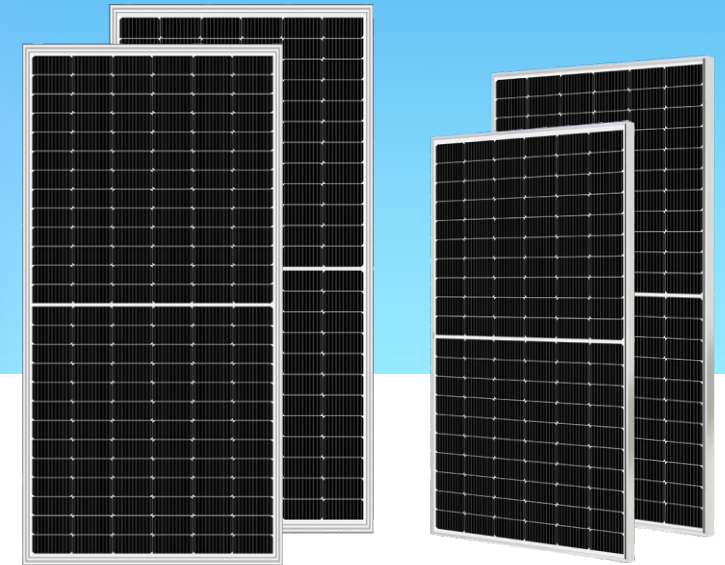




MSD450-600W

Mono Half-cut Single/Double Glass Module

450-600/MB Series



Solar module features



Multi Busbar Technology

Better light trapping and current collection to improve, Effectively improve the module's power output and reliability.



Higher output power

Module output power increased to 505W.



Low light performance

The special solar cell technology has excellent low light power generation performance.



Better resistance to hot spots

The use of half cell structure and special circuit design is less shade loss, with better temperature coefficient and thermal spot resistance ability

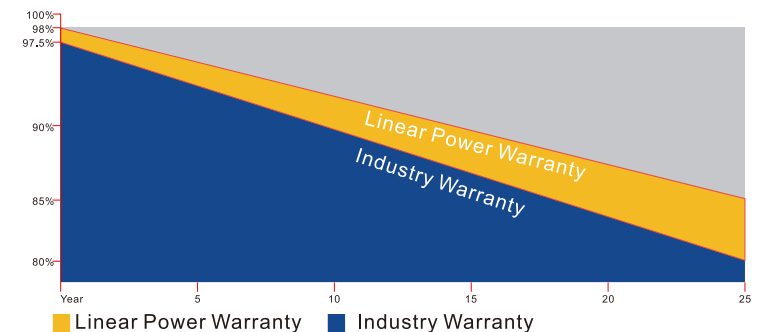


Adaptability to harsh environments

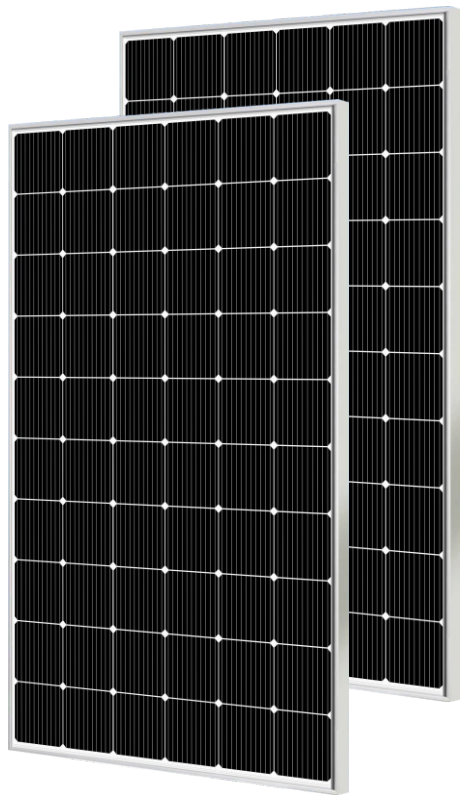
High performance materials are suitable for coastal, farm, desert and other harsh environmental conditions, glass surface is anti-reflective and easy to clean, minimizing power generation losses caused by dirt and dust.

First-class Quality Assurance

- 10-year warranty for material and technology
- 25-year linear power output warranty



Module Picture



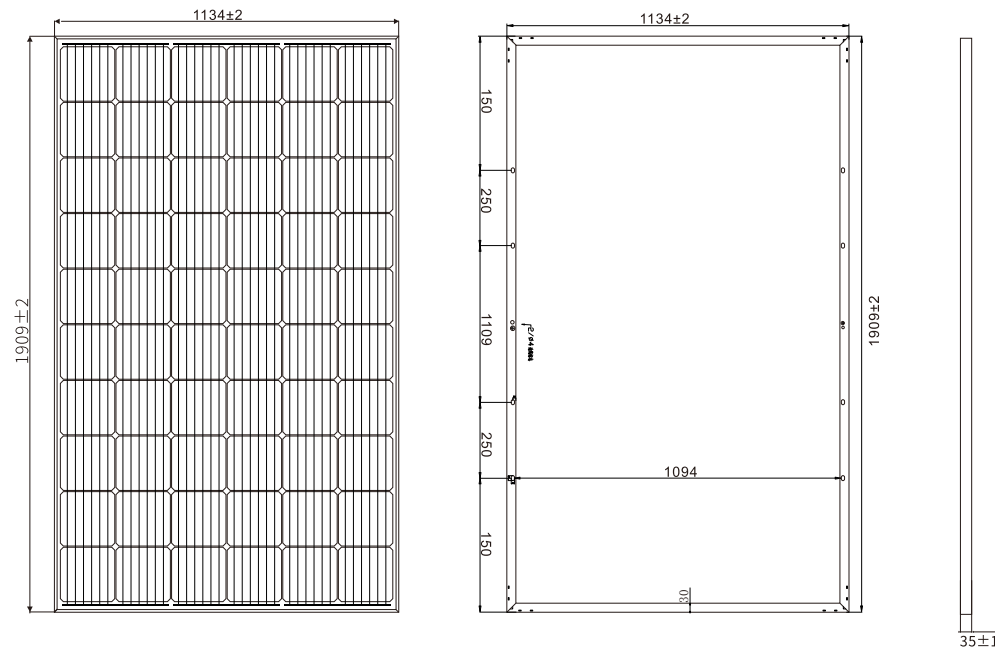
SP450M-60

Comprehensive Certificates

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems



Mechanical Diagrams



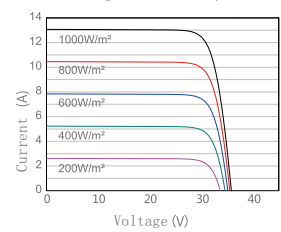
PS: Frame color and cable length can be customized

Electrical Parameters at (STC)

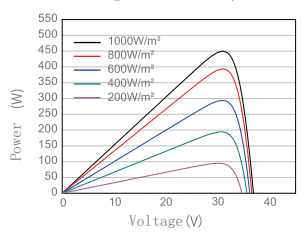
Module	Power (W)	Module Efficiency (%)	Voltage at Pmax (Vmp)	Current at Pmax (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)	Power Tolerance (w)
SP450M	450W	20.80%	34.20	13.16	41.04	13.95	±3%

Characteristics

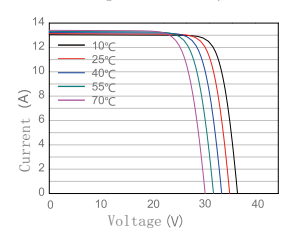
Current Voltage Curve SP450M/60



Power Voltage Curve SP450M/60



Current Voltage Curve SP450M/60



Mechanical Parameters	
Solar Cell(Type/Size)	MONO(182mm)
Solar Cells Number	60Pcs(6x10)
Dimension	1909x1134x35mm
Weight	22.9Kg/Pcs
Tempered Glass	3.2 mm High Permeability Coated
Frame	Anodized aluminum alloy
Junction Box	IP67, 3*bypass diode
Cable	4.0mm², (+)1000mm/(-)1000mm
Connector	Original MC4/Compatible MC4
Mechanical Load	Front 5400PA/back 2400PA

Packing	
Module Type	SP450M-60
Carton Size	1930x1160x85mm
Number	2Pcs/Ctn
Weight	46Kg/Ctn
Volume	0.190Cbm/Ctn
20GP Container	316Pcs
40HQ Container	736Pcs

- STC: Light intensity 1000W/m² Battery temperature:25°C atmosphere quality=15
- NOCT: Light intensity 800W/m² Battery temperature:20°C atmosphere quality=15 wind velocity 1m/s