

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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RSM144-6-385BMDG-405BMDG

385-405Wp **144 CELL Power Output Range** Mono PERC Module

1500VDC 19.9%

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 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

Bifacial

PID

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

Module Imp binning radically reduces string mismatch losses

power loss from dirt and dust

Warranted reliability and stringent quality assurances well beyond certified requirements

Certified to withstand severe environmental conditions

Anti-reflective & anti-soiling surface minimise

- Severe salt mist, ammonia & blown sand resistance, for seaside, farm and desert environments
- Excellent mechanical load 2400Pa & snow load 5400Pa resistance

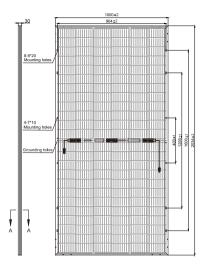
LINEAR PERFORMANCE WARRANTY

12 year Product Warranty / 30 year Linear Power Warranty

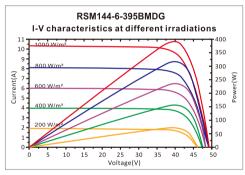


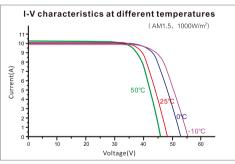


Dimensions of PV Module Unit: mm











ELECTRICAL DATA (STC)

| Model Number | RSM144-6-385BMDG | RSM144-6-390BMDG | RSM144-6-395BMDG | RSM144-6-400BMDG | RSM144-6-405BMDG |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|
| Rated Power in Watts-Pmax(Wp) | 385 | 390 | 395 | 400 | 405 |
| Open Circuit Voltage-Voc(V) | 48.15 | 48.30 | 48.45 | 48.60 | 48.75 |
| Short Circuit Current-Isc(A) | 10.20 | 10.30 | 10.40 | 10.50 | 10.60 |
| Maximum Power Voltage-Vmpp(V) | 40.15 | 40.25 | 40.35 | 40.45 | 40.55 |
| Maximum Power Current-Impp(A) | 9.60 | 9.70 | 9.80 | 9.90 | 10.00 |
| Module Efficiency (%) | 18.9 | 19.2 | 19.4 | 19.7 | 19.9 |

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3. Bifacial factor: $75\%\pm5\%$

ELECTRICAL DATA (NMOT)

| Model Number | RSM144-6-385BMDG | RSM144-6-390BMDG | RSM144-6-395BMDG | RSM144-6-400BMDG | RSM144-6-405BMDG |
|--------------------------------|------------------|------------------|------------------|------------------|------------------|
| Maximum Power-Pmax (Wp) | 288.1 | 291.8 | 295.6 | 299.3 | 303.1 |
| Open Circuit Voltage-Voc (V) | 44.30 | 44.40 | 44.60 | 44.70 | 44.90 |
| Short Circuit Current-Isc (A) | 8.36 | 8.45 | 8.53 | 8.61 | 8.69 |
| Maximum Power Voltage-Vmpp (V) | 36.80 | 36.90 | 37.00 | 37.05 | 37.14 |
| Maximum Power Current-Impp (A) | 7.83 | 7.92 | 8.00 | 8.08 | 8.16 |

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

MECHANICAL DATA

| Solar cells | Monocrystalline, 9BB |
|--------------------|---|
| Cell configuration | 144 cells (6×12+6×12) |
| Module dimensions | 2034×1000×30mm |
| Weight | 27kg |
| 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, IP68, 1500VDC, 3 Schottky bypass diodes |
| Cables | 4.0mm² (12AWG), Positive(+) 270mm, Negative(-) 100mm |
| Connector | Risen Twinsel PV-SY02, IP68 |

TEMPERATURE & MAXIMUM RATINGS

| Nominal Module Operating Temperature (NMOT) | 45°C±2°C |
|---|-------------|
| Temperature Coefficient of Voc | -0.28%/°C |
| Temperature Coefficient of Isc | 0.05%/°C |
| Temperature Coefficient of Pmax | -0.36%/°C |
| Operational Temperature | -40°C~+85°C |
| Maximum System Voltage | 1500VDC |
| Max Series Fuse Rating | 20A |
| Limiting Reverse Current | 20A |

PACKAGING CONFIGURATION

| | 40ft |
|--|----------------|
| Number of modules per container | 770 |
| Number of modules per pallet | 35 |
| Number of pallets per container | 22 |
| Packaging box dimensions (LxWxH) in mm | 2100×1130×1135 |
| Box gross weight[kg] | 1000 |

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

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