

Mono PERC 182 mm 228 Cells

MS(410-430)MB-57H Full Black

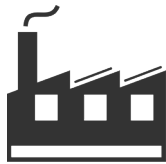
410/415/420/425/430 WP



APPLICATIONS >>



On-grid residential roof-tops



On-grid commercial/ industrial roof-tops



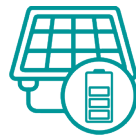
Better appearance

- Full-black tone makes the modules blend perfectly with the building roof, ideal for residential roofs and BIPVs
- Cleaner and more aesthetic than traditional modules and complements your home's architectural style
- The new layout design is uniform overall, and the vision is extremely beautiful



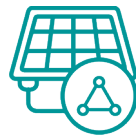
High customer value

- 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

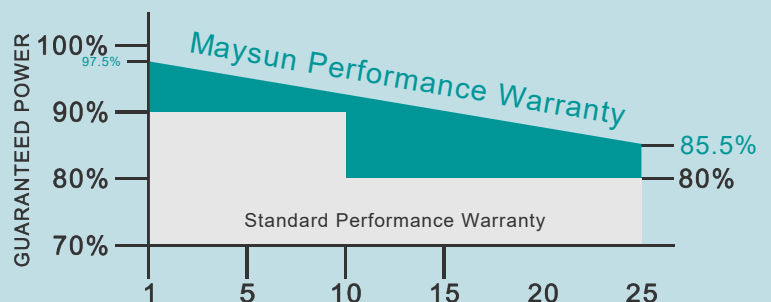
- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive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

MAXIMUM EFFICIENCY

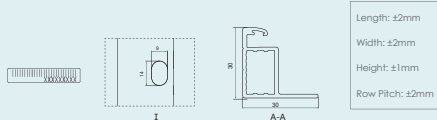
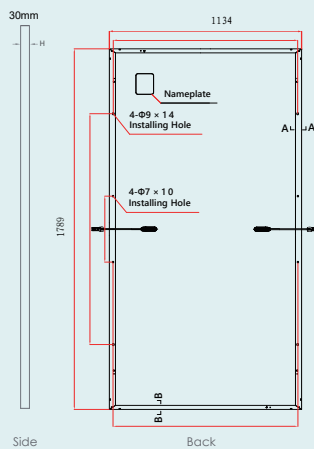
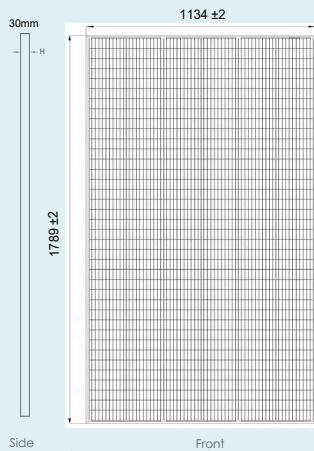
21.26%

POSITIVE POWER TOLERANCE

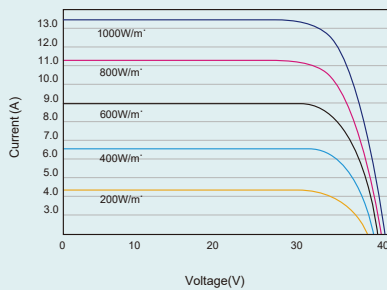
0 ~ +5W



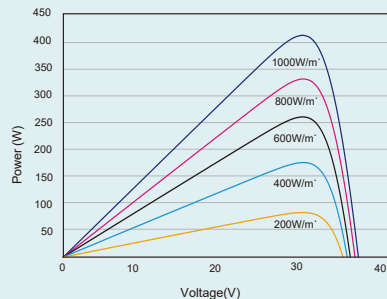
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(410W)



P-V CURVES OF PV MODULE(410W)



ELECTRICAL DATA (STC)

Parameter	410	415	420	425	430
Peak Power Watts- P_{MAX} (Wp)*	410	415	420	425	430
Power Tolerance- P_{MAX} (W)	0 ~ +5				
Maximum Power Voltage- V_{MPP} (V)	32.10	32.30	32.50	32.70	32.90
Maximum Power Current- I_{MPP} (A)	12.77	12.83	12.90	12.98	13.07
Open Circuit Voltage- V_{OC} (V)	38.60	38.85	39.10	39.40	39.70
Short Circuit Current- I_{SC} (A)	13.45	13.53	13.60	13.75	13.90
Module Efficiency η_m (%)	20.77	20.88	21.00	21.13	21.26

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

ELECTRICAL DATA (NOCT)

Parameter	309	312	316	320	324
Maximum Power- P_{MAX} (Wp)	309	312	316	320	324
Maximum Power Voltage- V_{MPP} (V)	30.33	30.52	30.71	30.90	31.08
Maximum Power Current- I_{MPP} (A)	10.19	10.24	10.29	10.36	10.43
Open Circuit Voltage- V_{OC} (V)	36.09	36.32	36.55	36.80	37.05
Short Circuit Current- I_{SC} (A)	10.77	10.82	10.88	10.96	11.03

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

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	228 cells (57×4)
Module Dimensions	1789×1134×30mm (75.19×44.65×1.18 inches)
Weight	22.4 kg
Glass	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Encapsulant Material	EVA/POE
Backsheet	Black
Frame	30 mm(1.18 inches) Black, 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 specified connector.

TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	43°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

MAXIMUM RATINGS

Operational Temperature	- 40 ~ +85°C
Maximum System Voltage	1500V DC (IEC)
	1000V DC (IEC)
Max Series Fuse Rating	25A

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 CONFIGURATION

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



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

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Website: www.maysunsolar.com