Maysun Solar

182mm 144Cells

Monocrystalline PV Module

MS(530-550)MB-72H Series

144 LAYOUT

MONOCRYSTALLINE MODULE

530-550W

POWER OUTPUT RANGE

21.3%

MAXIMUM EFFICIENCY

0~+5W

POSITIVE POWER TOLERANCE

Maysun Solar brand was established in 2008,our marketing center is located in the beautiful Chinese city of Hangzhou. We are a professional solar panels manufacturer and wholesaler. Our business covers the production and manufacture of various types of mono solar panels and poly solar panels. We have two solar plates production bases in China and UAE, with an annual production capacity of 1G watts. Our solar panel products have been exported to more than 80 countries and regions around the world. We have overseas sales offices and warehouses in Germany, Italy, Poland, Hungary, Saudi Arabia, Indonesia, UAE, etc. We have strictly quality management system of solar PV module, we are capable of absorbing and applying advanced technologies and new processes in the photovoltaic module industry in the fastest time, bringing high-performance special solar PV modules to the market, and serve our customers.

Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716
ISO 9001: Quality Management System

Management System

















MS(530-550)MB- 72H Series

POWER RANGE

530-550W



High power



- Up to 550W front power and 21.3% module efficiency with half-cut and MBB (Multi Busbar) technology bringing more BOS savings
- Lower resistance of half-cut and good reflection effect of MBB ensure high power

High reliability

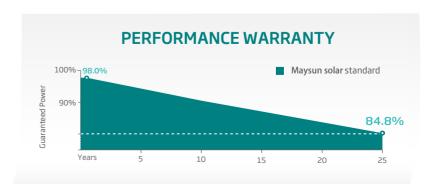


- Ensured PID resistance through cell process and module material control
- Resistant to salt, acid and ammonia
- Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative load

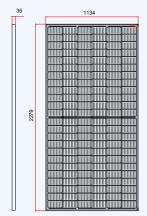
High energy generation

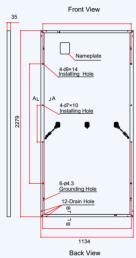


- Excellent IAM and low light performance validated by 3rd party with cell process and module material optimization
- Better anti-shading performance and lower operating temperature



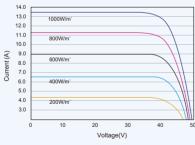
DIMENSIONS OF PV MODULE(mm)



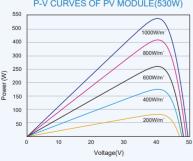




I-V CURVES OF PV MODULE(530W)



P-V CURVES OF PV MODULE(530W)



ELECTRICAL DATA (STC)

Peak Power Watts-P _{MAX} (Wp)*	530	535	540	545	550	
Power Tolerance-P _{MAX} (W)			0 ~ +5			
Maximum Power Voltage-V _{MPP} (V)	40.56	40.63	40.70	40.80	40.90	
Maximum Power Current-I _{MPP} (A)	13.07	13.17	13.27	13.36	13.45	
Open Circuit Voltage-Voc (V)	49.26	49.34	49.42	49.52	49.62	
Short Circuit Current-Isc (A)	13.71	13.79	13.85	13.94	14.03	
Module E°ciency η m (%)	20.5	20.7	20.9	21.1	21.3	

STC: Irradiance 1000W/m⁻, Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%

ELECTRICAL DATA (NOCT)

Maximum Power-P _{MAX} (Wp)	394	398	402	405	409	
Maximum Power Voltage-V _{MPP} (V)	37.84	37.91	38.08	38.25	38.42	
Maximum Power Current-I _{MPP} (A)	10.42	10.50	10.55	10.60	10.65	
Open Circuit Voltage-Voc (V)	46.50	46.57	46.65	46.74	46.84	
Short Circuit Current-Isc (A)	11.07	11.14	11.19	11.26	11.33	

NOCT: Irradiance at 800W/m⁻, Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
	•
Cell Orientation	144 cells (6 × 24)
Module Dimensions	2279 ×1134× 35 mm (89.72 × 44.65 × 1.38 inches)
Weight	29.4 kg
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA/POE
Backsheet	White
Frame	35 mm (1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm* (0.006 inches*), Portrait: N 300mm/P 300mm(11.8/11.8inches)
Connector	MC4

*Please refer to regional datasheet for specific connector

TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	45°C (±2°C)
Temperature Coe°cient of P _{MAX}	- 0.35%/℃
Temperature Coe°cient of Voc	- 0.28%/℃
Temperature Coe°cient of Isc	0.048%/℃

MAXIMUMRATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	25A

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

WARRANTY

12 year Product Workmanship Warranty 25 year Power Warranty 2% first year degradation 0.55% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGUREATION

Modules per box: 31 pieces Modules per 40' container: 620 pieces



notice. Version number: MS20210720 Website: www.maysunsolar.com