

# Mysolar

## ALTRA BIFACIAL M120B

PERC HALF CELL  
MONO MODULE  
440-460 Framed

POSITIVE TOLERANCE 0~+6W  
HALF CELL PERC MONO 120

New Energy, Smart Living

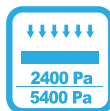


### WHY MYSOLAR?



#### MBB Solar Cells

Mysolar panels have multi-busbars that can reduce current heat loss of the cells and increase the current collection ability.



#### Strong and Safe

Mysolar panels are certified to withstand 2400 Pa negative load of wind and 5400 Pa positive load of snow.



#### 1500V System Voltage

Mysolar panels are of 1500V system voltage design compatible to 1000V/1500V and reduces BoS cost greatly.



#### PID-Resistant

Mysolar panels are PID-resistant which were tested to the industry's most rigorous durability standards in accordance to IEC 62804.



#### Better Low Light Output

Mysolar uses the best solar glass, cells, and assembling technology to guarantee good performance in cloudy days or low light conditions.



#### Salt-resistant & Ammonia-Resistant

Mysolar solar panels are salt mist and ammonia resistance certified.



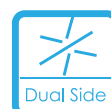
#### Positive Tolerance

Mysolar guarantees that all solar modules manufactured by Mysolar have 0~6W positive tolerance.



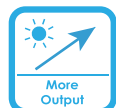
#### Confident Warranty

Mysolar offers 25 years limited product warranty and 30 years performance warranty for Bifacial solar modules.



#### Dual Side Power Producing

Mysolar bifacial panels have up to 70% bifaciality, generates up to 25.2% more energy yield than conventional panels.



#### Higher Output

With multi-busbar cells, and 1500V system voltage, super solar glass, Mysolar panels have higher output than its competitors'.



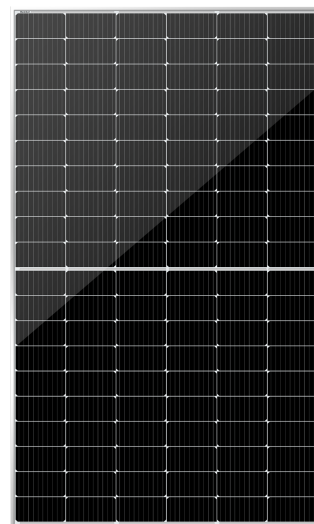
#### High Reliability

Mysolar has complete testing facilities for tests of UV, TC, HF, EL, etc tests. 100% of Mysolar panels were tested & minimally twice EL tests guaranteed.



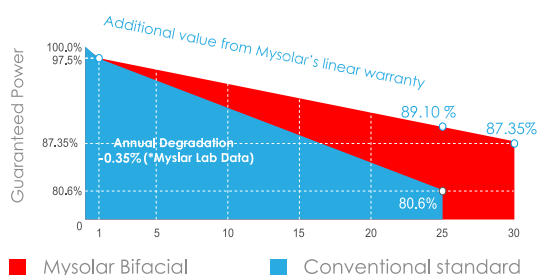
#### More Options for Solar Projects

More possible purposes like vertical installations, BIPV's, areas of high humidity, strong wind/snow, and deserts.



### LINEAR PERFORMANCE WARRANTY

25 Year Product Warranty · 30 Year Linear Power Warranty



- ISO9001:2015 Quality management systems
- ISO14001: 2015 Quality management systems
- OHSAS18001: 2018 Occupational health and safety management systems
- IEC61215, IEC61730, UL1703 certified product



## SPECIFICATIONS (STC\*)

Module Type	MS460M-DHBA		MS455M-DHBA		MS450M-DHBA		MS445M-DHBA		MS440M-DHBA	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax)	460W	347.1W	455W	343.5W	450W	340.0W	445W	336.3W	440W	332.6W
Maximum Power Voltage (Vmp)	35.04V	32.7V	34.90V	32.4V	34.73V	32.2V	34.58V	32.0V	34.41V	31.8V
Maximum Power Current (Imp)	13.13A	10.70A	13.04A	10.63A	12.96A	10.58A	12.87A	10.53A	12.79A	10.47A
Open-circuit Voltage (Voc)	41.54V	39.3V	41.36V	39.1V	41.20V	38.8V	41.04V	38.7V	40.91V	38.5V
Short-circuit Current (Isc)	14.02A	11.22A	13.95A	11.18A	13.87A	11.13A	13.79A	11.08A	13.70A	11.02A
Module Efficiency STC (%)	21.2%		21.0%		20.8%		20.6%		20.3%	
Operating Temperature (°C)	-40°C~+85°C									
Maximum System Voltage	1500VDC (IEC)									
Maximum Series Fuse Rating	30A									
Power Tolerance	0~+6W									
Temperature Coefficients of Pmax	-0.360%/°C									
Temperature Coefficients of Voc	-0.304%/°C									
Temperature Coefficients of Isc	0.050%/°C									
Nominal Module Operating Temperature (NMOT)	42±2°C									

## REAR SIDE POWER GAIN (BIFACIAL OUTPUT FOR MS450M-DHBA 450W)

Power Gain	5%	10%	15%	20%	25%
Maximum Power (Pmax)	472Wp	495Wp	517Wp	540Wp	562Wp
Maximum Power Voltage (Vmp)	34.89V	34.89	34.89V	34.88V	34.88V
Maximum Power Current (Imp)	13.59A	14.23A	14.88A	15.52A	16.18A
Open-circuit Voltage (Voc)	41.34V	41.34V	41.33V	41.33V	41.33V
Short-circuit Current (Isc)	14.48A	15.17A	15.86A	16.55A	17.24A

**NMOT\*** (Nominal Module Operating Temperature):

Irradiance 800W/sqm, Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s

\*Power measurement tolerance: -/+3%

### Mechanical Diagrams

### Characteristics and Operating Temperature

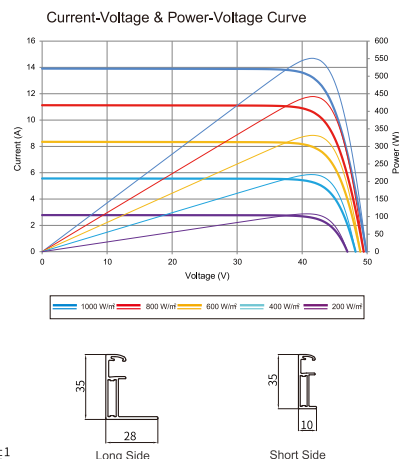
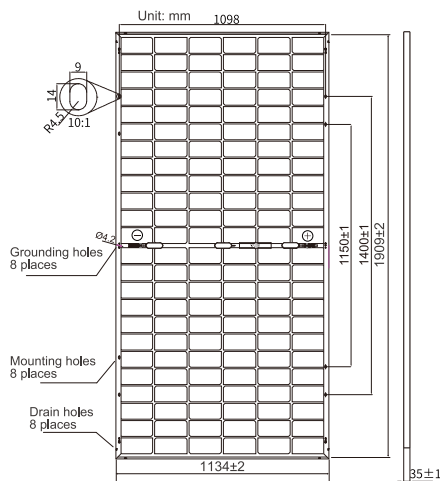
### Mechanical Characteristics

Cell Type	Mono PERC 182×91mm
No. of cells	120 (6×10+6×10)
Dimensions	1909±2 x 1134±2 x 35±1 mm
Weight	26.40KG ±2%
Glass	2.0mm Anti-Reflection Coating, High Transmission, Tempered Glass
Frame	Anodized aluminium alloy
Junction Box	IP68 Rated, 3 diodes, 300mm cable/Customized
Cable & Connector	4mm <sup>2</sup> (IEC), 12 AWG(UL) MC4 compatible

### Packaging Info

(Two pallets = One stack)

31pcs/pallet, 744pcs/40'HQ Container



Mysolar reserves the right to make necessary adjustment to the information described herein at any time without further notice due to continuous innovation and product improvement. Please be kindly noted installation of Mysolar solar modules shall be done by professional skilled people. Please read the installation manual carefully before using Mysolar solar panels.

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