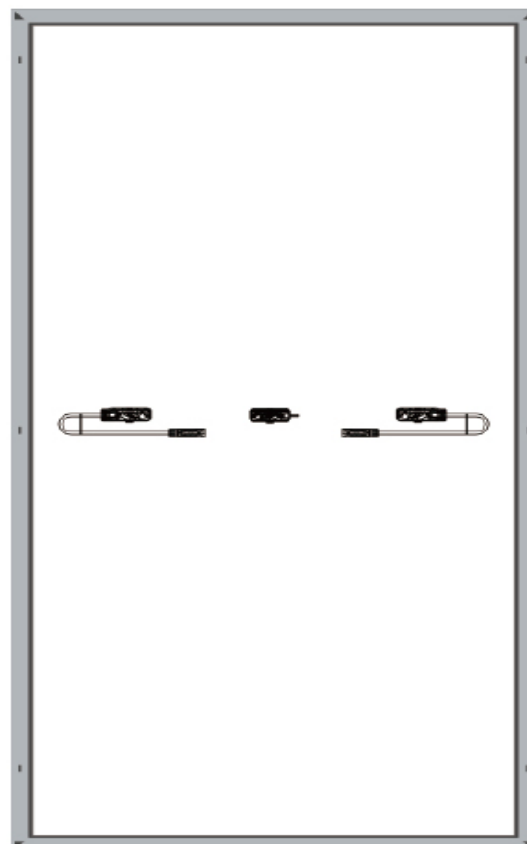
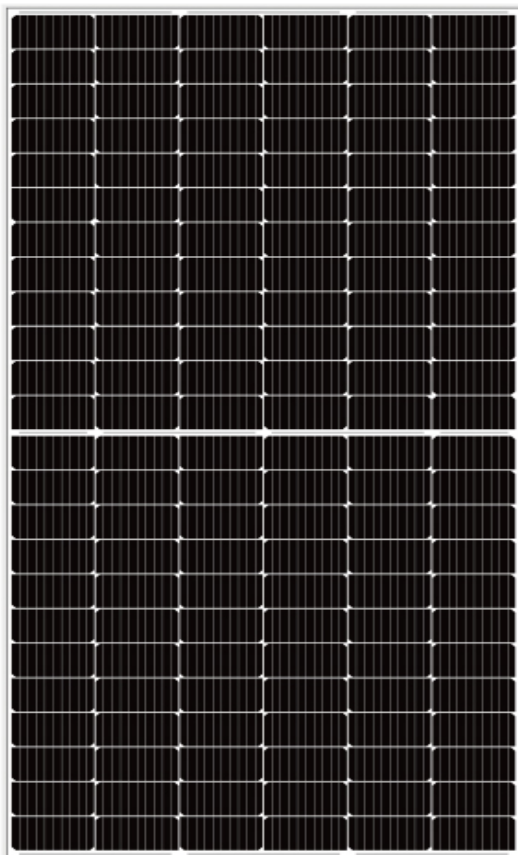
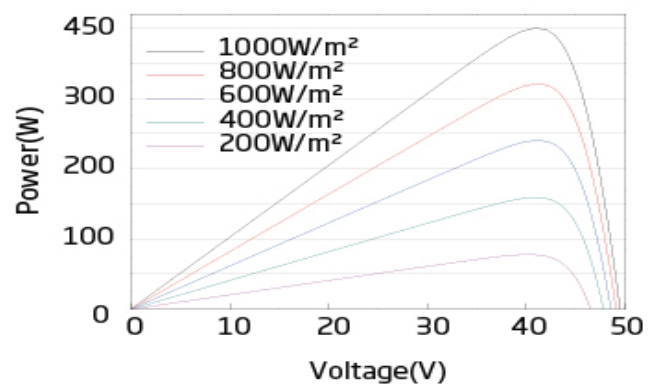
ISO9001/14001,CE,TUV,IEC 61215,IEC 61730,Safety Class II



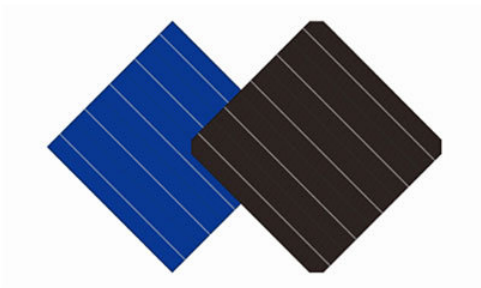
**I-V CURVES OF PV MODULE(450W)**



**P-V CURVES OF PV MODULE(450W)**



## Detailed Images of Solar Panel

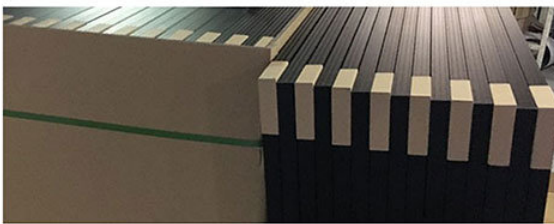


### Solar Cells

High efficiency 5BB PV cell  
Uniform color  
Anti-PID  
Germany standard Cell  
Full test

### Junction box

Conventional standalone edition  
and engineering custom edition  
Quality diode ensures module running safety  
IP67 protection level  
Heat dissipation  
Long service life



### Frame

Stock-size  
Silvery and black  
Thickness 30/35/40/50mm  
Stress test

### Glass

Antireflective glass  
Translucency of normal luminance is increased 2%  
Module efficiency is increased 2%  
Self-clean function  
Service life 25 years



**Founded in 2017 , 50MW solar panel production capacity.**

**Solar panel power range 3watt to 500watt for both polycrystalline and monocrystalline solar panel.  
25 years total workmanship and materials warranty , 10 years for at least 90% and 25 years for 80%  
linear power output warranty.**

**Volts Energy has two factories of solar panel factory and battery factory.**

**Cooperated with world famous big companies like Canadian Solar, Trina Solar, Jinko Solar, Longi Solar, HUAWEI, Sungrow, Solis, Growatt.**

**Volts Energy has certified by TUV, UL, CE, ISO9001, ISO14001, SGS.**

**100% EL, Flash test before package and shipping.**

**Turn-key solar systems are offered , to save the time and money for the clients**

**Volts Energy has constructed thousands of projects for homes, commercial, industrial use for all over the world.**

**Volts Energy is committed to light up the world with green energy.**