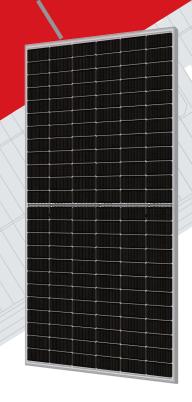
# at S Series

Type TOPCon HALF-CELL MONO



#### **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

#### 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







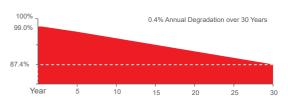




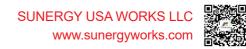


#### LINEAR PERFORMANCE WARRANTY

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

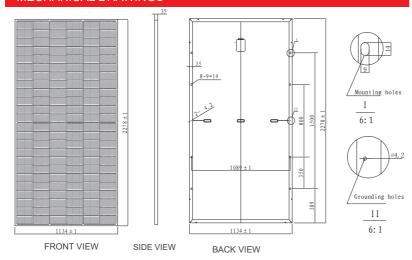








#### MECHANICAL DRAWINGS



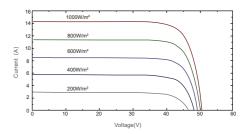
## MECHANICAL SPECIFICATION

Cell Type	N-Type Mono Crystalline 182x91mm
Number Of Cells	144 (6x24)
Dimensions(AxBxC)	2278x1134x35mm
Weights	27.0kg
Glass	3.2mm 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

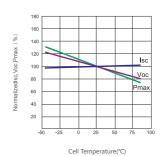
#### I-V CURVES

I-V Curves at SUN580-72M-H8N at different Irradiances

Cell Temp: 25°C



Power voltage current curve at different temperature



## PACKING CONFIGURATION

Container	40' HQ
Pieces Per Pallet	31
Pallets Per Container	20
Pieces Per Container	620

#### **ELECTRICAL CHARACTERISTICS**

Module Type	575W	580W	585W	590W	595W	600W
	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(Impp)	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		
Maximum Series Fuse 25A						
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%℃		

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



