Mono PERC 210mm 80 Cells

# MS(390-410)MB-40H Silver Frame

390/395/400/405/410 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(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 410W

- Large area cells based on 210mm silicon wafers and 1/2-cut cell technology
- Up to 21.2% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect lower series resistance and improved current collection

## APLLICATIONS >>

On-grid residential roof-tops

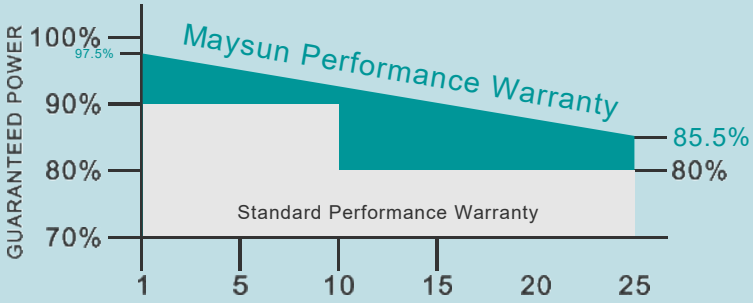
On-grid commercial/ industrial roof-tops

MAXIMUN EFFICIENCY

**21.2%**

POSITIVE POWER TOLERANCE

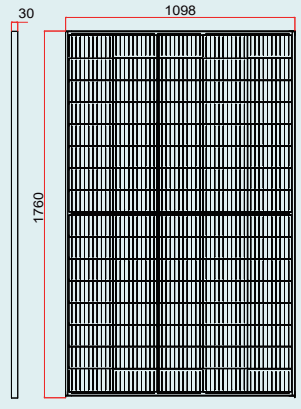
**0 ~+5W**



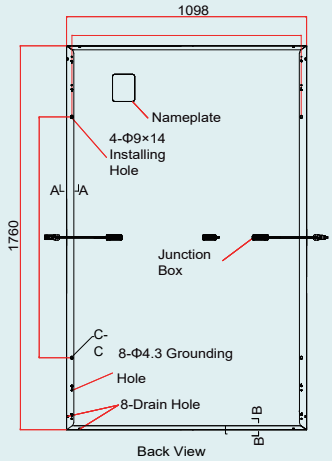
# Maysun Solar

## MS(390-410)MB-40H Silver Frame

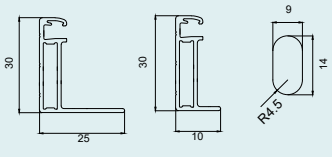
### DIMENSIONS OF PV MODULE(mm)




Front View

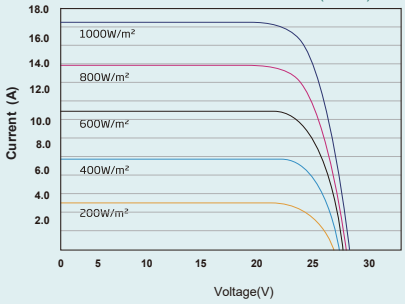



Back View

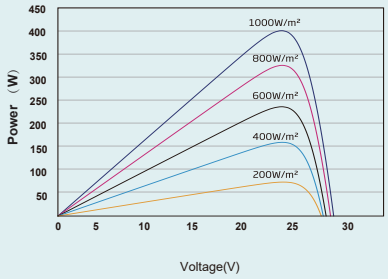



A-A B-B C-C

### 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) | 24.0 | 24.2 | 24.4 | 24.6 | 24.8 | |
| Maximum Power Current-$I_{MPP}$ (A) | 16.26 | 16.32 | 16.39 | 16.45 | 16.54 | |
| Open Circuit Voltage-$V_{OC}$ (V) | 28.9 | 29.1 | 29.4 | 29.6 | 29.8 | |
| Short Circuit Current-$I_{SC}$ (A) | 17.26 | 17.33 | 17.40 | 17.47 | 17.51 | |
| Module Efficiency $\eta_m$ (%) | 20.2 | 20.5 | 20.7 | 21.0 | 21.2 | |

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

### ELECTRICAL DATA (NOCT)

| | | | | | |
|---|---|---|---|---|---|
| Maximum Power-$P_{MAX}$ (Wp) | 295 | 299 | 302 | 306 | 309 |
| Maximum Power Voltage-$V_{MPP}$ (V) | 22.3 | 22.5 | 22.7 | 22.9 | 23.1 |
| Maximum Power Current-$I_{MPP}$ (A) | 13.22 | 13.27 | 13.33 | 13.37 | 13.38 |
| Open Circuit Voltage-$V_{OC}$ (V) | 27.2 | 27.5 | 27.7 | 27.9 | 28.1 |
| Short Circuit Current-$I_{SC}$ (A) | 13.91 | 13.96 | 14.02 | 14.07 | 14.13 |

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

### MECHANICAL DATA

| | |
|---|---|
| Solar Cells | Monocrystalline |
| Cell Orientation | 80 cells |
| Module Dimensions | 1760×1098×30 mm (69.29×43.22×1.18 inches) |
| Weight | 21.5 kg |
| Glass | 3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass |
| Encapsulant Material | EVA |
| Backsheet | White |
| Frame | 30 mm(1.18 inches) Silver, anodized aluminium alloy |
| J-Box | IP 68 rated (3 bypass diodes) |
| Cables | Photovoltaic Technology Cable 4.0mm² (0.006 inches²)<br>Portrait: N 300mm/P 300mm(11.8/11.8 inches)<br>Length can be customized |
| Connector | MC4 |

*Please refer to regional datasheet for specified connector.

### TEMPERATURE RATINGS

| | |
|---|---|
| NOCT(Nominal Operating Cell Temperature) | 43°C (±2°C) |
| Temperature Coe°cient of $P_{MAX}$ | - 0.34%/°C |
| Temperature Coe°cient of $V_{OC}$ | - 0.25%/°C |
| Temperature Coe°cient 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: 988 pieces |

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

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Website: www.maysunsolar.com