

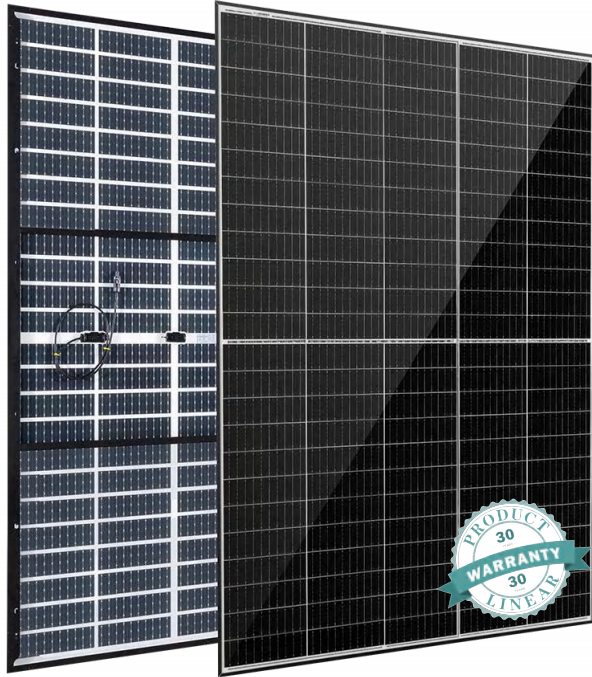
Mono PERC 210mm 120 Cells

MS(390-410)MDG-40H Black Frame Bifacial

390/395/400/405/410 WP



MAYSUNSOLAR.COM



Reinforced Glass-Glass Designed for Heavy Snow Regions

TwiSun X

- Black Frame



30-year Lifespan

Wide range of applications for severe weather with a service life of over 30 years.



High Snow Load

6000 Pa front snow load enable TwiSun X quite suitable for heavy snow area.



Higher Mechanical Load

Upgraded T6 frame and stronger design greatly enhance TwiSun X mechanical load.



Adaptability

1/3-cut low-current cell technology adaptable to mainstream European inverters.



Safety

Higher fire safety, more suitable for high density residential areas.



High Power

Bifacial power generation with 5%-25% increase in output for different conditions.

APPLICATIONS >>



On-grid residential
roof-tops



On-grid commercial/
industrial roof-tops

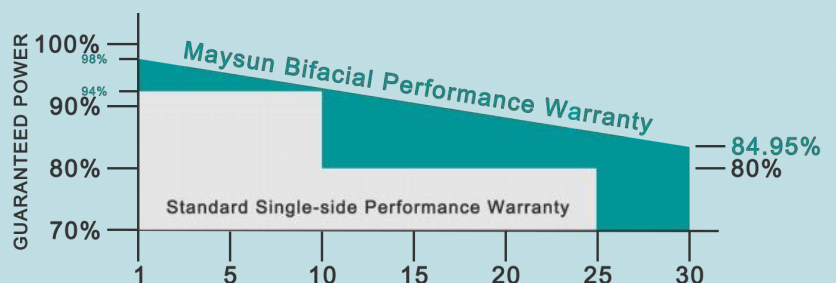


MAXIMUM EFFICIENCY

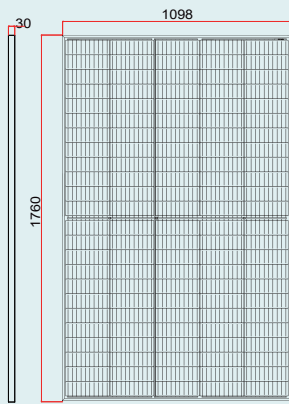
21.2%

POSITIVE POWER TOLERANCE

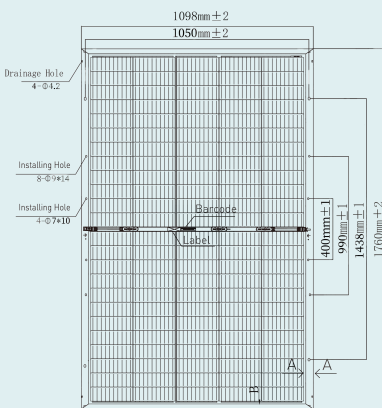
0 ~+5W



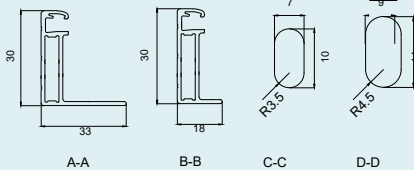
DIMENSIONS OF PV MODULE(mm)



Front View

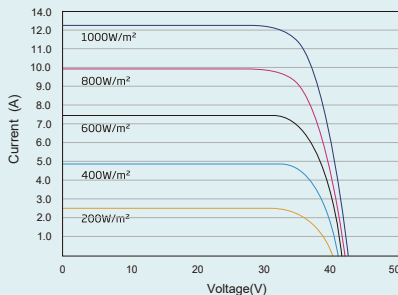


Back View

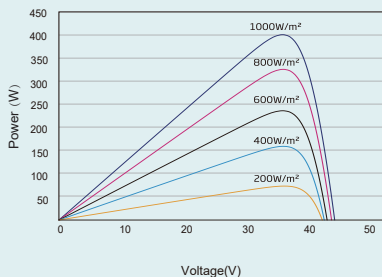


A-A B-B C-C D-D

I-V CURVES OF PV MODULE(400W)



P-V CURVES OF PV MODULE(400W)



ELECTRICAL DATA (STC)

| Peak Power Watts-P _{MAX} (Wp)* | 390 | 395 | 400 | 405 | 410 |
|--|--------|-------|-------|-------|-------|
| Power Tolerance-P _{MAX} (W) | 0 ~ +5 | | | | |
| Maximum Power Voltage-V _{MPP} (V) | 33.8 | 34.0 | 34.2 | 34.4 | 34.6 |
| Maximum Power Current-I _{MPP} (A) | 11.54 | 11.62 | 11.70 | 11.77 | 11.84 |
| Open Circuit Voltage-V _{OC} (V) | 40.8 | 41.0 | 41.2 | 41.4 | 41.6 |
| Short Circuit Current-I _{SC} (A) | 12.14 | 12.21 | 12.28 | 12.34 | 12.41 |
| Module Efficiency η m (%) | 20.3 | 20.5 | 20.8 | 21.1 | 21.2 |

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) | 409.5 | 414.75 | 420.0 | 425.25 | 430.5 |
| 5% Module Efficiency η m (%) | 21.32 | 21.52 | 21.84 | 22.15 | 22.26 |
| 15% Maximum Power-P _{MAX} (Wp) | 448.5 | 454.25 | 460 | 465.75 | 471.5 |
| 15% Module Efficiency η m (%) | 23.35 | 23.58 | 23.92 | 24.26 | 24.38 |
| 25% Maximum Power-P _{MAX} (Wp) | 487.5 | 493.75 | 500.0 | 506.25 | 512.5 |
| 25% Module Efficiency η m (%) | 25.38 | 25.63 | 26.0 | 26.38 | 26.5 |

Power Bifaciality: 70±5%.

ELECTRICAL DATA (NOCT)

| | | | | | |
|--|------|------|------|------|------|
| Maximum Power-P _{MAX} (Wp) | 295 | 298 | 302 | 306 | 310 |
| Maximum Power Voltage-V _{MPP} (V) | 31.8 | 32.0 | 32.2 | 32.5 | 32.8 |
| Maximum Power Current-I _{MPP} (A) | 9.26 | 9.32 | 9.38 | 9.41 | 9.45 |
| Open Circuit Voltage-V _{OC} (V) | 38.4 | 38.6 | 38.8 | 38.9 | 39.1 |
| Short Circuit Current-I _{SC} (A) | 9.78 | 9.84 | 9.90 | 9.95 | 9.99 |

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

MECHANICAL DATA

| | |
|----------------------|---|
| Solar Cells | Monocrystalline |
| Cell Orientation | 120 cells (5 x 24) |
| Module Dimensions | 1760 mm x 1098 mm x 30 mm |
| Weight | 19.5kg |
| Front Glass | 1.6 mm, High Transmission, AR Coated Heat Strengthened Glass |
| Encapsulant material | POE |
| Back Glass | 1.6 mm, High Transmission, Heat Strengthened Glass |
| Frame | 30 mm, Black, anodized aluminium alloy |
| J-Box | IP 68 rated (3 bypass diodes) |
| Cables | Photovoltaic Technology Cable 4.0mm ² Portrait: N 1000mm/P 1000mm Length can be customized |
| Connector | MC4 Compatible |

*Please refer to regional datasheet for specific 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 |

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

WARRANTY

| |
|--------------------------------|
| 30 years Product Warranty |
| 30 years Power Warranty |
| 2% First Year Degradation |
| 0.45% Annual Power Degradation |

(Please refer to product warranty for details)

APPLICATION ENVIRONMENT

| | |
|-------------------------|--------------------|
| Operational Temperature | -40~+85°C |
| Maximum System Voltage | 1500VDC |
| Max Series Fuse Rating | (IEC) 25A |
| Mechanical Performance | P 6000 Pa/N 2400Pa |

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