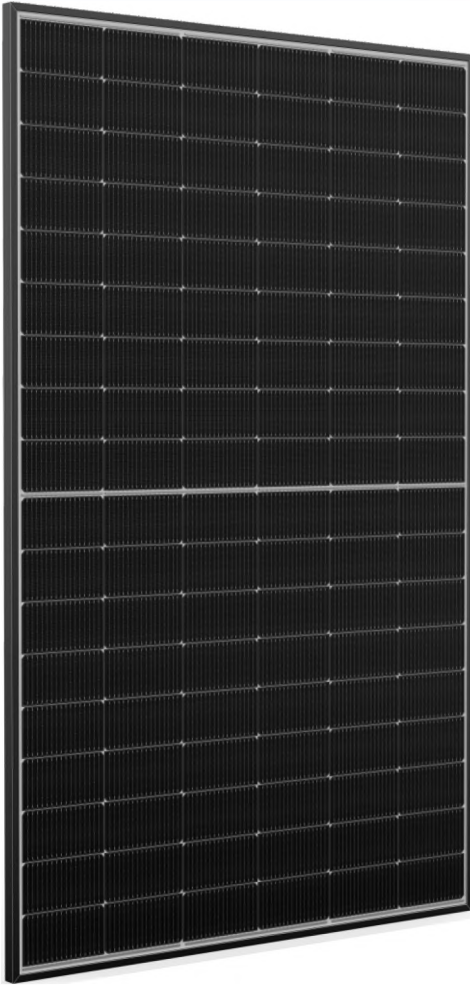


n-type TOPCon

HIGH PERFORMANCE DUAL GLASS MODULE

RSM108-9-415-440NDG



The module picture is for reference only

415-440 _{Wp}

Power Output Range

22.5 %

Maximum Efficiency

0~+3 %

Positive power tolerance

1500 _{VDC}

Maximum System Voltage

KEY FEATURES



Perfect for residential scenario application



Excellent power generation



Excellent anti-LID & anti-PID performance



Excellent temperature coefficient (Pmax): -0.29%/°C



Excellent weak-light performance



Excellent warranty assurance

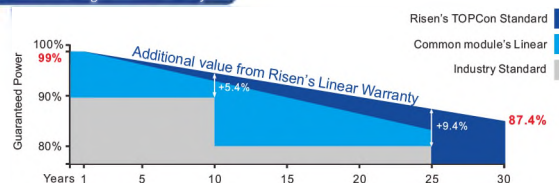


As there are different certification requirements in different markets, please contact your local Risen Energy sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

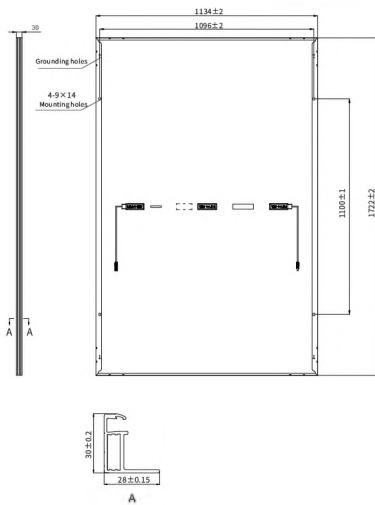
LINEAR PERFORMANCE WARRANTY

15 years Product Warranty / 30 years Linear Power Warranty

0.4% Annual Degradation over 30 years

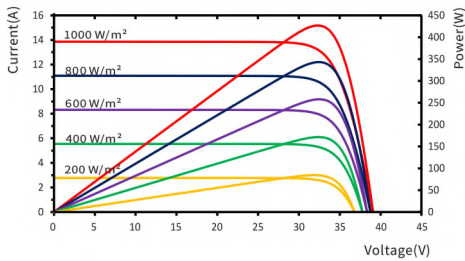


Dimensions of PV Module

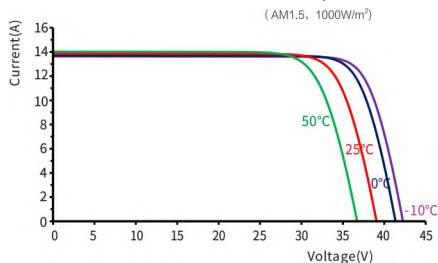


RSM108-9-425NDG

I-V characteristics at different irradiances



I-V characteristics at different temperatures



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	1745×1110×1260	
Box gross weight[kg]	904	

ELECTRICAL DATA (STC)

Model Type	RSM108-9-415-440NDG					
Rated Power in Watts- Pmax(Wp)	415	420	425	430	435	440
Open Circuit Voltage- Voc(V)	38.67	38.87	39.07	39.26	39.46	39.65
Short Circuit Current- Isc(A)	13.69	13.78	13.86	13.94	14.01	14.09
Maximum Power Voltage- Vmpp(V)	32.39	32.59	32.78	32.98	33.18	33.38
Maximum Power Current- Impp(A)	12.83	12.91	12.99	13.06	13.12	13.19
Module Efficiency (%) *	21.3	21.5	21.8	22.0	22.3	22.5

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

* Module Efficiency (%): Round-off to the nearest number

ELECTRICAL DATA (NMOT)

Model Type	RSM108-9-415-440NDG					
Maximum Power- Pmax (Wp)	314.8	318.6	322.4	326.0	329.6	333.4
Open Circuit Voltage- Voc (V)	35.96	36.15	36.34	36.51	36.70	36.87
Short Circuit Current- Isc (A)	11.23	11.30	11.36	11.43	11.49	11.55
Maximum Power Voltage- Vmpp (V)	30.06	30.24	30.42	30.61	30.79	30.98
Maximum Power Current- Impp (A)	10.47	10.54	10.60	10.65	10.71	10.76

NMOT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s.

MECHANICAL DATA

Solar cells	n-type TOPCon
Cell configuration	108 cells (6×9+6×9)
Module dimensions	1722×1134×30mm
Weight	24kg
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 ² , 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