

Mono PERC 210mm 150 Cells

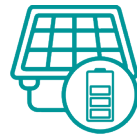
# MS(485-510)MB-50H Silver Frame

485/490/495/500/505/510 WP



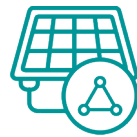
## High customer value

- 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



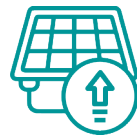
## High energy yield

- 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 510W

- Large area cells based on 210mm silicon wafers and 1/3-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

## APPLICATIONS >>



On-grid residential roof-tops



On-grid commercial/ industrial roof-tops



## MAXIMUM EFFICIENCY

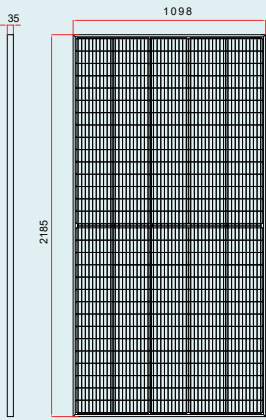
# 21.2%

## POSITIVE POWER TOLERANCE

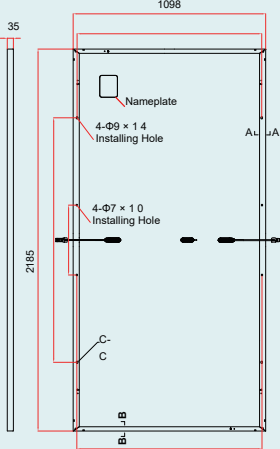
# 0 ~ +5W



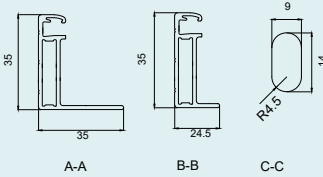
### DIMENSIONS OF PV MODULE(mm)



Front View



Back View

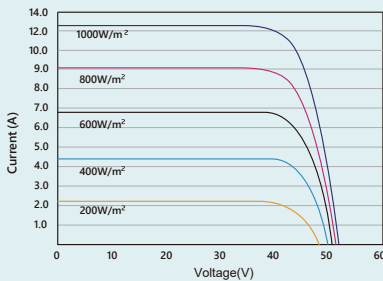


A-A

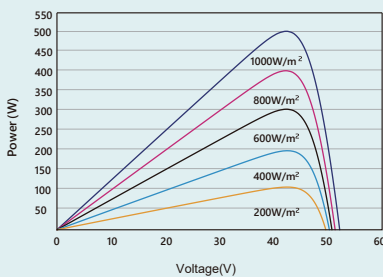
B-B

C-C

### I-V CURVES OF PV MODULE(500W)



### P-V CURVES OF PV MODULE(500W)



### ELECTRICAL DATA (STC)

Peak Power Watts- $P_{MAX}$ (Wp)*	485	490	495	500	505	510
Power Tolerance- $P_{MAX}$ (W)	0 ~+5					
Maximum Power Voltage- $V_{MPP}$ (V)	42.2	42.4	42.6	42.8	43.0	43.2
Maximum Power Current- $I_{MPP}$ (A)	11.49	11.56	11.63	11.69	11.75	11.81
Open Circuit Voltage- $V_{OC}$ (V)	51.1	51.3	51.5	51.7	51.9	52.1
Short Circuit Current- $I_{SC}$ (A)	12.07	12.14	12.21	12.28	12.35	12.42
Module Efficiency $\eta_m$ (%)	20.1	20.3	20.5	20.7	21.0	21.2

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C,  
Air Mass AM1.5. \*Measuring tolerance: ±3%.

### ELECTRICAL DATA (NOCT)

Maximum Power- $P_{MAX}$ (Wp)	365	369	373	377	381	385
Maximum Power Voltage- $V_{MPP}$ (V)	39.9	40.0	40.2	40.4	40.6	40.5
Maximum Power Current- $I_{MPP}$ (A)	9.17	9.22	9.28	9.33	9.38	9.50
Open Circuit Voltage- $V_{OC}$ (V)	48.1	48.2	48.4	48.6	48.8	49.0
Short Circuit Current- $I_{SC}$ (A)	9.73	9.78	9.84	9.90	9.95	10.01

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

### MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	150 cells (5 x 30)
Module Dimensions	2185×1098×35 mm (86.02×43.22×1.38 inches)
Weight	26.5 kg
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA
Backsheet	White
Frame	35 mm(1.38 inches) Silver, anodized aluminium alloy
J-Box	IP 68 rated (3 bypass diodes)
Cables	Photovoltaic Technology Cable 4.0mm <sup>2</sup> (0.006 inches <sup>2</sup> ) 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 $P_{MAX}$	- 0.34%/°C
Temperature Coefficient of $V_{OC}$	- 0.25%/°C
Temperature Coefficient of $I_{SC}$	0.04%/°C

### MAXIMUM RATINGS

Operational Temperature	- 40 ~ +85°C
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 CONFIGURATION

Modules per pallet: 31 pieces

Modules per 40' container: 620 pieces



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

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