Mono PERC 210mm 144 Cells

MS(415-435)MB-48H Black Frame

415/420/425/430/435 WP

Maysun Solar

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(Incidet Angle Modifier) and low irradiation performance,validated by 3rd party certifications
- The unique design provides optimized energy production under inter-rowshading 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 435W

- Innovative 210*182 mm rectangular cell, more efficient than conventional square cells
- Up to 21.8% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect lower series resistance and improved current collection

APPLICATIONS >>

On-grid residential roof-tops

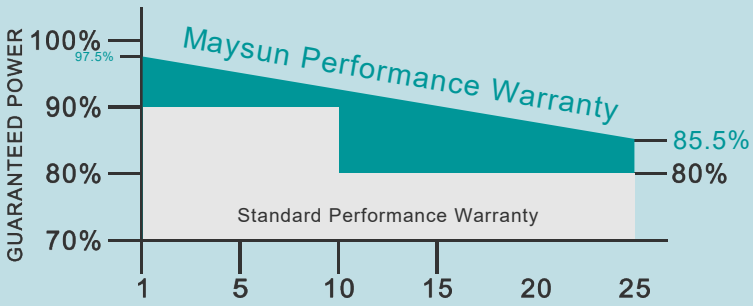
On-grid commercial/ industrial roof-tops

MAXIMUM EFFICIENCY

21.8%

POSITIVE POWER TOLERANCE

0 ~+5W



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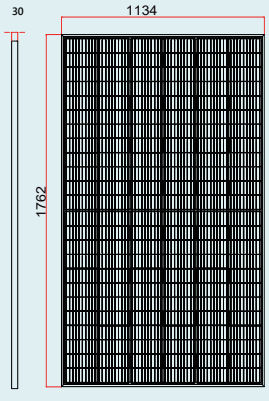
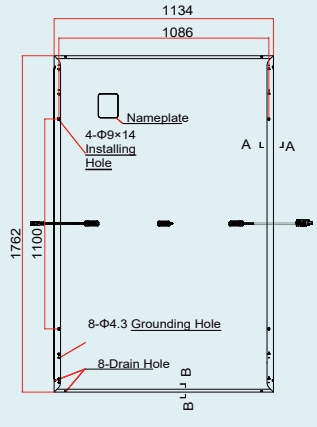
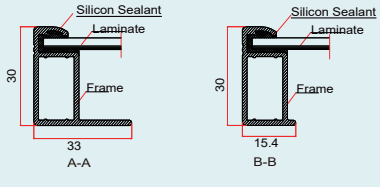
DIMENSIONS OF PV MODULE(mm)



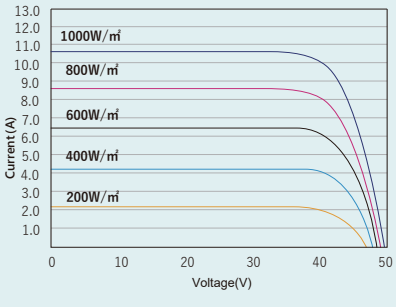
Front View



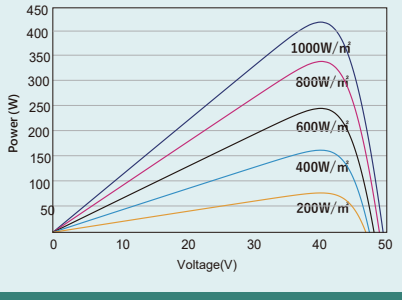
Back View



I-V CURVES OF PV MODULE(420W)



P-V CURVES OF PV MODULE(420W)



ELECTRICAL DATA (STC)

Peak Power Watts-P_{MAX} (Wp)*	415	420	425	430	435	
Power Tolerance-P_{MAX} (W)	0 ~ +5					
Maximum Power Voltage-V_{MPP} (V)	41.0	41.3	41.5	41.8	42.0	
Maximum Power Current-I_{MPP} (A)	10.11	10.17	10.24	10.30	10.36	
Open Circuit Voltage-V_{OC} (V)	49.4	49.7	49.9	50.3	50.6	
Short Circuit Current-I_{SC} (A)	10.64	10.69	10.74	10.81	10.86	
Module Efficiency η_m (%)	20.8	21.0	21.3	21.5	21.8	

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

ELECTRICAL DATA (NOCT)

Maximum Power-P_{MAX} (Wp)	313	317	321	325	329	
Maximum Power Voltage-V_{MPP} (V)	38.5	38.8	39.1	39.4	39.6	
Maximum Power Current-I_{MPP} (A)	8.13	8.17	8.21	8.26	8.30	
Open Circuit Voltage-V_{OC} (V)	46.5	46.7	46.9	47.3	47.6	
Short Circuit Current-I_{SC} (A)	8.58	8.62	8.66	8.71	8.75	

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

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	144 cells
Module Dimensions	1762×1134×30 mm (69.37×44.65×1.18 inches)
Weight	21.8 kg
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA/POE
Backsheet	White
Frame	30 mm(1.18 inches) black, anodized aluminium alloy
J-Box	IP 68 rated (3 bypass diodes)
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²) Portrait: N 350mm/P 350mm(13.7/13.7inches) Length can be customized
Connector	MC4 Compatible

*Please refer to regional datasheet for specified connector.

TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P_{MAX}	- 0.34%/°C
Temperature Coefficient of V_{OC}	- 0.25%/°C
Temperature Coefficient of I_{SC}	0.04%/°C

MAXIMUMRATINGS

Operational Temperature	- 40 ~ +85℃
Maximum System Voltage	1500V DC (IEC)
	1000V DC (IEC)
Max Series Fuse Rating	20A

WARRANTY

- 15 year Product Workmanship Warranty
- 25 year Power Warranty
- 2.5% first year degradation
- 0.5% Annual Power Attenuation

*Please refer to product warranty for details.

PACKAGING CONFIGUREATION

- Modules per pallet: 37 pieces
- Modules per 40' container: 962 pieces

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

Website: www.maysunsolar.com