

SZSSTH

RSM120H-182M-10BB 430-450W

High Efficiency Low LID Mono PERC with Half-cut Technology

Positive power tolerance (0 ~ +5W) guaranteed

High module conversion efficiency (up to 20.80%)

Slower power degradation enabled by Low LID Mono PERC technology:
first year <2.5%, 0.56% year 2-25

Solid PID resistance ensured by solar cell process optimization and careful module BOM selection

Reduced resistive loss with lower operating current

Higher energy yield with lower operating temperature

Reduced hot spot risk with optimized electrical design and lower operating current

Complete System and Product Certifications

IEC 61215, IEC 61730

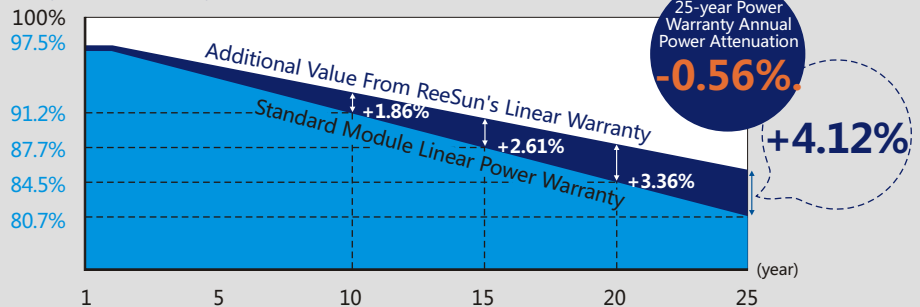
ISO 9001:2015: ISO Quality Management System

ISO 14001:2015: ISO Environment Management System

ISO 45001:2018 Occupational Health and Safety

* Specifications subject to technical changes and tests.
ReeSuna solar reserves the right of interpretation.

12-year Warranty for Materials and Processing; 25-year Warranty for Extra Linear Power Output.



Shenzhen ShengShi TianHe Electronic Technology Co.,Ltd
Add: 7th Floor, Building B5, Xiufeng industrial zone, Gankeng community
Jihua Street, Longgang district, Shenzhen City, Guangdong Province, China.

Tel: 86-0755-28284592 E-mail: info@ssthpower.com

Website: www.ssthpower.com



Shenzhen SZSSTH Company is a high-tech PV enterprise dedicated to research, development, production, sales & after sales service, mainly engaged in crystalline silicon solar cells, solar panels, photovoltaic systems, PV applications. Our product specifications are compatible with 158-210 size battery cells, adopting German TUV quality control standards, and realizing the whole process quality traceability from auxiliary materials to finished components.



RSM120H-182M-10BB

430-450W

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Electrical Characteristics

Electrical Characteristics

Test uncertainty for Pmax: ±3%

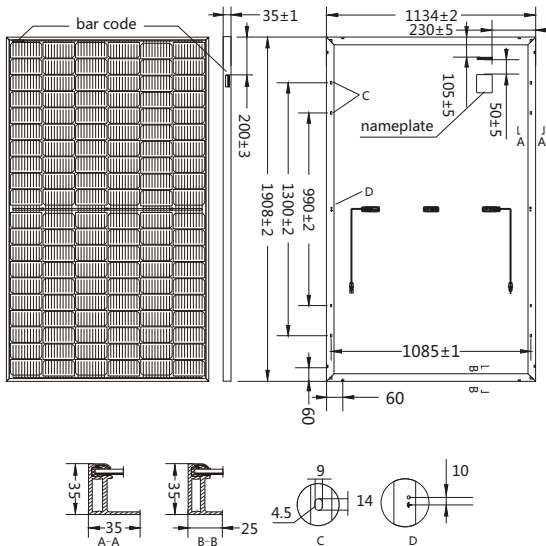
Model Number	430W		435W		440W		445W		450W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition										
Maximum Power (Pmax/W)	430	322	435	326	440	329	445	332	450	335
Voltage at Maximum Power (Vmp/V)	33.73	31.36	33.84	31.48	33.95	31.60	34.07	31.71	34.18	31.83
Current at Maximum Power (Imp/A)	12.85	10.28	12.93	10.34	13.01	10.40	13.09	10.46	13.17	10.52
Open Circuit Voltage (Voc/V)	40.83	38.53	40.94	38.64	41.05	38.75	41.17	38.86	41.28	38.96
Short Circuit Current (Isc/A)	13.53	10.93	13.61	10.99	13.69	11.06	13.77	11.12	13.85	11.19
Module Efficiency (%)	19.88		20.11		20.34		20.57		20.80	

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25°C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

Design (mm)

Mechanical & Operating Parameters



Cell Orientation 120 (6×20)

Junction Box IP68, three diodes

Output Cable 4mm², 300mm in length, length can be customized

Glass Single glass 3.2mm coated tempered glass

Frame Anodized aluminum alloy frame

Weight 24.5kg

Dimension 1908×1134×35mm

Packaging 31pcs/pallet 744pcs/40'HC

Operational Temperature -40°C ~ +85°C

Power Output Tolerance 0~+5 W

Voc and Isc Tolerance ±3%

Maximum System Voltage DC1500V (IEC/UL)

Maximum Series Fuse Rating 20A

Nominal Operating Cell Temperature 45±2°C

Safety Class Class II

Fire Rating Class C

Temperature Ratings (STC)

Mechanical Loading

Temperature Coefficient of Isc +0.048%/°C

Front Side Maximum Static Loading 5400Pa

Temperature Coefficient of Voc -0.270%/°C

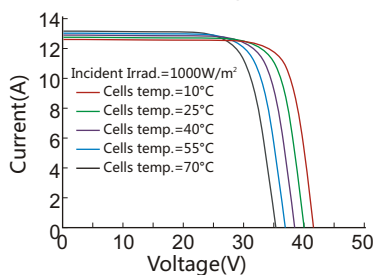
Rear Side Maximum Static Loading 2400Pa

Temperature Coefficient of Pmax -0.350%/°C

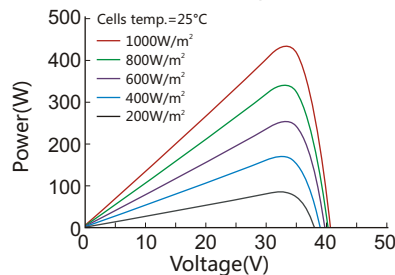
Hailstone Test 25mm Hailstone at the speed of 23m/s

I-V Curve (RSM120H-182M-440W)

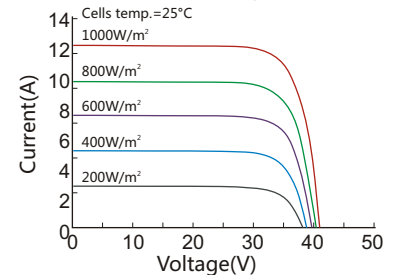
Current-Voltage Curve



Power-Voltage Curve



Current-Voltage Curve



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