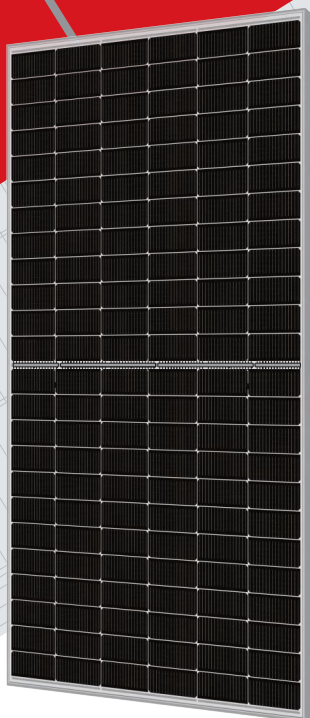


Mars Series

575W/580W/585W/590W/595W/600W

SUN 72MD-H8NS

HALF-CELL BIFACIAL SMBB MONO
N-Type TOPCon DOUBLE GLASS MODULE



COMPREHENSIVE CERTIFICATES

IEC61215 / IEC61730 / IEC61701 / IEC62716 / IEC62804
ISO 9001: 2015 Quality management systems;
ISO 14001: 2015 Environmental management systems;
ISO 45001: 2018 Occupational health and safety management systems;

Sunergy Advantages



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



IP68 junction box

IP68 junction box offer perfect waterproof performance



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.

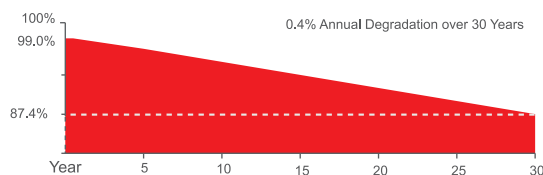
QUALIFICATIONS AND CERTIFICATES



SUNERGY

LINEAR PERFORMANCE WARRANTY

- 12 Years Manufacturing Warranty
- 12 Years 94.6% Power Output
- 30 Years 87.4% Power Output

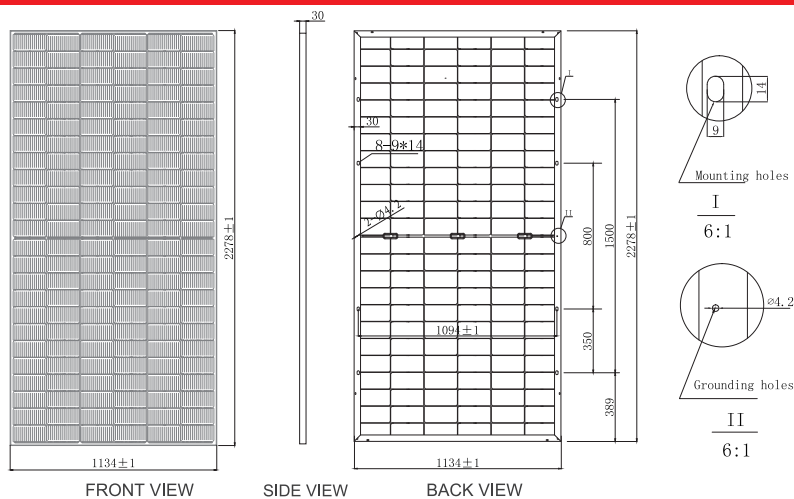


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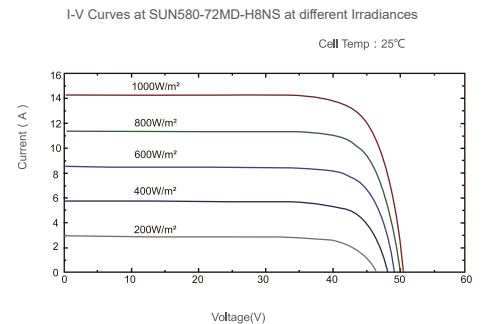


Mars Series SUN 72MD-H8NS

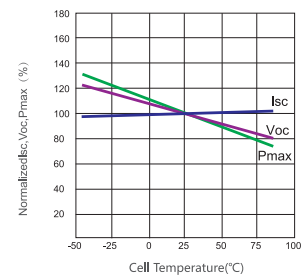
MECHANICAL DRAWINGS



I-V CURVES



Power voltage current curve at different temperature



MECHANICAL SPECIFICATION

Cell Type	N-Type Mono Crystalline 182x91mm
Number Of Cells	144 (6x24)
Dimensions(AxBxC)	2278x1134x30mm
Weights	31.5kg
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	575W		580W		585W		590W		595W		600W																															
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT																														
Maximum Power At STC(Pmax)	575W	434.0W	580W	437.8W	585W	441.6W	590W	445.3W	595W	449.1W	600W	452.9W																														
Short Circuit Current(Isc)	14.26A	11.58A	14.33A	11.64A	14.39A	11.69A	14.47A	11.75A	14.55A	11.82A	14.62A	11.88A																														
Open Circuit Voltage(Voc)	51.17V	48.47V	51.32V	48.61V	51.47V	48.75V	51.62V	48.89V	51.77V	49.03V	51.92V	49.18V																														
Maximum Power Current(Imp)	13.49A	10.95A	13.56A	11.00A	13.63A	11.05A	13.70A	11.11A	13.77A	11.17A	13.84A	11.22A																														
Maximum Power Voltage(Vmpp)	42.63V	39.65V	42.78V	39.79V	42.93V	39.97V	43.07V	40.09V	43.21V	40.21V	43.36V	40.35V																														
Module Efficiency	22.3%		22.5%		22.6%		22.8%		23.0%		23.2%																															
Power Tolerance	0~+5W		0~+5W		0~+5W		0~+5W		0~+5W		0~+5W																															
Maximum System Voltage	VDC 1500V		ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (Reference to 585W Front) <table><tr><td>Backside Power Gain</td><td>10%</td><td>15%</td><td>20%</td><td>25%</td></tr><tr><td>Maximum Power At STC(Pmax)</td><td>643.5</td><td>672.8</td><td>702.0</td><td>731.3</td></tr><tr><td>Short Circuit Current(Isc)</td><td>15.85</td><td>16.56</td><td>17.27</td><td>17.98</td></tr><tr><td>Open Circuit Voltage(Voc)</td><td>51.57</td><td>51.75</td><td>51.93</td><td>52.11</td></tr><tr><td>Maximum Power Current(Imp)</td><td>14.98</td><td>15.65</td><td>16.32</td><td>16.99</td></tr><tr><td>Maximum Power Voltage(Vmpp)</td><td>42.95</td><td>42.98</td><td>43.01</td><td>43.04</td></tr></table>										Backside Power Gain	10%	15%	20%	25%	Maximum Power At STC(Pmax)	643.5	672.8	702.0	731.3	Short Circuit Current(Isc)	15.85	16.56	17.27	17.98	Open Circuit Voltage(Voc)	51.57	51.75	51.93	52.11	Maximum Power Current(Imp)	14.98	15.65	16.32	16.99	Maximum Power Voltage(Vmpp)	42.95	42.98	43.01	43.04
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Maximum Series Fuse	30A																																									
Increased Snowload Acc.to Iec 61215	5400Pa																																									
Operating Temperature	-40~+85°C																																									
Number Of Bypass Diodes	3																																									
Norminal Operating Cell Temperature(Noct)	45°C±2°C																																									
Temperature Coefficient Of Pmax	-0.30%/°C																																									
Temperature Coefficient Of Voc	-0.25%/°C																																									
Temperature Coefficient Of Isc	0.046%/°C																																									

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN

(Reference to 585W Front)

Backside Power Gain	10%	15%	20%	25%
Maximum Power At STC(Pmax)	643.5	672.8	702.0	731.3
Short Circuit Current(Isc)	15.85	16.56	17.27	17.98
Open Circuit Voltage(Voc)	51.57	51.75	51.93	52.11
Maximum Power Current(Imp)	14.98	15.65	16.32	16.99
Maximum Power Voltage(Vmpp)	42.95	42.98	43.01	43.04

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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