arsseries 560W/565W/570W/575W/580W

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



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













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



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

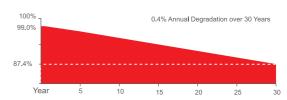


Higher fire rating

Fire rating up to Class A, reduce fire hazards;

LINEAR PERFORMANCE WARRANTY

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



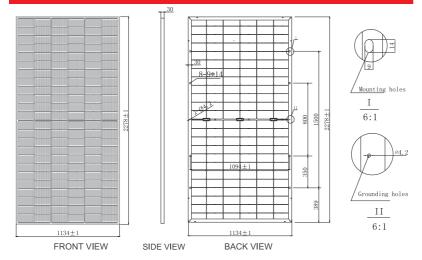




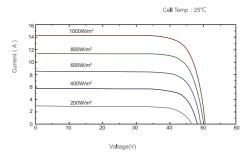




MECHANICAL DRAWINGS

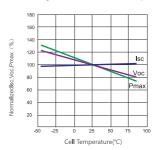


I-V CURVES



I-V Gurves at SUN565-72MD-H8NS at different Irradiances

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	33.0kg
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	36
Pallets Per Container	20
Pieces Per Container	720

ELECTRICAL CHARACTERISTICS

Module Type	560W	565W	570W	575W	580W	
	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT	
Maximum Power At STC(Pmax)	560W 422.7W	565W 426.5W	570W 430.2W	575W 434.0W	580W 437.8W	
Short Circuit Current(Isc)	14.04A 11.40A	14.11A 11.46A	14.18A 11.52A	14.26A 11.58A	14.33A 11.64A	
Open Circuit Voltage(Voc)	50.72V 48.04V	50.87V 48.18V	51.02V 48.32V	51.17V 48.47V	51.32V 48.61V	
Maximum Power Current(Impp)	13.28A 10.78A	13.35A 10.83A	13.42A 10.89A	13.49A 10.95A	13.56A 11.00A	
Maximum Power Voltage(Vmpp)	42.18V 39.22V	42.33V 39.37V	42.48V 39.52V	42.63V 39.65V	42.78V 39.79V	
Module Efficiency	21.70%	21.90%	22.1%	22.3%	22.5%	
Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W	
Maximum System Voltage	VDC 1500V	ELECTRICAL CLI	ADACTEDICTICS VAI			

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAII

(Reference to 565W Front)

Backside Power Gain	10%	15%	20%	25%	30%
Maximum Power At STC(Pmax)	621.5	650.0	678.0	706.0	734.5
Short Circuit Current(Isc)	15.48	16.18	16.87	17.55	18.25
Open Circuit Voltage(Voc)	51.07	51.27	51.47	51.67	51.87
Maximum Power Current(Impp)	14.61	15.27	15.91	16.56	17.21
Maximum Power Voltage(Vmpp)	42.55	42.58	42.61	42.64	42.67

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

30A

5400Pa

-40~+85°C

3

45°C±2°C

-0.30%℃

-0.25%℃

0.046%℃



Maximum Series Fuse

Operating Temperature

Number Of Bypass Diodes

Temperature Coefficient Of Pmax

Temperature Coefficient Of Voc

Temperature Coefficient Of Isc

Increased Snowload Acc.to lec 61215

Norminal Operating Cell Temperature(Noct)

