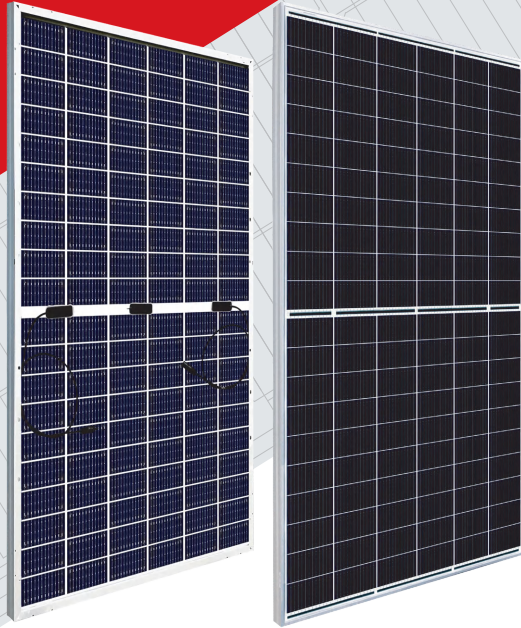


# Mars Series

630W/635W/640W/645W

## SUN60MD-H12JS

**HALF-CELL BIFACIAL MBB MONO  
HJT DOUBLE GLASS MODULE  
210MM CELLS**



BACK VIEW

FRONT VIEW

### COMPREHENSIVE CERTIFICATES

IEC61215 / IEC61730 / IEC61701 / IEC62716 / IEC62804  
ISO 9001: 2015 Quality management systems;  
ISO 14001: 2015 Environmental management systems;  
OHSAS 18001: 2007 Occupational health and safety management systems;

### Sunergy Advantages



#### Up to 90% Bifaciality

Natural symmetrical bifacial structure bringing more energy yield from the backside



#### Better Temperature Coefficient

-0.26%/C Pmax temperature coefficient  
More stable power generation performance and even better in hot climate



#### Overflow tank can be waterproof

The excess silicone will flow into the overflow tank, can reduce 3% water vapor entering the panels



#### Stronger frame

The C side of the frame contains curved hook reinforcement, enhanced the mechanical load strength by 10%



#### Current grading

Current classification effectively avoids 2% power loss caused by current mismatch during installation, achieving max output power



#### Higher fire rating

Fire rating up to Class A, reduce fire hazards;

### SUNERGY USA WORKS LLC

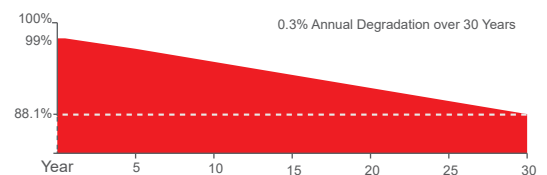
Founded in 2008, Sunergy is a manufacturer of high-performance photovoltaic products. With 12 manufacturing bases and more than 20 branches around the world, the company's business covers modules, photovoltaic power stations and EPC. Sunergy products are available in over 120 countries and regions and are used extensively in ground-mounted power plants, commercial & industrial rooftop PV systems and residential rooftop PV systems.

### QUALIFICATIONS AND CERTIFICATES



### LINEAR PERFORMANCE WARRANTY

- 12 Years Manufacturing Warranty
- 12 Years 94.9% Power Output
- 30 Years 88.1% Power Output

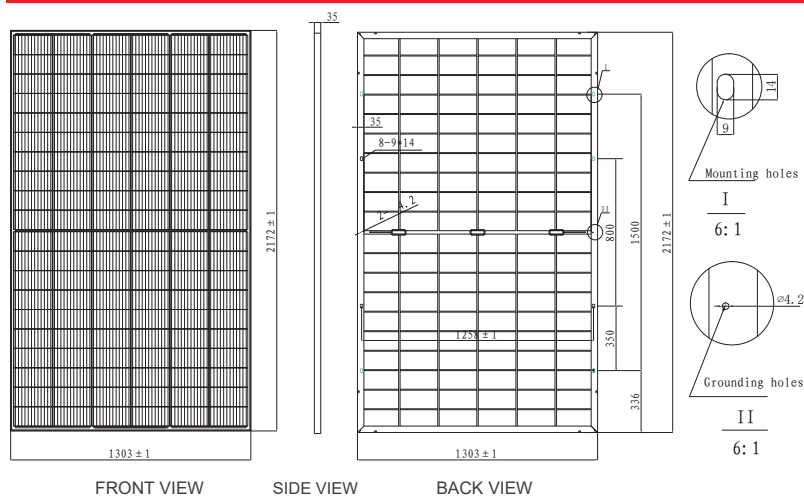


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[www.sunergyworks.com](http://www.sunergyworks.com)

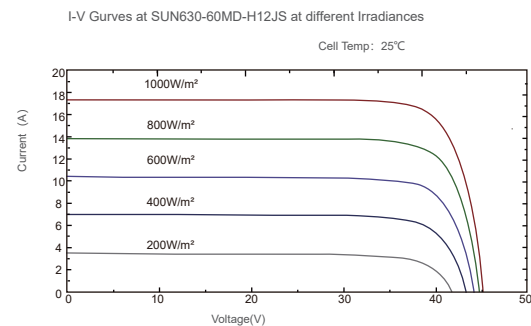


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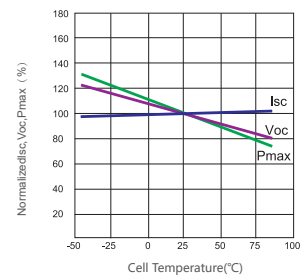
## MECHANICAL DRAWINGS



## I-V CURVES



Power voltage current curve at different temperature



## MECHANICAL SPECIFICATION

Cell Type	HJT 210x105mm
Number Of Cells	120 (6x20)
Dimensions(AxBxC)	2172x1303x35mm
Weights	36.0kg
Glass	2.0/2.0mm Tempered Low Iron Glass
Aluminium Frame	Anodised Aluminium
Junction Box	Split Junction Box (IP68 ,three diode)
Connector	Mc4 Compatible
Output Cables	4.0mm²,+300mm,-300mm Customized Length

## PACKING CONFIGURATION

Container	40' HQ
Pieces Per Pallet	31
Pallets Per Container	17
Pieces Per Container	527

## ELECTRICAL CHARACTERISTICS

Module Type	630W		635W		640W		645W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power At STC(Pmax)	630W	486.8W	635W	490.6W	640W	494.5W	645W	498.3W
Short Circuit Current(Isc)	17.31A	13.96A	17.35A	13.99A	17.40A	14.03A	17.44A	14.06A
Open Circuit Voltage(Voc)	45.1V	42.5V	45.3V	42.7V	45.5V	42.9V	45.7V	43.1V
Maximum Power Current(Imp)	16.28A	13.13A	16.32A	13.16A	16.37A	13.20A	16.41A	13.23A
Maximum Power Voltage(Vmpp)	38.7V	37.1V	38.9V	37.3V	39.1V	37.5V	39.3V	37.7V
Module Efficiency	22.26%		22.44%		22.61%		22.79%	
Power Tolerance	0~+5W		0~+5W		0~+5W		0~+5W	

## ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN

(Reference to 630W Front)

Backside Power Gain	10%	15%	20%	25%	30%
Maximum Power At STC(Pmax)	693	725	756	788	819
Short Circuit Current(Isc)	18.94	19.80	20.56	21.41	22.27
Open Circuit Voltage(Voc)	45.2	45.2	45.4	45.4	45.4
Maximum Power Current(Imp)	17.81	18.62	19.34	20.14	20.95
Maximum Power Voltage(Vmpp)	38.9	38.9	39.1	39.1	39.1

STC: 1000W/m2 irradiance, 25°C cell temperature, AM1.5. NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, wind speed 1m/s.



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