

Mono PERC 210mm 80 Cells

MS(390-410)MB-40H Full Black Bifacial

390/395/400/405/410 WP



Tailored for balcony and garden solar system set

Venusun S

-Full Black



Lighter Weight

14 kg weight greatly facilitates transportation and installation after reducing 7 kg.



Higher Power

Transparent backsheet generates 5%-20% extra electricity while backsheet can produce power.



More Application

Designed for compatibility with existing mainstream system components.



Better Appearance

All-black tone makes Venusun S more harmonious with the architecture, especially suitable for household.



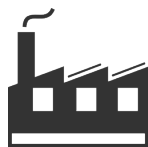
High Reliability

Suitable for all kinds of weather, Venusun S owns class C fire safety.

APPLICATIONS >>



On-grid residential roof-tops



On-grid commercial/ industrial roof-tops



On-grid balcony garden and carport

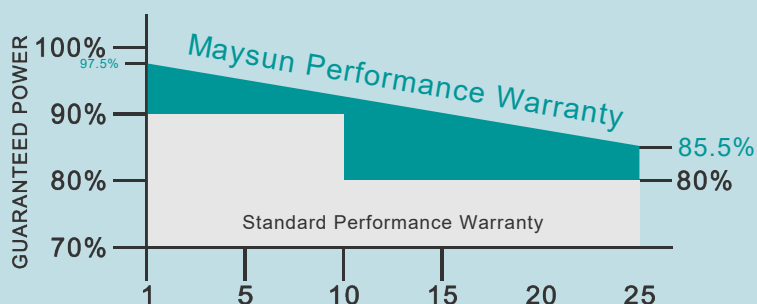


MAXIMUM EFFICIENCY

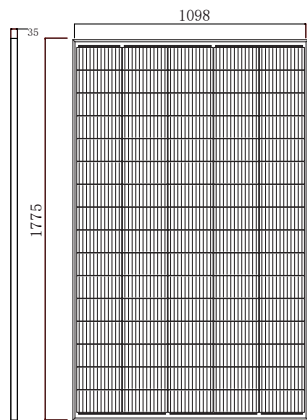
21%

POSITIVE POWER TOLERANCE

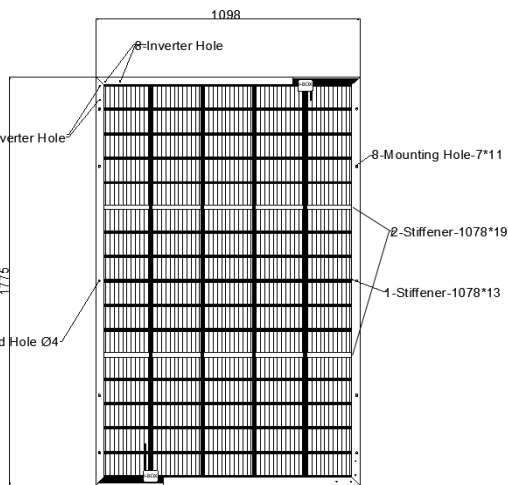
0 ~ +5W



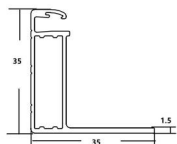
DIMENSIONS OF PV MODULE(mm)



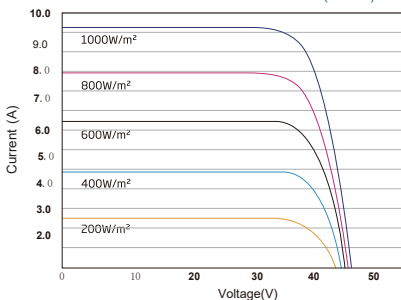
Front View



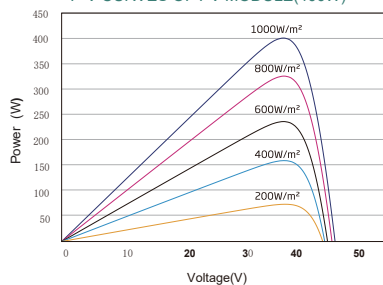
Back View



I-V CURVES OF PV MODULE(400W)



P-V CURVES OF PV MODULE(400W)



ELECTRICAL DATA (STC)

	390	395	400	405	410
Peak Power Watts- P_{MAX} (Wp)*	390	395	400	405	410
Power Tolerance- P_{MAX} (W)	0 ~ +5				
Maximum Power Voltage- V_{MPP} (V)	42.63	42.94	43.3	43.65	44.0
Maximum Power Current- I_{MPP} (A)	9.15	9.20	9.24	9.28	9.32
Open Circuit Voltage- V_{OC} (V)	51.59	51.96	52.4	52.82	53.24
Short Circuit Current- I_{SC} (A)	9.70	9.75	9.79	9.83	9.88
Module Efficiency η_m (%)	20.0	20.2	20.5	20.7	21.0

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

Electrical characteristics with different rear side power gain

	390	395	400	405	410
5% Maximum Power- P_{MAX} (Wp)	390	395	400	405	410
5% Module Efficiency η_m (%)	21.01%	21.28%	21.55%	21.82%	22.09%
10% Maximum Power- P_{MAX} (Wp)	429	434.5	440	445.5	451
10% Module Efficiency η_m (%)	22.01%	22.29%	22.58%	22.86%	23.14%
20% Maximum Power- P_{MAX} (Wp)	468	474	480	486	492
20% Module Efficiency η_m (%)	24.01%	24.32%	24.63%	24.94%	25.24%

Power Bifaciality: 70±5%.

ELECTRICAL DATA (NOCT)

	295	299	302	306	309
Maximum Power- P_{MAX} (Wp)	295	299	302	306	309
Maximum Power Voltage- V_{MPP} (V)	39.6	39.9	40.2	40.6	40.9
Maximum Power Current- I_{MPP} (A)	7.44	7.49	7.51	7.54	7.56
Open Circuit Voltage- V_{OC} (V)	47.9	48.3	48.6	49.1	49.4
Short Circuit Current- I_{SC} (A)	7.82	7.86	7.89	7.99	8.01

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

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	80 cells
Module Dimensions	1775mm x 1098mm x 35mm
Weight	14kg
Glass	1.6mm High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA
Backsheet	Black mesh transparent
Frame	35mm Black, anodized aluminium alloy
J-Box	IP 68 rated (2bypass diodes)+1MOS
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²) Portrait: N 1650mm/P 650mm(66.93/23.62 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 Coe ^o cient of P_{MAX}	- 0.34%/°C
Temperature Coe ^o cient of V_{OC}	- 0.25%/°C
Temperature Coe ^o cient 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 package: 2 pieces



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

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