

# Mars Series

435W/440W/445W/450W/

## SUN 72MD-H6S

HALF-CELL BIFACIAL MBB MONO  
PERC DOUBLE GLASS MODULE



### 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;

### KEY SALIENT FEATURES



High output power



Better power generation under shadows



Strong anti-hot spot ability



Enhanced safety



Easy to install

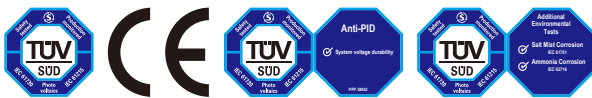


High tolerance for harsh environment and extreme weather conditions

### SUNERGY USA WORKS LLC

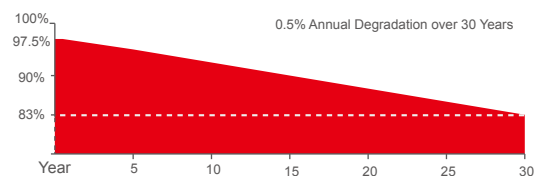
Founded in 2008, Sunergy is a manufacturer of high-performance photovoltaic products. With 12 manufacturing bases and more than 20 branches around the world, the company's business covers modules, photovoltaic power stations and EPC. Sunergy products are available in over 120 countries and regions and 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 92% Power Output
- 30 Years 83% Power Output

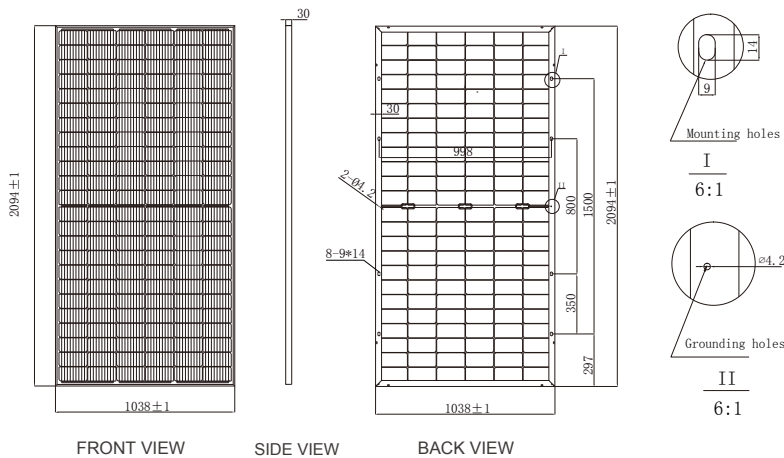


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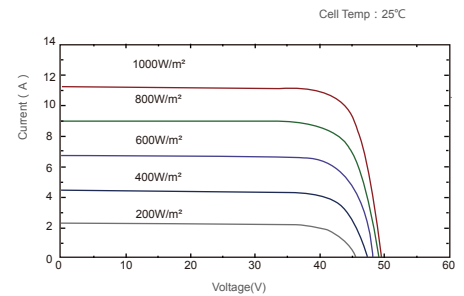
# Mars Series SUN 72MD-H6S

## MECHANICAL DRAWINGS

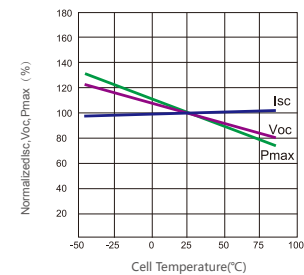


## I-V CURVES

I-V Curves at SUN440-72MD-H6S at different Irradiances



Power voltage current curve at different temperature



## MECHANICAL SPECIFICATION

Cell Type	Mono Crystalline 166x83mm
Number Of Cells	144 (6x24)
Dimensions(AxBxC)	2094x1038x30mm
Weights	28.5kg
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	36
Pallets Per Container	20
Pieces Per Container	720

## ELECTRICAL CHARACTERISTICS

Module Type	435W		440W		445W		450W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power At STC(Pmax)	435W	327.0W	440W	330.7W	445W	334.5W	450W	338.3W
Short Circuit Current(Isc)	11.14A	9.00A	11.21A	9.06A	11.29A	9.12A	11.36A	9.18A
Open Circuit Voltage(Voc)	49.2V	45.9V	49.4V	46.1V	49.7V	46.3V	50.0V	46.6V
Maximum Power Current(Imp)	10.66A	8.53A	10.73A	8.59A	10.80A	8.65A	10.87A	8.70A
Maximum Power Voltage(Vmpp)	40.8V	38.3V	41.0V	38.5V	41.2V	38.7V	41.4V	38.9V
Module Efficiency	20.01%		20.24%		20.47%		20.70%	
Power Tolerance	0~+5W		0~+5W		0~+5W		0~+5W	

## ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN

(Reference to 440W Front)

	5%	10%	15%	20%	25%
Backside Power Gain	5%	10%	15%	20%	25%
Maximum Power At STC(Pmax)	462	484	506	528	550
Short Circuit Current(Isc)	11.78	12.34	12.90	13.42	13.98
Open Circuit Voltage(Voc)	49.4	49.4	49.4	49.5	49.5
Maximum Power Current(Imp)	11.27	11.80	12.34	12.85	13.38
Maximum Power Voltage(Vmpp)	41.0	41.0	41.0	41.1	41.1

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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