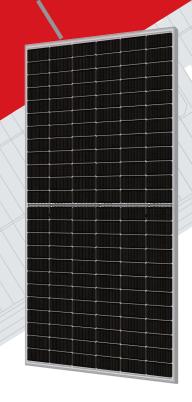
ars Series

5W/580W/585W590W/595W

Type TOPCon HALF-CELL MONO



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

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









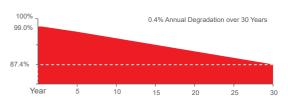






LINEAR PERFORMANCE WARRANTY

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

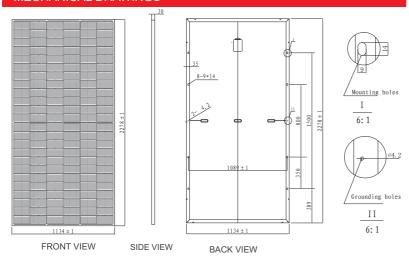








MECHANICAL DRAWINGS



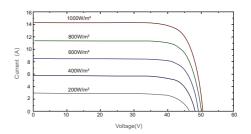
MECHANICAL SPECIFICATION

Cell Type	N-Type Mono Crystalline 182x91mm
Number Of Cells	144 (6x24)
Dimensions(AxBxC)	2278x1134x30mm
Weights	27.5±0.5kg
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

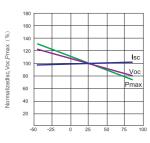
I-V CURVES

I-V Curves at SUN590-72M-H8N at different Irradiances

Cell Temp: 25°C



Power voltage current curve at different temperature



Cell Temperature(°C)

PACKING CONFIGURATION

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

ELECTRICAL CHARACTERISTICS

Module Type	570W	575W	580W	585W	590W	595W
	STC NOCT					
Maximum Power At STC(Pmax)	570W 430.2W	575W 434.0W	580W 437.8W	585W 441.6W	590W 445.3W	595W 449.1W
Short Circuit Current(Isc)	14.18A 11.52A	14.26A 11.58A	14.33A 11.64A	14.39A 11.69A	14.47A 11.75A	14.55A 11.82A
Open Circuit Voltage(Voc)	51.02V 48.32V	51.17V 48.47V	51.32V 48.61V	51.47V 48.75V	51.62V 48.89V	51.77V 49.03V
Maximum Power Current(Impp)	13.42A 10.89A	13.49A 10.95A	13.56A 11.00A	13.63A 11.05A	13.70A 11.11A	13.77A 11.17A
Maximum Power Voltage(Vmpp)	42.48V 39.52V	42.63V 39.65V	42.78V 39.79V	42.93V 39.97V	43.07V 40.09V	43.21V 40.21V
Module Efficiency	22.1%	22.3%	22.5%	22.65%	22.8%	23.0%
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 61	215			5400Pa		
Operating Temperature				-40~+85°C		
Number Of Bypass Diodes				3		
Norminal Operating Cell Temperation	ture(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.



