

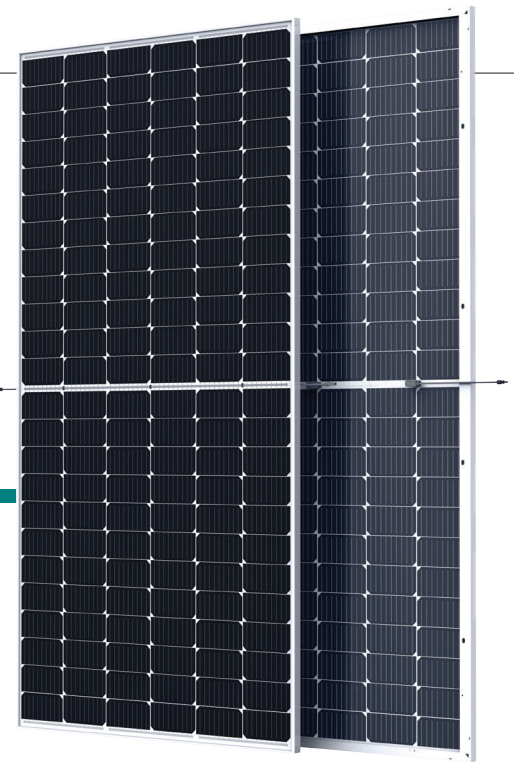
Mono

Maysun Solar

166mm 144Cells

BIFACIAL DOUBLE GLASS 144LAYOUT MODULE

MS(430-450)MDG- 72H6 Series



144 LAYOUT

MONOCRYSTALLINE MODULE

430- 450W

POWER OUTPUT RANGE

20.7%

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



PRODUCTS

MS(430-450)MDG- 72H6

POWER RANGE

430-450W



High power

- Up to 450W front power and 20.7% 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

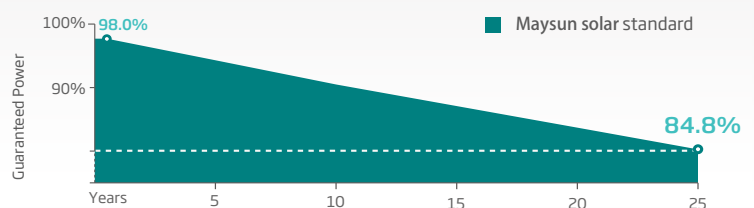
- Ensured PID resistance through cell process and module material control
- Resistant to salt, acid and ammonia
- Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative load



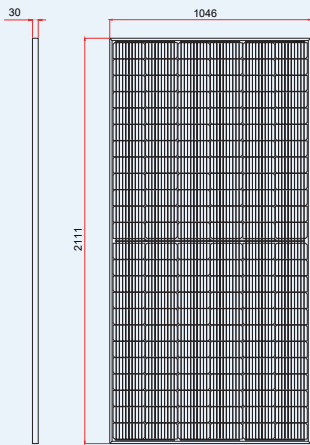
High energy generation

- 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

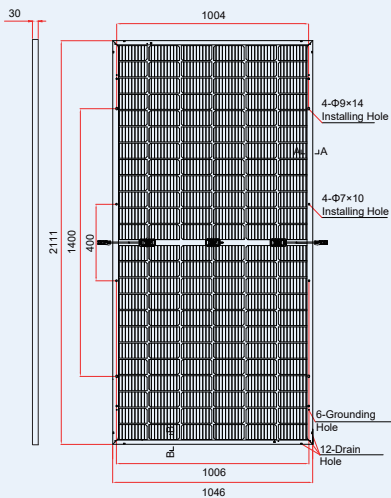
PERFORMANCE WARRANTY



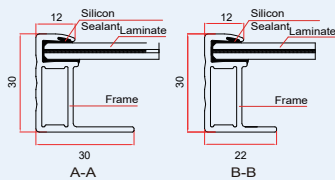
DIMENSIONS OF PV MODULE(mm)



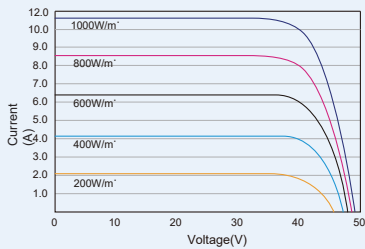
Front View



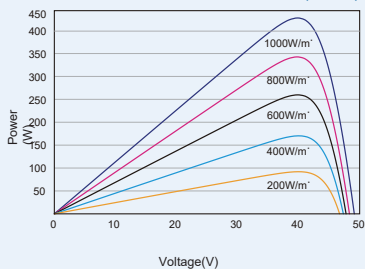
Back View



I-V CURVES OF PV MODULE(440 W)



P-V CURVES OF PV MODULE(440W)



ELECTRICAL DATA (STC)

Peak Power Watts-P _{MAX} (Wp)*	430	435	440	445	450
Power Tolerance-P _{MAX} (W)	0 ~ +5				
Maximum Power Voltage-V _{MPP} (V)	40.5	40.8	41.1	41.4	41.7
Maximum Power Current-I _{MPP} (A)	10.62	10.67	10.71	10.75	10.80
Open Circuit Voltage-V _{OC} (V)	48.7	48.9	49.1	49.3	49.5
Short Circuit Current-I _{SC} (A)	11.20	11.24	11.28	11.32	11.36
Module E ^o ciency η _m (%)	19.5	19.7	19.9	20.2	20.4

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
*Measuring tolerance: ±3%.

Electrical characteristics with different rear side power gain (reference to 435 Wp front)

Maximum Power-P _{MAX} (Wp)	457	479	500	522	544
Maximum Power Voltage-V _{MPP} (V)	40.8	40.8	40.8	40.8	40.8
Maximum Power Current-I _{MPP} (A)	11.20	11.74	12.27	12.80	13.34
Open Circuit Voltage-V _{OC} (V)	49.0	49.1	49.2	49.3	49.4
Short Circuit Current-I _{SC} (A)	11.80	12.36	12.93	13.49	14.05
Pmax gain	5%	10%	15%	20%	25%

Power Bifaciality:70±5%.

ELECTRICAL DATA (NOCT)

Maximum Power-P _{MAX} (Wp)	324	328	331	335	339
Maximum Power Voltage-V _{MPP} (V)	37.9	38.1	38.4	38.6	39.2
Maximum Power Current-I _{MPP} (A)	8.55	8.60	8.64	8.67	8.65
Open Circuit Voltage-V _{OC} (V)	45.8	46.0	46.2	46.4	46.5
Short Circuit Current-I _{SC} (A)	9.02	9.06	9.09	9.12	9.16

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	144 cells (6 × 24)
Module Dimensions	2111×1046×30 mm (83.11×41.18×1.18 inches)
Weight	28.6 kg (63.1 lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	POE/EVA
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	30mm(1.18 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cable s	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²), Portrait: 280/280 mm(11.02/11.02 inches) Landscape: 1900/1900 mm(74.80/74.80inches)
Connector	MC4

*Please refer to regional datasheet for specific connector.

TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coe ^o cient of P _{MAX}	- 0.34%/°C
Temperature Coe ^o cient of V _{OC}	- 0.25%/°C
Temperature Coe ^o cient of I _{SC}	0.04%/°C

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

WARRANTY

12 year Product Workmanship Warranty
30 year Power Warranty
2% 1 st year degradation
0.45% Annual Power Attenuation

(Please refer to product warranty for details)

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	(IEC) 20A

PACKAGING CONFIGURATION

Modules per box: 36 pieces
Modules per 40' container: 792 pieces



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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Website: www.maysunsolar.com