

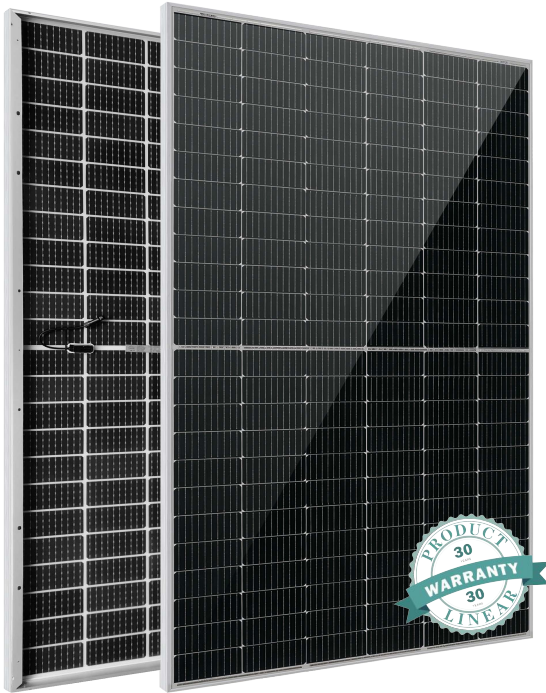
Mono PERC 182mm 144 Cells

MS(530-550)MDG-72H Dual Glass Bifacial

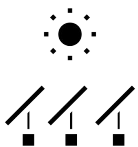
530/535/540/545/550 WP



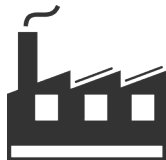
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APPLICATIONS >>



Ground power plants

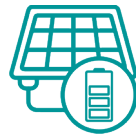


Commercial/
industrial roof-tops



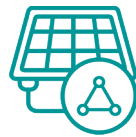
High customer value

- 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



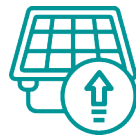
High energy yield

- 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 550W

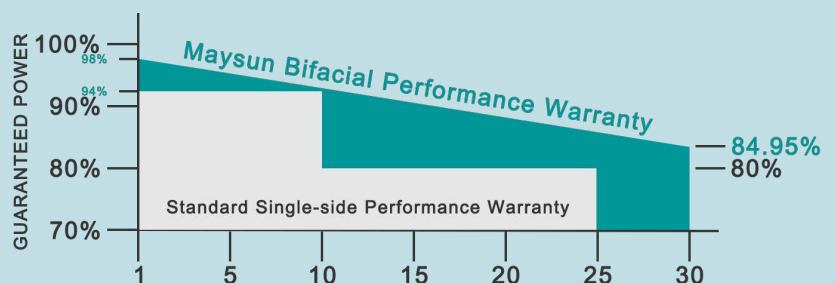
- Large area cells based on 182mm silicon wafers and 1/2-cut cell technology
- Up to 21.3% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect lower series resistance and improved current collection

MAXIMUM EFFICIENCY

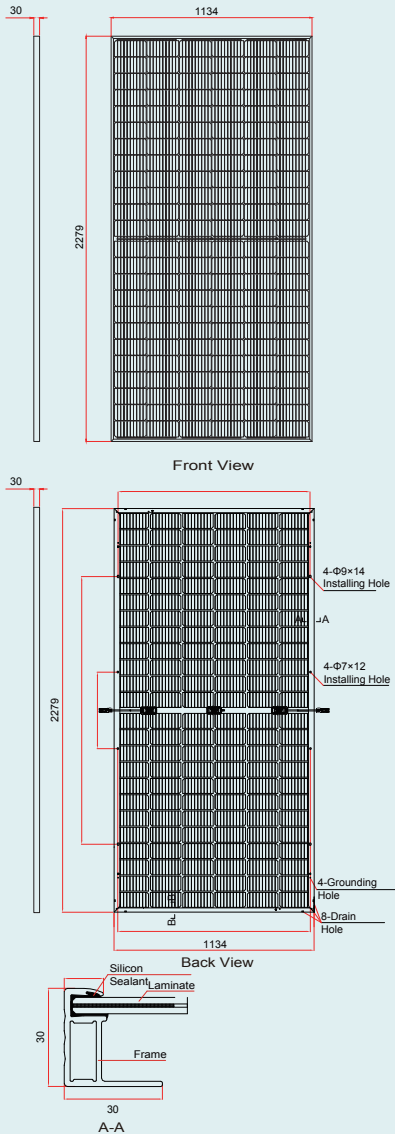
21.3%

POSITIVE POWER TOLERANCE

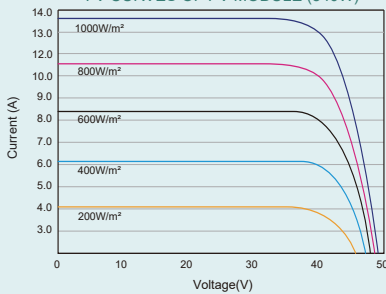
0 ~ +5W



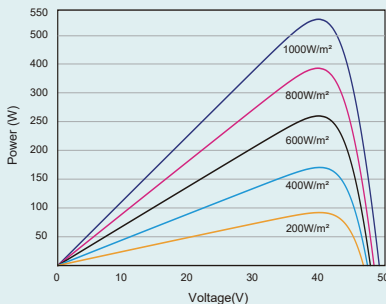
DIMENSIONS OF PV MODULE (mm)



I-V CURVES OF PV MODULE (540W)



P-V CURVES OF PV MODULE (540W)



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- V_{OC} (V)	49.26	49.34	49.42	49.52	49.62
Short Circuit Current- I_{SC} (A)	13.71	13.79	13.85	13.94	14.03
Module Efficiency η m (%)	20.5	20.7	20.9	21.1	21.3

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

Electrical characteristics with different rear side power gain

5% Maximum Power- P_{MAX} (Wp)	556.5	561.7	567.0	572.2	577.5
5% Module Efficiency η m (%)	21.55	21.75	21.95	22.16	22.34
15% Maximum Power- P_{MAX} (Wp)	609.5	615.2	621.0	626.7	632.5
15% Module Efficiency η m (%)	23.6	23.82	24.05	24.27	24.49
25% Maximum Power- P_{MAX} (Wp)	662.5	668.7	675.0	681.2	687.5
25% Module Efficiency η m (%)	25.65	25.89	26.11	26.36	26.62

Power Bifaciality: 70±5%.

ELECTRICAL DATA (NOCT)

Maximum Power- P_{MAX} (Wp)	394	398	402	406	410
Maximum Power Voltage- V_{MPP} (V)	37.92	38.05	38.19	38.32	38.46
Maximum Power Current- I_{MPP} (A)	10.40	10.46	10.52	10.58	10.64
Open Circuit Voltage- V_{OC} (V)	46.50	46.63	46.75	46.88	47.00
Short Circuit Current- I_{SC} (A)	11.06	11.12	11.19	11.25	11.32

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

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	144 cells
Module Dimensions	2279×1134×30 mm (89.72×44.65×1.18 inches)
Weight	30.6 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	30 mm (1.18 inches) Silver, anodized aluminium alloy
J-Box	IP 68 rated (3 bypass diodes)
Cables	Photovoltaic Technology Cable 4.0 mm ² Portrait: N 1500 mm/P 1500 mm 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)

MAXIMUM RATINGS

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

WARRANTY

30 Year Product Workmanship Warranty
30 Year Power Warranty
2% First Year Degradation
0.45% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per pallet: 36 pieces
Modules per 40' container: 720 pieces



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

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Specifications included in this datasheet are subject to change without notice.

Website: www.maysunsolar.com