



The logo for risen solar, featuring a white circle with a grid pattern to the left of the word "risen" in white lowercase letters, with "430-450 Wp" in white uppercase letters below it.

**RSM108-10NDGB-430-455**



**Cells**

108



**Efficiency**

Up to 22,1%



**Module dimensions**

1800 X 1134 X 30 mm



**Module characteristics**

Full black



**Packaging**

36 modules per pallet,  
936 modules per 40'HC



**Technology**

N-Type



**Product warranty**

25 years warranty



**Performance warranty**

30 years warranty



# Full-black Aesthetic

## n-type TOPCon Dual Glass Module



The module picture is for reference only



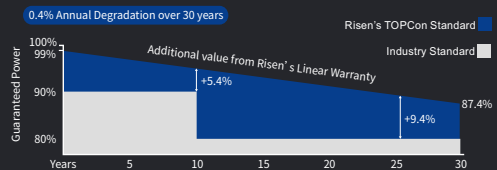
### RSM108-10-430-450NDGB

#### KEY FEATURES

-  Full-black design with aesthetic appearance
-  Perfect for residential scenario application
-  Excellent power generation
-  Excellent anti-LID & anti-PID performance
-  Excellent temperature coefficient (P<sub>max</sub>): -0.29%/°C
-  Excellent weak-light performance
-  Excellent warranty assurance

#### LINEAR PERFORMANCE WARRANTY

25 years Product Warranty / 30 years Linear Power Warranty

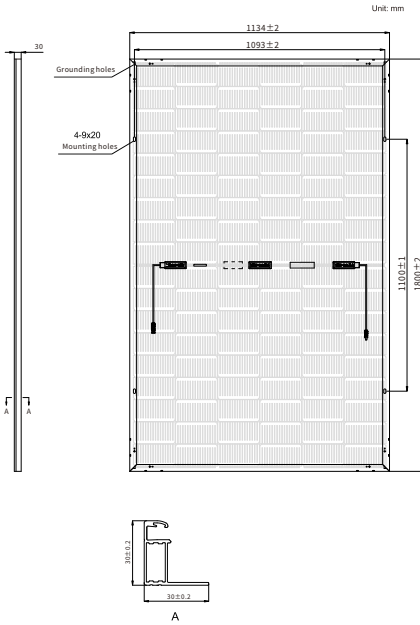


\* Please check the valid version of Limited Product Warranty which is officially released by Risen Energy Co., Ltd



\* As there are different certification requirements in different markets, please contact your local Risen Energy sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

## Dimensions of PV Module



## ELECTRICAL DATA (STC)

Model Type	RSM108-10-430-450NDGB				
Rated Power in Watts-Pmax(Wp)	430	435	440	445	450
Open Circuit Voltage-Voc(V)	38.17	38.39	38.61	38.83	39.05
Short Circuit Current-Isc(A)	14.40	14.47	14.55	14.61	14.66
Maximum Power Voltage-Vmpp(V)	31.72	31.90	32.08	32.27	32.44
Maximum Power Current-Impp(A)	13.58	13.66	13.74	13.82	13.88
Module Efficiency (%) *	21.1	21.3	21.6	21.8	22.1

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

Bifacial factor: 80 ± 10(%) \* Module Efficiency (%): Rounding to the nearest number

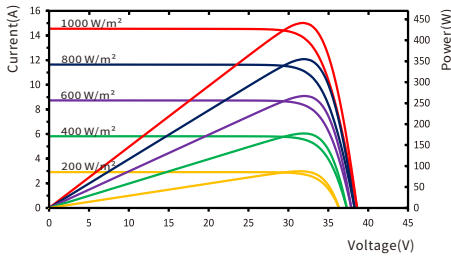
## ELECTRICAL DATA (NMOT)

Model Type	RSM108-10-430-450NDGB				
Maximum Power-Pmax (Wp)	326.3	330.1	333.9	337.7	341.0
Open Circuit Voltage-Voc (V)	35.50	35.70	35.91	36.11	36.32
Short Circuit Current-Isc (A)	11.81	11.87	11.93	11.98	12.02
Maximum Power Voltage-Vmpp (V)	29.44	29.61	29.77	29.94	30.10
Maximum Power Current-Impp (A)	11.08	11.15	11.21	11.28	11.33

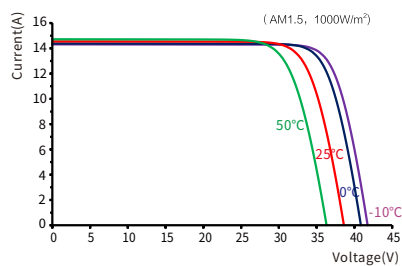
NMOT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

### RSM108-10-440NDGB

#### I-V characteristics at different irradiances



#### I-V characteristics at different temperatures



## MECHANICAL DATA

Solar cells	<i>n</i> -type TOPCon
Cell configuration	108 cells (6×9+6×9)
Module dimensions	1800×1134×30mm
Weight	22kg
Superstrate	High Transmission, Low Iron, AR Coated Heat Strengthened Glass
Substrate	Heat Strengthened Glass
Frame	Anodized Aluminium Alloy, Black
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm <sup>2</sup> , Positive(+)1200mm, Negative(-)1200mm (Connector Included), or customized length
Connector	Risen Twinsel PV-SY02, IP68

## TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C ± 2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°C
Operational Temperature	-40°C ~ +85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

## PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	936	216
Number of modules per pallet	36	36
Number of pallets per container	26	6
Packaging box dimensions (LxWxH) in mm	1816×1140×1260	
Box gross weight[kg]	945	



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THE POWER OF RISING VALUE

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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No special undertaking or warranty for the suitability of special purpose or being installed in extraordinary surroundings is granted unless as otherwise specifically committed by manufacturer in contract document.

Version: REM108-NDGB-16BB-EN-H2-2-2023