



HIGH PERFORMANCE BIFACIAL PERC MONOCRYSTALLINE MODULE

























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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RSM120-8-585BMDG-610BMDG

585-610Wp **120 CELL Power Output Range** Mono PERC Module

1500VDC 21.6%

Maximum Efficiency Maximum System Voltage

KEY SALIENT FEATURES

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

Bifacial

PID

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 power tolerance of 0~+3%

Excellent PID resistance

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

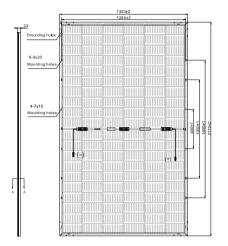
LINEAR PERFORMANCE WARRANTY

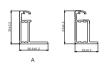
12 year Product Warranty / 30 year Linear Power Warranty

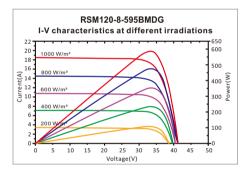


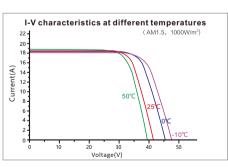


Dimensions of PV Module Unit: mm









Our Partners:

REM120-BMDG-12BB-EN-H1-1-2023

ELECTRICAL DATA (STC)

Model Number	RSM120-8-580BMDG	RSM120-8-585BMDG	RSM120-8-590BMDG	RSM120-8-595BMDG	RSM120-8-600BMDG	RSM120-8-605BMDG
Rated Power in Watts-Pmax(Wp)	580	585	590	595	600	605
Open Circuit Voltage-Voc(V)	40.90	41.10	41.30	41.50	41.70	41.90
Short Circuit Current-Isc(A)	18.06	18.11	18.16	18.21	18.26	18.32
Maximum Power Voltage-Vmpp(V)	34.04	34.22	34.42	34.60	34.80	34.98
Maximum Power Current-Impp(A)	17.05	17.10	17.15	17.20	17.25	17.30
Module Efficiency (%) ★	20.5	20.7	20.8	21.0	21.2	21.4

 $STC: Irradiance\ 1000\ W/m^2, Cell\ Temperature\ 25^{\circ}C, Air\ Mass\ AM1.5\ according\ to\ EN\ 60904-3.$

Bifacial factor: 70±10(%) ★ Module Efficiency (%): Round-off to the nearest number

Electrical characteristics with 10% rear side power gain

Total Equivalent power -Pmax (Wp)	644	649	655	660	666	671
Open Circuit Voltage-Voc(V)	41.10	41.30	41.50	41.70	41.90	42.20
Short Circuit Current-Isc(A)	19.92	19.98	20.03	20.09	20.15	20.21
Maximum Power Voltage-Vmpp(V)	34.22	34.42	34.60	34.80	34.98	35.18
Maximum Power Current-Impp(A)	18.81	18.87	18.92	18.98	19.03	19.09

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	RSM120-8-585BMDG	RSM120-8-590BMDG	RSM120-8-595BMDG	RSM120-8-600BMDG	RSM120-8-605BMDG	RSM120-8-610BMDG
Maximum Power-Pmax (Wp)	443.1	447.0	450.7	454.6	458.3	462.2
Open Circuit Voltage-Voc (V)	38.22	38.41	38.60	38.78	38.97	39.25
Short Circuit Current-Isc (A)	14.85	14.89	14.93	14.97	15.02	15.06
Maximum Power Voltage-Vmpp (V)	31.76	31.94	32.11	32.29	32.46	32.65
Maximum Power Current-Impp (A)	13.95	13.99	14.04	14.08	14.12	14.16

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

MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	120 cells (6×10+6×10)
Module dimensions	2172×1303×33mm
Weight	34.5kg
Superstrate	High Transmission, AR Coated Heat Strengthened Glass
Substrate	Heat Strengthened Glass
Frame	Anodized Aluminium Alloy , Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm², Positive(+)350mm, Negative(-)230mm (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	594
Number of modules per pallet	33
Number of pallets per container	18
Packaging box dimensions (LxWxH) in mm	1320×1125×2310
Box gross weight[kg]	1180

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.