

# HIGH PERFORMANCE BIFACIAL PERC MONOCRYSTALLINE MODULE

RSM120-6-300BMDG-320BMDG

120 CELL MONOCRYSTALLINE MODULE

300-320Wp POWER OUTPUT RANGE

1500VDC MAXIMUM SYSTEM VOLTAGE

19.0% MAXIMUM EFFICIENCY



## About Risen Energy

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.

## KEY SALIENT FEATURES



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



Bifacial technology enables additional energy harvesting from rear side (up to 25%)



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



ISO9001  
ISO14001  
OHSAS18001  
IEC TS 62941



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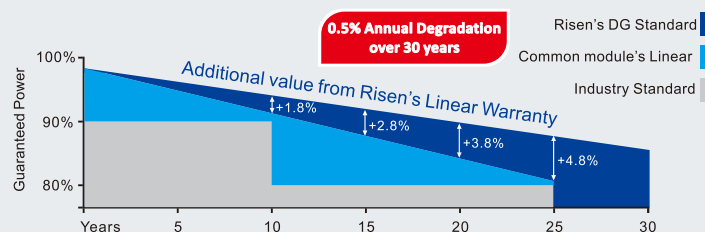
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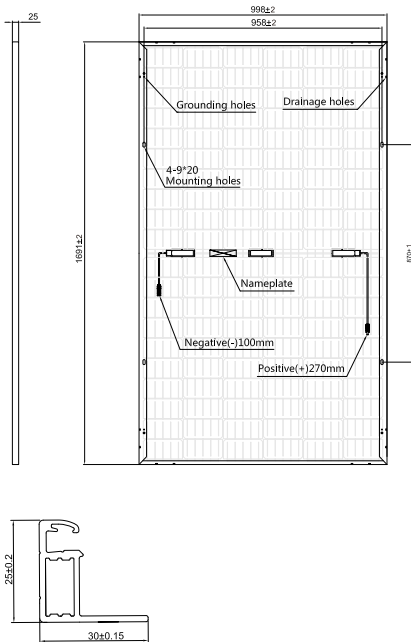
Website: [www.risenenergy.com](http://www.risenenergy.com)

## LINEAR PERFORMANCE WARRANTY

12 year Product Warranty / 30 year Linear Power Warranty



### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM120-6-300BMDG	RSM120-6-305BMDG	RSM120-6-310BMDG	RSM120-6-315BMDG	RSM120-6-320BMDG
Rated Power in Watts-Pmax(Wp)	300	305	310	315	320
Open Circuit Voltage-Voc(V)	39.40	39.50	39.70	39.80	40.00
Short Circuit Current-Isc(A)	9.70	9.80	9.90	10.00	10.10
Maximum Power Voltage-Vmpp(V)	33.00	33.20	33.35	33.55	33.70
Maximum Power Current-Impp(A)	9.10	9.20	9.30	9.40	9.50
Module Efficiency (%)	17.8	18.1	18.4	18.7	19.0

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
Bifacial factor: 75%±5%

### ELECTRICAL DATA (NMOT)

Model Number	RSM120-6-300BMDG	RSM120-6-305BMDG	RSM120-6-310BMDG	RSM120-6-315BMDG	RSM120-6-320BMDG
Maximum Power-Pmax (Wp)	224.5	228.3	231.8	235.7	239.3
Open Circuit Voltage-Voc (V)	36.30	36.40	36.50	36.60	36.80
Short Circuit Current-Isc (A)	7.95	8.04	8.12	8.20	8.28
Maximum Power Voltage-Vmpp (V)	30.20	30.40	30.50	30.70	30.90
Maximum Power Current-Impp (A)	7.43	7.51	7.59	7.67	7.75

NMOT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

### MECHANICAL DATA

Solar cells	Monocrystalline 156.75×78.375mm, 5BB
Cell configuration	120 cells (6×10+6×10)
Module dimensions	1691×998×25mm
Weight	22kg
Superstrate	2.0 mm, High Transmission, Low Iron, Tempered ARC Glass
Substrate	2.0 mm, Tempered Glass
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP67, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)270mm, Negative(-)100mm
Connector	Risen Twinsel PV-SY02, IP67

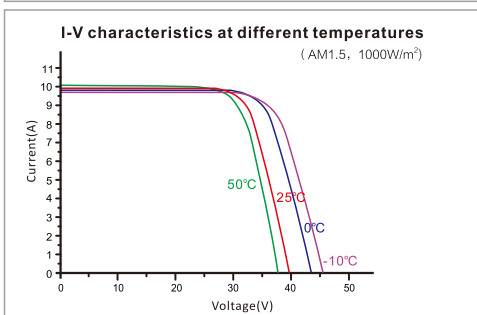
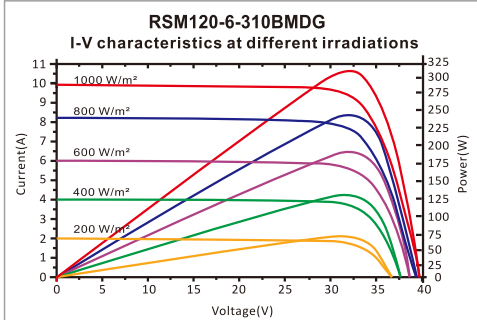
### TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	45°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.39%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

### PACKAGING CONFIGURATION

	40ft	20ft
Number of modules per container	1040	480
Number of modules per pallet	40	40
Number of pallets per container	26	12
Packaging box dimensions (LxWxH) in mm	1755×1100×1135	1755×1100×1135
Box gross weight[kg]	930	930

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