

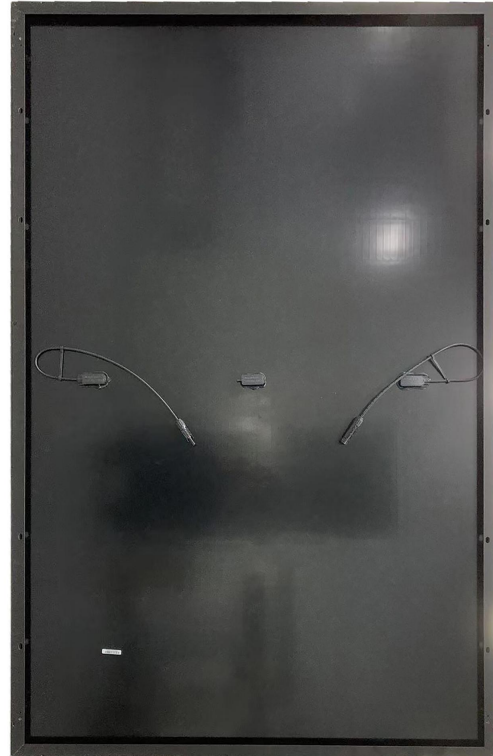


P Type Half-cell Panel

Pure Black Design

VSMH120-475-M10

Rated Power 460-480W



SMBB Technology

New circuit design, lower internal current, lower internal resistance loss.



Higher Output Power

Module adopts 120 pcs of 182*182mm half cells, the maximum power can reach 480W.



Harsh Environmental Adaptability

Strict salt spray and ammonia corrosion test by TUV SUD.



Low Light Features

Higher performance under low light environment.



PID Resistance

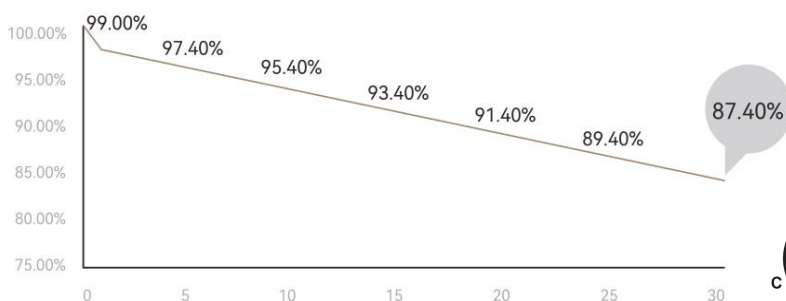
Ensure the attenuation probability caused by PID phenomenon is minimized.



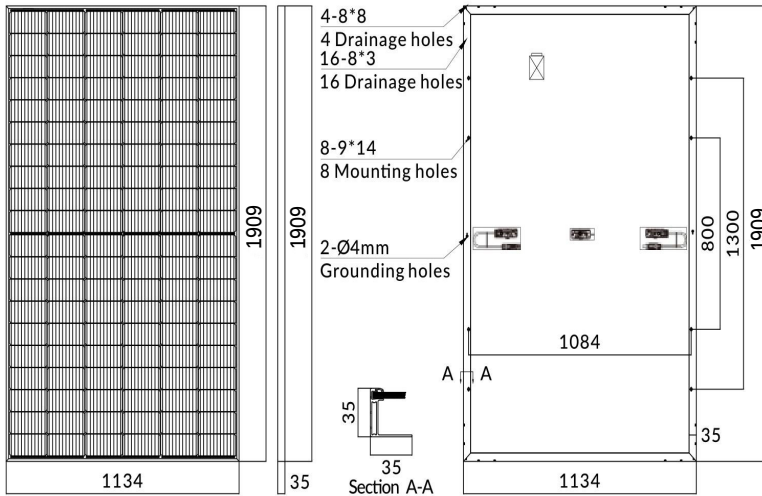
Load Capacity

Mechanical load tests including wind load 2400 Pa and snow load 5400 Pa done by TUV SUD.

1st year <1%, 0.4% power degradation per year from 2 to 30 years



MECHANICAL DIAGRAMS



SPECIFICATIONS

Weight	24.2kg
Dimensions	1909×1134×35mm (1.5mm Cell Gap)
Cell Dimensions	182*182mm
Cell Amount	60*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Frame	Aluminum Alloy
Cable	4mm ² , Landscape: N 300mm/P 300mm Portrait: N 200mm/P 300mm
Connector	MC4 compatible
Application Level	Class A

ELECTRICAL PARAMETERS AT STC

Power	460W	465W	470W	475W	480W
Open Circuit Voltage	42.05V	42.22V	42.38V	42.54V	42.71V
Short Circuit Current	13.99A	14.07A	14.15A	14.23A	14.31A
Maximum Power Voltage	34.72V	34.89V	35.05V	35.21V	35.38V
Maximum Power Current	13.25A	13.33A	13.41A	13.49A	13.57A
Module Efficiency	21.32%	21.55%	21.78%	22.01%	22.24%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL PARAMETERS AT NMOT

Power	346W	350W	353W	357W	361W
Open Circuit Voltage	39.94V	40.01V	40.25V	40.41V	40.57V
Short Circuit Current	11.29A	11.36A	11.42A	11.49A	11.55A
Maximum Power Voltage	32.60V	32.77V	32.94V	33.10V	33.27V
Maximum Power Current	10.61A	10.67A	10.73A	10.79A	10.85A
Module Efficiency	/	/	/	/	/

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

TEMPERATURE CHARACTERISTICS

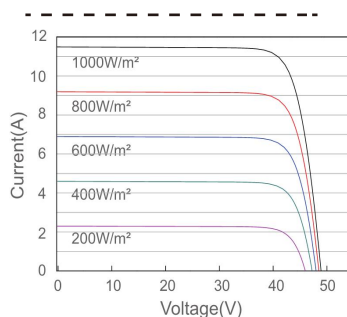
NMOT	41±3°C	Temp Coefficient of ISC	+0.05%/°C
Temp Coefficient of VOC	-0.28%/°C	Temp Coefficient of Pmax	-0.36%/°C

PACKING CONFIGURATION

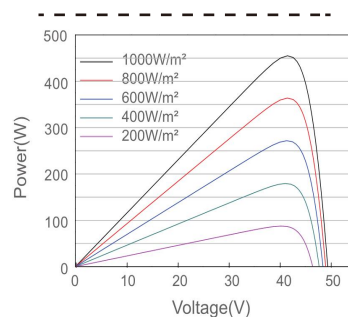
Modules/Pallet	31 Pieces	Modules/40'Container	744 Pieces
Packing Description	24 Pallets, Total=(31+31)=744 Pieces		

CHARACTERISTICS

VSMH120-475W-M10



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MAXIMUM RATING

Output Tolerance	0~+5W
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400pa/5400pa
Fuse Current	25A