



# **HIGH PERFORMANCE** BIFACIAL PERC MONOCRYSTALLINE MODULE



























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

#### 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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# RSM150-8-485BMDG-510BMDG

485-510Wp **150 CELL Power Output Range** Mono PERC Module

1500VDC 20.7%

Maximum System Voltage Maximum Efficiency

# **KEY SALIENT FEATURES**

Global, Tier 1 bankable brand, with independently TIER 1 certified state-of-the-art automated manufacturing

> Bifacial technology enables additional energy harvesting from rear side (up to 30%)

Industry leading lowest thermal co-efficient of power

Industry leading 12 years product warranty

Excellent low irradiance performance

Positive tight power tolerance

Excellent PID resistance

Bifacial

PID

2 Dual stage 100% EL Inspection warranting defect-free product

Module Imp binning radically reduces string mismatch losses

> Excellent wind load 2400Pa & snow load 5400Pa under certain installation method

Comprehensive product and system certification

- \* IEC61215:2016; IEC61730-1/-2:2016;
- ISO 9001:2015 Quality Management System
- ISO 14001:2015 Environmental Management System
- ISO 45001:2018 Occupational Health and Safety Management System

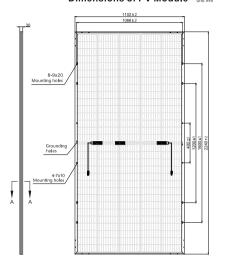
#### LINEAR PERFORMANCE WARRANTY

12 year Product Warranty / 30 year Linear Power Warranty

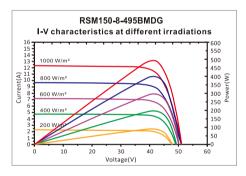


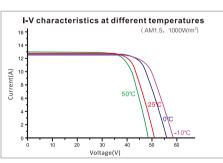


#### Dimensions of PV Module Unit: mm









# Our Partners:

REM150-BMDG-9BB-EN-H2-1-2021

#### **ELECTRICAL DATA (STC)**

Model Number	RSM150-8-485BMDG	RSM150-8-490BMDG	RSM150-8-495BMDG	RSM150-8-500BMDG	RSM150-8-505BMDG	RSM150-8-510BMDG
Rated Power in Watts-Pmax(Wp)	485	490	495	500	505	510
Open Circuit Voltage-Voc(V)	50.35	50.57	50.79	51.01	51.23	51.45
Short Circuit Current-Isc(A)	12.25	12.32	12.39	12.46	12.53	12.60
Maximum Power Voltage-Vmpp(V)	42.22	42.44	42.66	42.88	43.10	43.32
Maximum Power Current-Impp(A)	11.50	11.56	11.62	11.68	11.74	11.80
Module Efficiency (%) ★	19.6	19.9	20.1	20.3	20.5	20.7

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3. Bifacial factor:  $70\%\pm5$  \* Module Efficiency (%): Round-off to the nearest number

### Electrical characteristics with 10% rear side power gain

Total Equivalent power -Pmax (Wp)	534	539	545	550	556	561
Open Circuit Voltage-Voc(V)	50.35	50.57	50.79	51.01	51.23	51.45
Short Circuit Current-Isc(A)	13.48	13.55	13.63	13.71	13.78	13.86
Maximum Power Voltage-Vmpp(V)	42.22	42.44	42.66	42.88	43.10	43.32
Maximum Power Current-Impp(A)	12.65	12.72	12.78	12.85	12.91	12.98

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

#### **ELECTRICAL DATA (NMOT)**

Model Number	RSM150-8-485BMDG	RSM150-8-490BMDG	RSM150-8-495BMDG	RSM150-8-500BMDG	RSM150-8-505BMDG	RSM150-8-510BMDG
Maximum Power-Pmax (Wp)	367.7	371.5	375.4	379.3	383.2	387.1
Open Circuit Voltage-Voc (V)	46.83	47.03	47.23	47.44	47.64	47.85
Short Circuit Current-Isc (A)	10.05	10.10	10.16	10.22	10.27	10.33
Maximum Power Voltage-Vmpp (V)	39.18	39.38	39.59	39.79	40.00	40.20
Maximum Power Current-Impp (A)	9.38	9.43	9.48	9.53	9.58	9.63

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

#### **MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	150 cells (5×15+5×15)
Module dimensions	2240×1102×30mm
Weight	31.5kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Tempered Glass
Frame	Anodized Aluminium Alloy type 6005-2T6, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm² (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	-0.25%/°C			
Temperature Coefficient of Isc	0.04%/°C			
Temperature Coefficient of Pmax	-0.34%/°C			
Operational Temperature	-40°C~+85°C			
Maximum System Voltage	1500VDC			
Max Series Fuse Rating	25A			
Limiting Reverse Current	25A			

## PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	700	140
Number of modules per pallet	35	35
Number of pallets per container	20	4
Packaging box dimensions (LxWxH) in mm	2305×1130×1240	2305×1130×1240
Box gross weight[kg]	1160	1160

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.