



HIGH PERFORMANCE BIFACIAL PERC MONOCRYSTALLINE MODULE







ISO14001





















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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RSM120-8-580BMDG-600BMDG

580-600Wp **120 CELL Power Output Range** Mono PERC Module

1500VDC 21.2%

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 Bifacial from rear side (up to 30%)

Industry leading lowest thermal co-efficient of power

Industry leading 12 years product warranty

Excellent low irradiance performance

PID Excellent PID resistance

Positive tight power tolerance

2 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 resistance: wind load 2400Pa & snow load 5400Pa

LINEAR PERFORMANCE WARRANTY

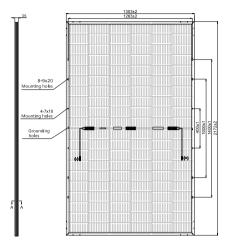
12 year Product Warranty / 30 year Linear Power Warranty



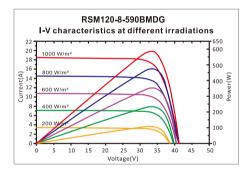
★ Please check the valid version of Limited Product Warranty which is officially released by Risen Energy Co., Ltd

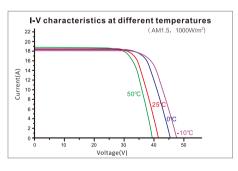


Dimensions of PV Module Unit: mm









Our Partners:

REM120-BMDG-12BB-EN-H1-1-2021

ELECTRICAL DATA (STC)

Model Number	RSM120-8-580BMDG	RSM120-8-585BMDG	RSM120-8-590BMDG	RSM120-8-595BMDG	RSM120-8-600BMDG
Rated Power in Watts-Pmax(Wp)	580	585	590	595	600
Open Circuit Voltage-Voc(V)	40.90	41.10	41.30	41.50	41.70
Short Circuit Current-Isc(A)	18.06	18.11	18.16	18.21	18.26
Maximum Power Voltage-Vmpp(V)	34.04	34.22	34.42	34.60	34.80
Maximum Power Current-Impp(A)	17.05	17.10	17.15	17.20	17.25
Module Efficiency (%) ★	20.5	20.7	20.8	21.0	21.2

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)	638	644	649	655	660
Open Circuit Voltage-Voc(V)	40.90	41.10	41.30	41.50	41.70
Short Circuit Current-Isc(A)	19.87	19.92	19.98	20.03	20.09
Maximum Power Voltage-Vmpp(V)	34.04	34.22	34.42	34.60	34.80
Maximum Power Current-Impp(A)	18.76	18.81	18.87	18.92	18.98

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)

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Model Number	RSM120-8-580BMDG	RSM120-8-585BMDG	RSM120-8-590BMDG	RSM120-8-595BMDG	RSM120-8-600BMDG
Maximum Power-Pmax (Wp)	439.5	443.1	447.0	450.7	454.6
Open Circuit Voltage-Voc (V)	38.04	38.22	38.41	38.60	38.78
Short Circuit Current-Isc (A)	14.81	14.85	14.89	14.93	14.97
Maximum Power Voltage-Vmpp (V)	31.59	31.76	31.94	32.11	32.29
Maximum Power Current-Impp (A)	13.91	13.95	13.99	14.04	14.08

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

MECHANICAL DATA

	MECHANICAL DATA				
	Solar cells	Monocrystalline			
	Cell configuration	120 cells (6×10+6×10)			
	Module dimensions	2172×1303×35mm			
	Weight	35kg			
	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	35A
Limiting Reverse Current	35A

PACKAGING CONFIGURATION

	40ft(HQ)
Number of modules per container	527
Number of modules per pallet	31
Number of pallets per container	17
Packaging box dimensions (LxWxH) in mm	1350×1145×2310
Box gross weight[kg]	1130

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

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