

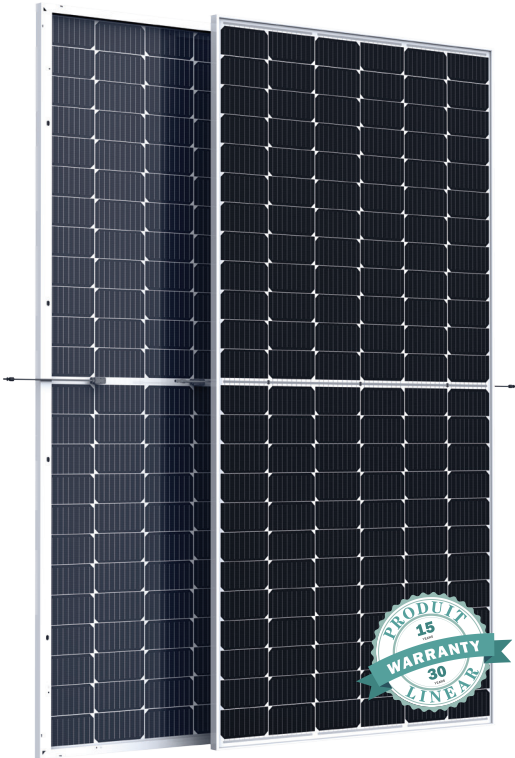
Mono PERC 166mm 144 Cells

MS(430-450)MDG-72H Dual Glass Bifacial

430/435/440/445/450 WP

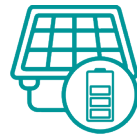


MAYSUNSOLAR.COM



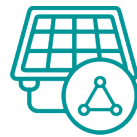
High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance Of System) cost, shorter payback time
- Lower guaranteed first year and annual degradation
- Designed for compatibility with existing mainstream system components
- Higher return on Investment



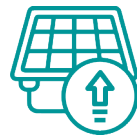
High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions



High reliability

- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load
- Class-C fire safety test passed



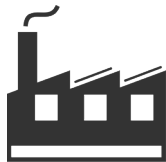
High power up to 450W

- 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

APPLICATIONS >>



On-grid residential roof-tops



On-grid commercial/ industrial roof-tops

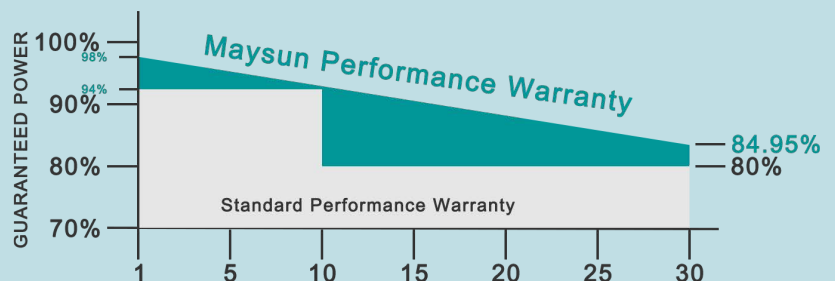


MAXIMUM EFFICIENCY

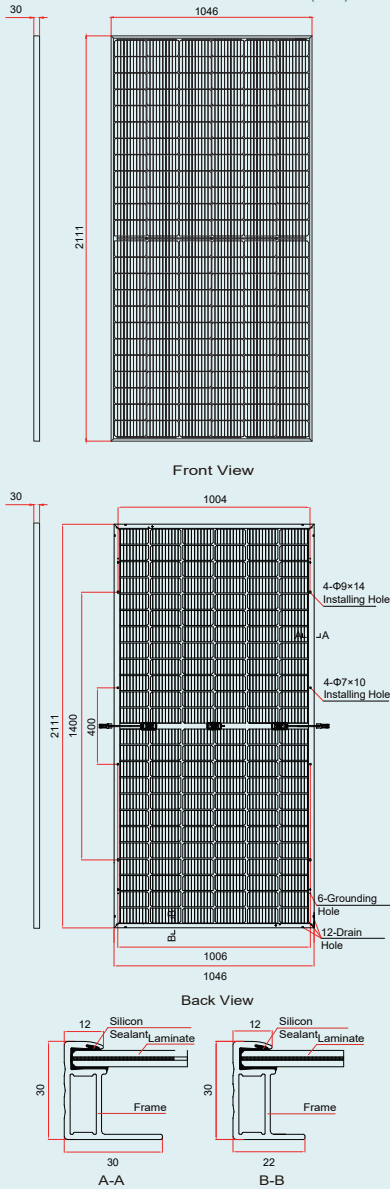
20.7%

POSITIVE POWER TOLERANCE

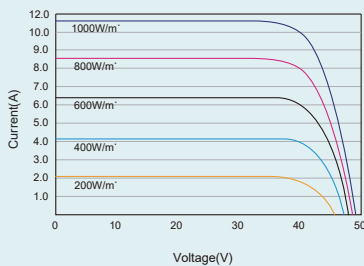
0 ~ +5W



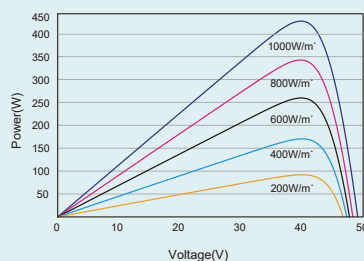
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(440W)



P-V CURVES OF PV MODULE(440W)



ELECTRICAL DATA (STC)

Parameter	430	435	440	445	450
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 Efficiency 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

Parameter	5%	10%	15%	20%	25%
5% Maximum Power- P_{MAX} (Wp)	457	479	500	522	544
5% Module Efficiency η m (%)	40.8	40.8	40.8	40.8	40.8
15% Maximum Power- P_{MAX} (Wp)	11.20	11.74	12.27	12.80	13.34
15% Module Efficiency η m (%)	49.0	49.1	49.2	49.3	49.4
25% Maximum Power- P_{MAX} (Wp)	11.80	12.36	12.93	13.49	14.05
25% Module Efficiency η m (%)	5%	10%	15%	20%	25%

Power Bifaciality: 70±5%.

ELECTRICAL DATA (NOCT)

Parameter	430	435	440	445	450
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
Module Dimensions	2111×1046×30 mm (83.11×41.18×1.18 inches)
Weight	28.6 kg
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) Silver, anodized aluminium alloy
J-Box	IP 68 rated (3 bypass diodes)
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²) Portrait: N 300mm/P 300mm(11.8/11.8 inches) Length can be customized
Connector	MC4 Compatible

*Please refer to regional datasheet for specific connector.

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	44°C (±2°C)
Temperature Coefficient of P_{MAX}	- 0.35%/°C
Temperature Coefficient of V_{OC}	- 0.27%/°C
Temperature Coefficient of I_{SC}	0.048%/°C

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

WARRANTY

15 year Product Workmanship Warranty
30 year Power Warranty
2% first 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) 30A

PACKAGING CONFIGURATION

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



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

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Website: www.maysunsolar.com