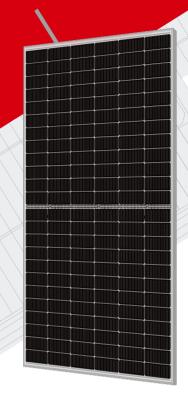
arsseries

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;

KEY SALIENT FEATURES



High output power



Better power generation under shadows



Strong anti-hot spot ability



Enhanced safety



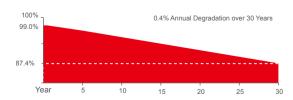
Easy to install



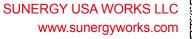
High tolerance for harsh environment and extreme weather conditions

LINEAR PERFORMANCE WARRANTY

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





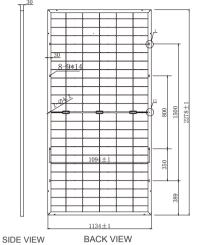


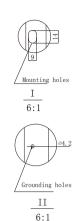




MECHANICAL DRAWINGS

1134±1 FRONT VIEW

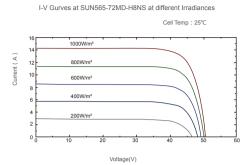




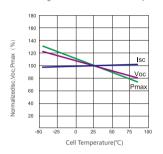
MECHANICAL SPECIFICATION

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	4.0mm ² ,+300mm,-300mm Customized Length

I-V CURVES



Power voltage current curve at different temperature



PACKING CONFIGURATION

Container	40' HQ
Pieces Per Pallet	36
Pallets Per Container	20
Pieces Per Container	720

ELECTRICAL CHARACTERISTICS

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 Type	560W	565W	570W	575W	580W	
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		STC NOCT					
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	Maximum Power At STC(Pmax)	560W 422.7W	565W 426.5W	570W 430.2W	575W 434.0W	580W 437.8W	
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	Short Circuit Current(Isc)	14.04A 11.40A	14.11A 11.46A	14.18A 11.52A	14.26A 11.58A	14.33A 11.64A	
Maximum Power Voltage(Vmpp) 42.18V 39.22V 42.33V 39.37V 42.48V 39.52V 42.63V 39.65V 42.78V 39.79V	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%	Module Efficiency	21.70%	21.90%	22.1%	22.3%	22.5%	
Power Tolerance 0~+5W 0~+5W 0~+5W 0~+5W 0~+5W	Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W	

	0 . 3
Maximum System Voltage	VDC 1500V
Maximum Series Fuse	30A
Increased Snowload Acc.to lec 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%℃
Temperature Coefficient Of Voc	-0.25%℃
Temperature Coefficient Of Isc	0.046%℃

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN

(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

 $STC: 1000W/m2 \ irradiance, 25^{\circ}C \ cell \ temperature, AM1.5. \quad NOCT: Irradiance \ at \ 800W/m^2 \ , Ambient \ Temperature \ 20^{\circ}C \ \ , \ wind \ speed \ 1m/s \ .$



