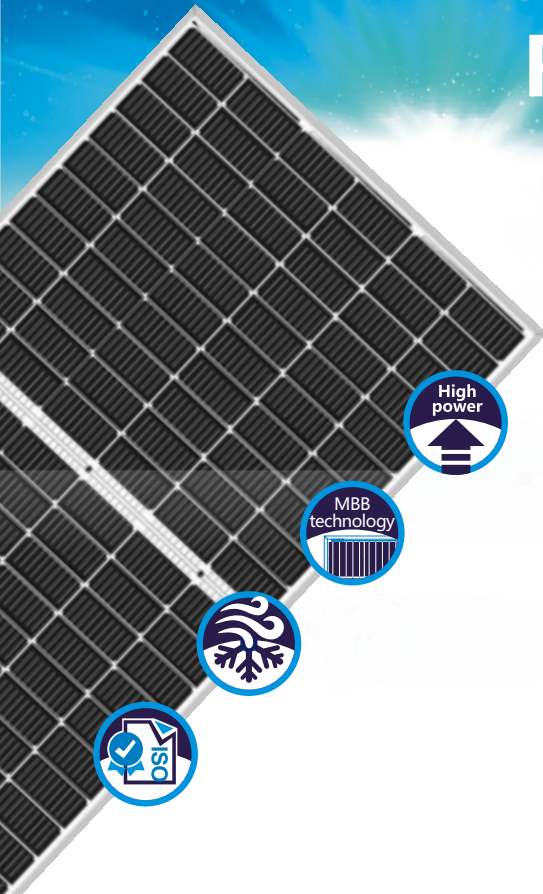


SZSSTH

RSM144HB-166M-9BB 425-455W



High Efficiency Low LID Mono PERC with Half-cut Technology

Positive power tolerance (0 ~ +5W) guaranteed

High module conversion efficiency (up to 20.1%)

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

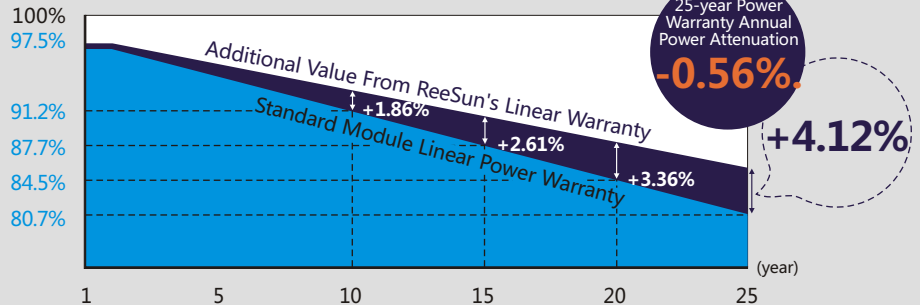
ISO 45001:2018 Occupational Health and Safety



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.

* 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
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Website: www.ssthpower.com

RSM144HB-166M-9BB

425-450W

SZSSTH

Electrical Characteristics

Model Number	
Testing Condition	
Maximum Power (Pmax/W)	
Voltage at Maximum Power (Vmp/V)	
Current at Maximum Power (Imp/A)	
Open Circuit Voltage (Voc/V)	
Short Circuit Current (Isc/A)	
Module Efficiency (%)	

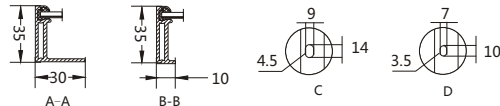
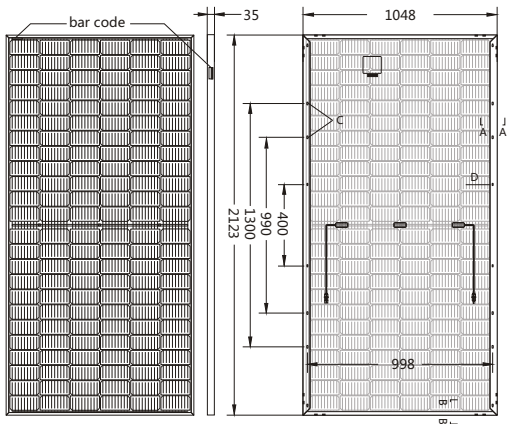
Electrical Characteristics

Test uncertainty for Pmax: +3%

	425W	430W	435W	440W	445W	450W
STC	STC	STC	STC	STC	STC	STC
425	430	435	440	445	450	
40.21	40.49	40.77	41.0	41.32	41.59	
10.57	10.62	10.67	10.72	10.77	10.82	
48.50	48.70	48.90	49.10	49.30	49.50	
11.16	11.20	11.24	11.28	11.32	11.36	
19.0	19.2	19.5	19.7	19.9	20.1	

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

Design (mm)



Tolerance : Length: ±2mm, Width: ±2mm, Height: ±1mm, Pitch-row: ±1 mm

	Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
458	48.90	11.80	40.87	11.20	5%	
480	48.90	12.36	40.87	11.74	10%	
500	49.00	12.93	40.77	12.27	15%	
522	49.00	13.49	40.77	12.80	20%	
544	49.00	14.05	40.77	13.34	25%	

Mechanical Parameters

Operating Parameters

Cell Orientation: 144 (6x24)	Operational Temperature: -40°C ~ +85°C
Junction Box: IP68, three diodes	Power Output Tolerance: 0~+5 W
Output Cable: 4mm ² , 300mm in length, length can be customized	Maximum System Voltage: DC1500V (IEC/UL)
	Maximum Series Fuse Rating: 20A
Glass: Dual glass 2.0mm coated tempered glass	Voc and Isc Tolerance: ±3%
Frame: Anodized aluminum alloy frame	Nominal Operating Cell
Weight: 29.5kg	Temperature: 45±2°C
Dimension: 2123×1048×35mm	Safety Class: Class II
Packaging: 30pcs per pallet	Fire Rating: UL
150pcs per 20'/GP	Bifaciality: Glazing 70±5%
620pcs per 40'/HC	

Temperature Ratings (STC)

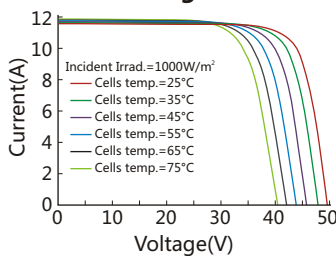
Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.284%/°C
Temperature Coefficient of Pmax	-0.350%/°C

Mechanical Loading

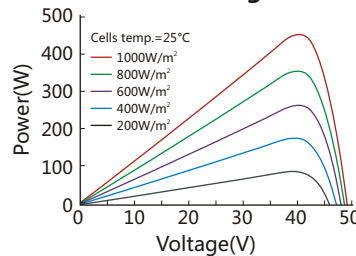
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

I-V Curve (RSM144HB-166M-435W)

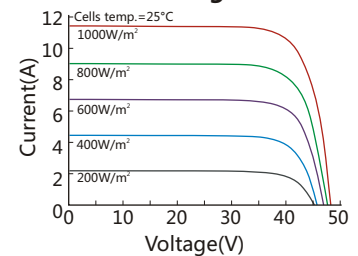
Current-Voltage Curve



Power-Voltage Curve



Current-Voltage Curve



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