

# HIGH PERFORMANCE MONOCRYSTALLINE PERC 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.

Distributor in Vietnam: NGUYEN VINH TIEN CO., LTD Add: B11, Tan Phong Residential Area, Town 7, Tan Phong Ward, Bien Hoa City, Dong Nai Province.

Tel: +842513 680968 E-mail: nguyenvinhtien2013@gmail.com Fax: +842513 680421 Website: www.solar.net.vn



Preliminary For Global Market

# Draft

## RSM110-8-535M-555M

110 CELL

535-555Wp

Mono PERC Module

Power Output Range

1500VDC

21.2%

Maximum System Voltage

Maximum Efficiency

#### **KEY SALIENT FEATURES**

Bloomberg
TIER 1

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



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



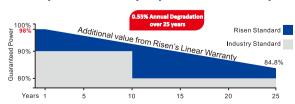
Certified to withstand severe environmental conditions



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

#### LINEAR PERFORMANCE WARRANTY

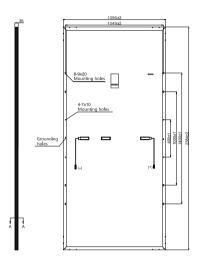
12 year Product Warranty / 25 year Linear Power Warranty



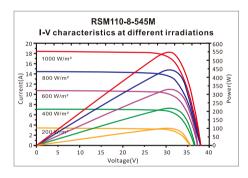
★ Please check the valid version of Limited Product Warranty which is officially released by Risen Energy Co., Ltd

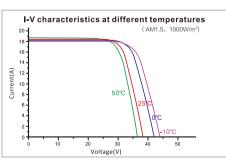


#### Dimensions of PV Module Unit: mm











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

Model Number	RSM110-8-535M	RSM110-8-540M	RSM110-8-545M	RSM110-8-550M	RSM110-8-555M
Rated Power in Watts-Pmax(Wp)	535	540	545	550	555
Open Circuit Voltage-Voc(V)	37.58	37.78	38.02	38.24	38.46
Short Circuit Current-Isc(A)	18.13	18.18	18.23	18.28	18.33
Maximum Power Voltage-Vmpp(V)	31.26	31.46	31.66	31.86	32.06
Maximum Power Current-Impp(A)	17.12	17.17	17.22	17.27	17.32
Module Efficiency (%) ★	20.5	20.7	20.9	21.0	21.2

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

★ Module Efficiency (%): Round-off to the nearest number

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

Model Number	RSM110-8-535M	RSM110-8-540M	RSM110-8-545M	RSM110-8-550M	RSM110-8-555M
Maximum Power-Pmax (Wp)	405.3	409.0	412.8	416.7	420.5
Open Circuit Voltage-Voc (V)	34.95	35.14	35.36	35.56	35.77
Short Circuit Current-Isc (A)	14.87	14.91	14.95	14.99	15.03
${\it Maximum Power Voltage-Vmpp}~(V)$	29.01	29.19	29.38	29.57	29.75
Maximum Power Current-Impp (A)	13.97	14.01	14.05	14.09	14.13

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

#### **MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	110 cells (5×11+5×11)
Module dimensions	2384×1096×35mm
Weight	29kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
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	30A
Limiting Reverse Current	30A

### PACKAGING CONFIGURATION

	40ft(HQ)
Number of modules per container	620
Number of modules per pallet	31
Number of pallets per container	20
Box gross weight[kg]	950

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

©2020 Risen Energy. All rights reserved. Specifications included in this datasheet are subject to change without notice.