

RSM144-7-435-455



Cells

144



Efficiency

Up to 20,6%



Module dimensions

2108 X 1048 X 35 mm



Module characteristics

Anodised aluminium
frame



Packaging

31 modules per pallet,
682 modules per 40'HC



Technology

P-Type



Product warranty

12 years warranty



Performance warranty

25 years warranty



HIGH PERFORMANCE MONOCRYSTALLINE PERC MODULE



G4.3

RSM144-7-435M-455M

144 CELL Mono PERC Module	435-455Wp Power Output Range
1500VDC Maximum System Voltage	20.6% Maximum Efficiency

KEY SALIENT FEATURES

-  Global, Tier 1 bankable brand, with independently certified state-of-the-art automated manufacturing
-  Industry leading lowest thermal co-efficient of power
-  Industry leading 12 years product warranty
-  Excellent low irradiance performance
-  Excellent PID resistance
-  Positive tight power tolerance
-  Dual stage 100% EL Inspection warranting defect-free product
-  Module Imp binning radically reduces string mismatch losses
-  Warranted reliability and stringent quality assurances well beyond certified requirements
-  Certified to withstand severe environmental conditions
 - ◆ Anti-reflective & anti-soiling surface minimise power loss from dirt and dust
 - ◆ Severe salt mist, ammonia & blown sand resistance, for seaside, farm and desert environments
 - ◆ Excellent mechanical load 2400Pa & snow load 5400Pa resistance



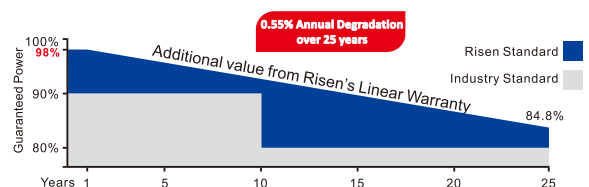
RISEN ENERGY CO., LTD.

Risen Energy is a leading, global tier 1 manufacturer of high-performance solar photovoltaic products and provider of total business solutions for residential, commercial and utility-scale power generation. The company, founded in 1986, and publicly listed in 2010, compels value generation for its chosen global customers. Techno-commercial innovation, underpinned by consummate quality and support, encircle Risen Energy's total Solar PV business solutions which are among the most powerful and cost-effective in the industry. With local market presence and strong financial bankability status, we are committed, and able, to building strategic, mutually beneficial collaborations with our partners, as together we capitalise on the rising value of green energy.

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LINEAR PERFORMANCE WARRANTY

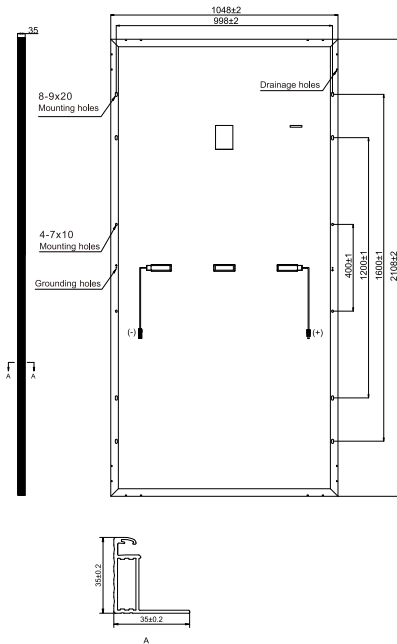
12 year Product Warranty / 25 year Linear Power Warranty



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



Dimensions of PV Module Unit: mm



ELECTRICAL DATA (STC)

Model Number	RSM144-7-435M	RSM144-7-440M	RSM144-7-445M	RSM144-7-450M	RSM144-7-455M
Rated Power in Watts-Pmax(Wp)	435	440	445	450	455
Open Circuit Voltage-Voc(V)	49.40	49.50	49.60	49.70	49.80
Short Circuit Current-Isc(A)	11.20	11.30	11.40	11.50	11.60
Maximum Power Voltage-Vmpp(V)	41.05	41.13	41.25	41.30	41.40
Maximum Power Current-Impp(A)	10.60	10.70	10.80	10.90	11.00
Module Efficiency (%) *	19.7	19.9	20.1	20.4	20.6

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 Number	RSM144-7-435M	RSM144-7-440M	RSM144-7-445M	RSM144-7-450M	RSM144-7-455M
Maximum Power-Pmax (Wp)	325.2	329.6	333.9	338.2	342.5
Open Circuit Voltage-Voc (V)	45.45	46.18	46.39	46.43	46.61
Short Circuit Current-Isc (A)	9.18	9.27	9.35	9.43	9.51
Maximum Power Voltage-Vmpp (V)	37.60	37.80	37.90	38.00	38.10
Maximum Power Current-Impp (A)	8.65	8.72	8.81	8.90	8.99

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

MECHANICAL DATA

Solar cells	Monocrystalline 166×83mm
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2108×1048×35mm
Weight	24.5kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm ² (12AWG), Positive(+)350mm, Negative(-)350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

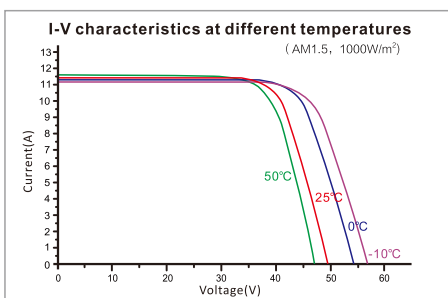
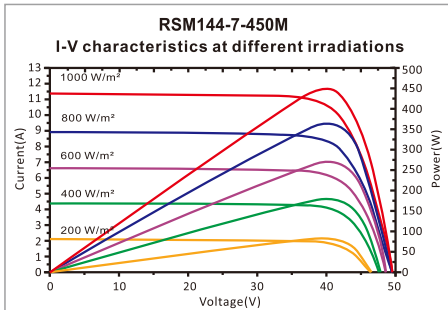
PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	682	155
Number of modules per pallet	31	31
Number of pallets per container	22	5
Packaging box dimensions (LxWxH) in mm	2140×1135×1180	2140×1135×1180
Box gross weight[kg]	815	815

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

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