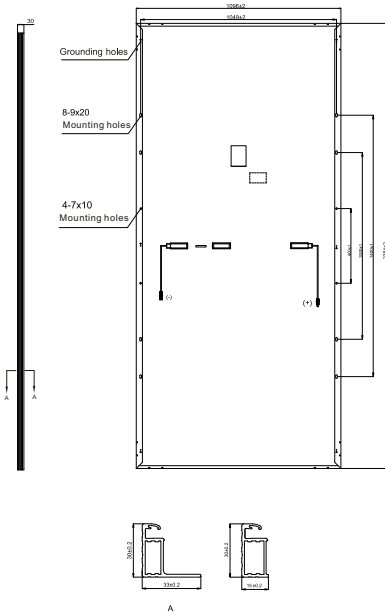


**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

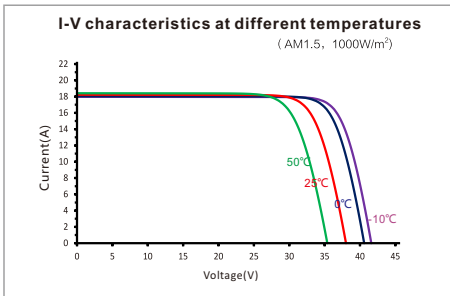
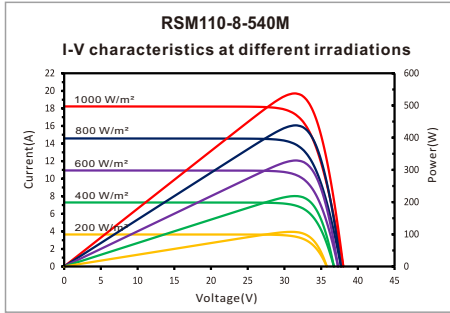
Model Type	RSM110-8-540M
Rated Power in Watts-Pmax(Wp)	540
Open Circuit Voltage-Voc(V)	37.78
Short Circuit Current-Isc(A)	18.18
Maximum Power Voltage-Vmpp(V)	31.46
Maximum Power Current-Impp(A)	17.17
Module Efficiency (%) *	20.7

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3  
 \* Module Efficiency(%): Round-off to the nearest number  
 Sorting and binning tolerances: 0-4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty  
 The first year degradation:2%,annual degradation:0.55%,power retention rate within 25 years:84.8%

**ELECTRICAL DATA (NMOT)**

Model Type	RSM110-8-540M
Maximum Power-Pmax (Wp)	409.0
Open Circuit Voltage-Voc (V)	35.14
Short Circuit Current-Isc (A)	14.91
Maximum Power Voltage-Vmpp (V)	29.19
Maximum Power Current-Impp (A)	14.01

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



**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	110 cells (5×11+5×11)
Module dimensions	2384×1096×30/35/40mm
Weight	27.0~34.0kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm <sup>2</sup> , Positive(+)350mm, Negative(-)230mm (Connector Included)
Connector	Zhejiang Twinsel Electronic Technology Co.,Ltd. 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
Fire Class According to UL790	CLASS C
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

**PACKAGING CONFIGURATION**

	40ft(HQ)
Number of modules per container	720
Number of modules per pallet	36
Number of pallets per container	20
Packaging box dimensions (LxWxH) in mm	2395×1120×1235
Box gross weight [kg]	1072



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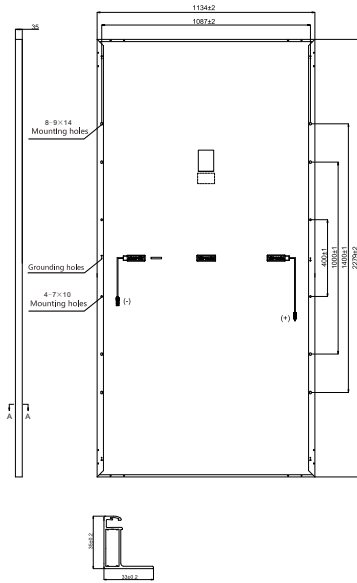
Website: www.risenenergy.com

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**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Type	RSM144-9-545M
Rated Power in Watts-Pmax(Wp)	545
Open Circuit Voltage-Voc(V)	49.70
Short Circuit Current-Isc(A)	13.84
Maximum Power Voltage-Vmpp(V)	42.11
Maximum Power Current-Impp(A)	12.96
Module Efficiency (%) *	21.1

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3  
 \* Module Efficiency(%): Round-off to the nearest number  
 Sorting and binning tolerances: 0-4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty  
 The first year degradation:2%,annual degradation:0.55%,power retention rate within 25 years:84.8%

**ELECTRICAL DATA (NMOT)**

Model Type	RSM144-9-545M
Maximum Power-Pmax (Wp)	405.8
Open Circuit Voltage-Voc (V)	46.87
Short Circuit Current-Isc (A)	11.35
Maximum Power Voltage-Vmpp (V)	38.90
Maximum Power Current-Impp (A)	10.43

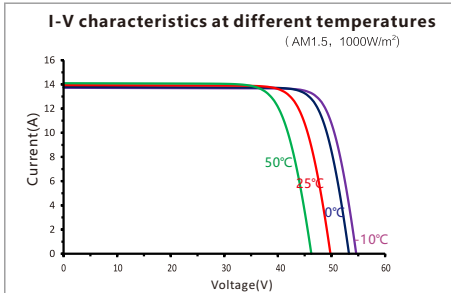
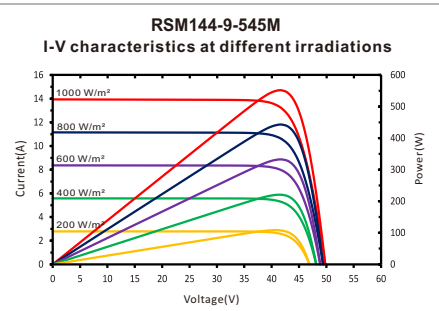
NMOT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2279/2278/2274/2266*1134*30/35/40mm Or 2256/2250*1132*30/35/40mm
Weight	27.0~38.0kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm <sup>2</sup> , Positive(+)+350mm, Negative(-)-230mm (Connector Included)
Connector	Zhejiang Twinsel Electronic Technology Co.,Ltd. PV-SY02, IP68

**TEMPERATURE & MAXIMUM RATINGS**

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Pmax	-0.34%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UL790	CLASS C
Max Series Fuse Rating	25A
Limiting Reverse Current	25A



**PACKAGING CONFIGURATION**

	40ft(HQ)
Number of modules per container	620
Number of modules per pallet	31
Number of pallets per container	20
Packaging box dimensions (LxWxH) in mm	2320×1130×1260
Box gross weight [kg]	908



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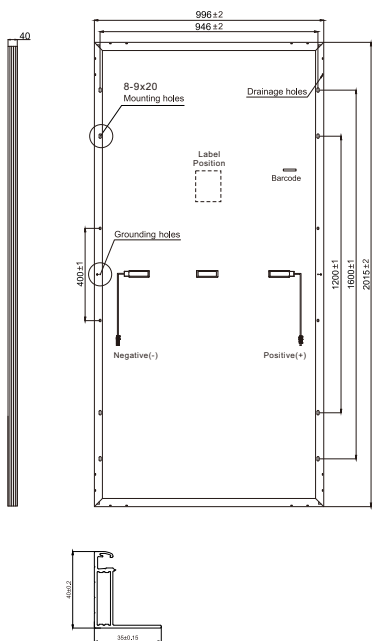
Website: www.risenenergy.com

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Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM144-6-395M	RSM144-6-400M	RSM144-6-405M	RSM144-6-410M	RSM144-6-415M	RSM144-6-420M
Rated Power in Watts-Pmax(Wp)	395	400	405	410	415	420
Open Circuit Voltage-Voc(V)	48.45	48.60	48.75	48.90	49.00	49.10
Short Circuit Current-Isc(A)	10.40	10.50	10.60	10.70	10.80	10.90
Maximum Power Voltage-Vmpp(V)	40.35	40.45	40.55	40.65	40.70	40.80
Maximum Power Current-Impp(A)	9.80	9.90	10.00	10.10	10.20	10.30
Module Efficiency (%) *	19.7	19.9	20.2	20.4	20.7	20.9

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3  
 \* Module Efficiency(%): Round-off to the nearest number  
 Sorting and binning tolerances: 0-4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty  
 The first year degradation:2%, annual degradation:0.55%, power retention rate within 25 years:84.8%

### ELECTRICAL DATA (NMOT)

Model Number	RSM144-6-395M	RSM144-6-400M	RSM144-6-405M	RSM144-6-410M	RSM144-6-415M	RSM144-6-420M
Maximum Power-Pmax (Wp)	295.6	299.3	303.1	306.9	309.2	312.7
Open Circuit Voltage-Voc (V)	44.60	44.70	44.90	44.99	45.63	45.70
Short Circuit Current-Isc (A)	8.53	8.61	8.69	8.77	8.80	8.87
Maximum Power Voltage-Vmpp (V)	37.00	37.05	37.14	37.24	37.30	37.40
Maximum Power Current-Impp (A)	8.00	8.08	8.16	8.24	8.29	8.36

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

### MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2010/2020/2015*992/998/996*25/30/35/40 or 2108*1048*30/35/40mm
Weight	16.5~30kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)-350mm, Negative(-)-350mm (Connector Included)
Connector	Zhejiang Twinsel Electronic Technology Co.,Ltd. PV-SY02, IP68

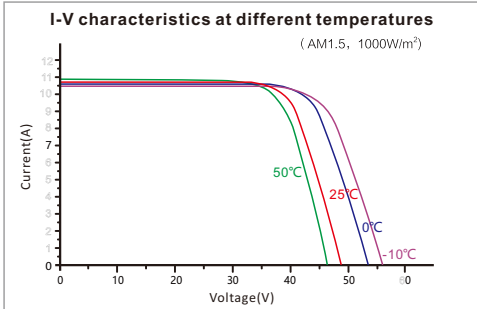
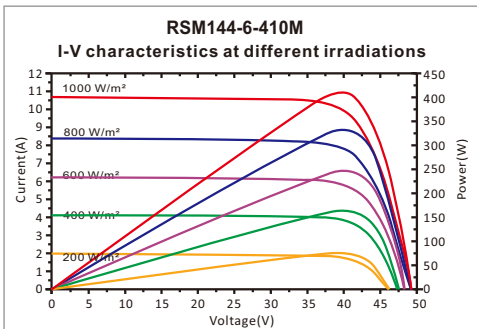
### TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

### PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	594	270
Number of modules per pallet	27	27
Number of pallets per container	22	10
Packaging box dimensions (LxWxH) in mm	2040×1130×1130	2040×1130×1130
Box gross weight[kg]	670	670

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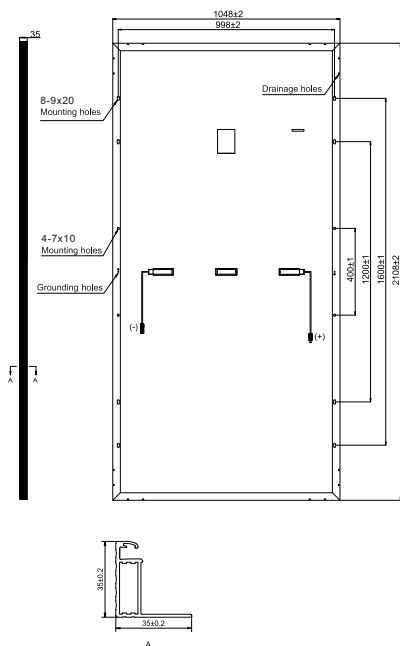


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### Dimensions of PV Module

Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM144-7-440M	RSM144-7-445M	RSM144-7-450M	RSM144-7-455M	RSM144-7-460M
Rated Power in Watts-Pmax(Wp)	440	445	450	455	460
Open Circuit Voltage-Voc(V)	49.50	49.60	49.70	49.80	49.90
Short Circuit Current-Isc(A)	11.30	11.40	11.50	11.60	11.70
Maximum Power Voltage-Vmpp(V)	41.13	41.25	41.30	41.40	41.50
Maximum Power Current-Impp(A)	10.70	10.80	10.90	11.00	11.10
Module Efficiency (%) *	19.9	20.1	20.4	20.6	20.8

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3

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

Sorting and binning tolerances: 0-4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

The first year degradation:2%,annual degradation:0.55%,power retention rate within 25 years:84.8%

### ELECTRICAL DATA (NMOT)

Model Number	RSM144-7-440M	RSM144-7-445M	RSM144-7-450M	RSM144-7-455M	RSM144-7-460M
Maximum Power-Pmax (Wp)	329.6	333.9	338.2	342.5	346.9
Open Circuit Voltage-Voc (V)	46.18	46.39	46.43	46.61	46.67
Short Circuit Current-Isc (A)	9.27	9.35	9.43	9.51	9.59
Maximum Power Voltage-Vmpp (V)	37.80	37.90	38.00	38.10	38.20
Maximum Power Current-Impp (A)	8.72	8.81	8.90	8.99	9.08

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

### MECHANICAL DATA

Solar cells	Monocrystalline 166×83mm
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2108*1048*30/35/40mm
Weight	23~28kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063-T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)350mm, Negative(-)230mm (Connector Included)
Connector	Zhejiang Twinsel Electronic Technology Co.,Ltd. PV-SY02, IP68

### TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

### PACKAGING CONFIGURATION

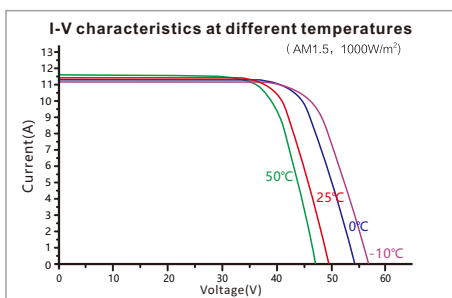
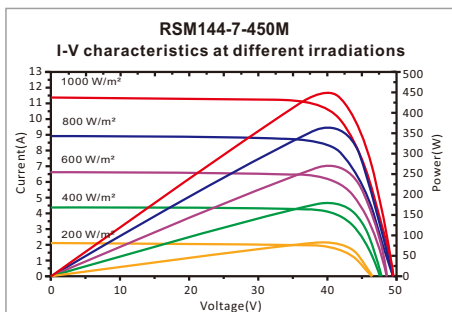
	40ft(HQ)	20ft
Number of modules per container	682	155
Number of modules per pallet	31	31
Number of pallets per container	22	5
Packaging box dimensions (LxWxH) in mm	2140×1130×1180	2140×1130×1180
Box gross weight[kg]	808	808

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THE POWER OF RISING VALUE



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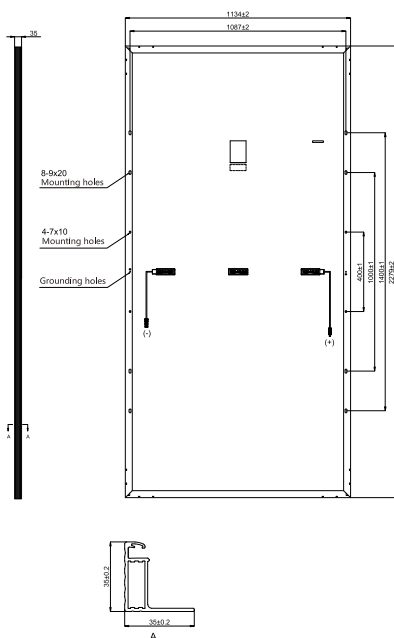
E-mail: marketing@risenenergy.com

Website: www.risenenergy.com

REM144-M-9BB-EN-H2-1-2023



**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM144-9-550M	RSM144-9-555M	RSM144-9-560M
Rated Power in Watts-Pmax(Wp)	<b>550</b>	<b>555</b>	<b>560</b>
Open Circuit Voltage-Voc(V)	49.80	49.91	50.01
Short Circuit Current-Isc(A)	13.94	14.04	14.14
Maximum Power Voltage-Vmpp(V)	42.20	42.29	42.38
Maximum Power Current-Impp(A)	13.04	13.13	13.22
Module Efficiency (%) *	21.3	21.5	21.7

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3  
 \* Module Efficiency(%): Round-off to the nearest number  
 Sorting and binning tolerances: 0-4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM144-9-550M	RSM144-9-555M	RSM144-9-560M
Maximum Power-Pmax (Wp)	409.4	413.3	417.1
Open Circuit Voltage-Voc (V)	46.96	47.07	47.17
Short Circuit Current-Isc (A)	11.43	11.51	11.59
Maximum Power Voltage-Vmpp (V)	39.00	39.10	39.20
Maximum Power Current-Impp (A)	10.50	10.57	10.64

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2279/2278/2274/2266*1134*35/40mm, 2256/2250*1132*35/40mm
Weight	27~38kg
Superstrate	3.2/4.0 mm, High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)350mm, Negative(-)230mm (Connector Included ) or customized length
Connector	Risen Twinsel PV-SY02 or MC4 EVO2, IP68

**TEMPERATURE & MAXIMUM RATINGS**

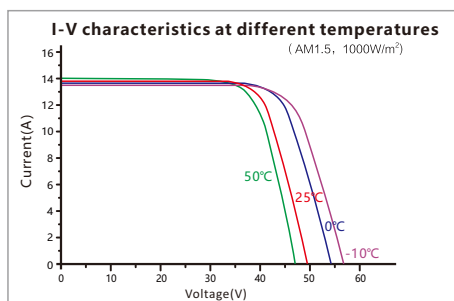
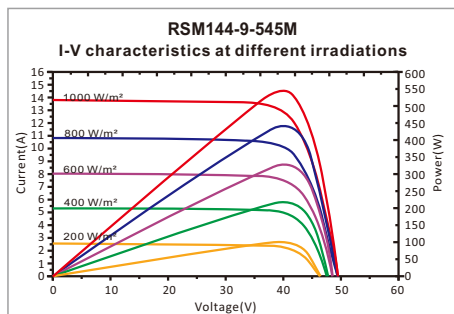
Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Pmax	-0.35%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	25A
Limiting Reverse Current	25A

**PACKAGING CONFIGURATION**

	40ft(HQ)
Number of modules per container	620
Number of modules per pallet	31
Number of pallets per container	20
Packaging box dimensions (LxWxH) in mm	2325×1150×1250
Box gross weight[kg]	910

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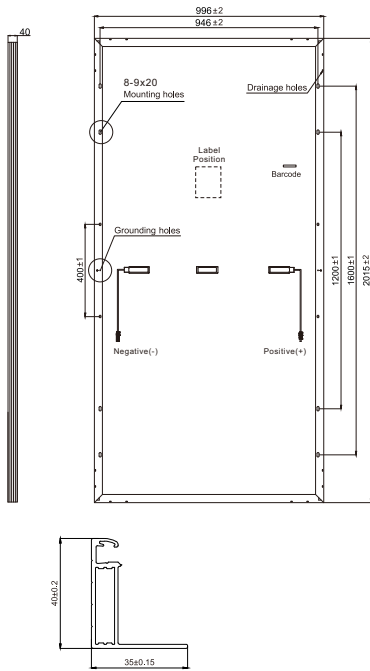


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REM144-M-10BB-EN-H1-2-2022-AU

**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM144-6-395M	RSM144-6-400M	RSM144-6-405M	RSM144-6-410M	RSM144-6-415M	RSM144-6-420M
Rated Power in Watts-Pmax(Wp)	395	400	405	410	415	420
Open Circuit Voltage-Voc(V)	48.45	48.60	48.75	48.90	49.00	49.10
Short Circuit Current-Isc(A)	10.40	10.50	10.60	10.70	10.80	10.90
Maximum Power Voltage-Vmpp(V)	40.35	40.45	40.55	40.65	40.70	40.80
Maximum Power Current-Impp(A)	9.80	9.90	10.00	10.10	10.20	10.30
Module Efficiency (%) *	19.7	19.9	20.2	20.4	20.7	20.9

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3

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

Sorting and binning tolerances: 0-4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance ±4% Open Circuit Voltage tolerance: ±3%

12 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM144-6-395M	RSM144-6-400M	RSM144-6-405M	RSM144-6-410M	RSM144-6-415M	RSM144-6-420M
Maximum Power-Pmax (Wp)	295.6	299.3	303.1	306.9	309.2	312.7
Open Circuit Voltage-Voc (V)	44.60	44.70	44.90	44.99	45.63	45.70
Short Circuit Current-Isc (A)	8.53	8.61	8.69	8.77	8.80	8.87
Maximum Power Voltage-Vmpp (V)	37.00	37.05	37.14	37.24	37.30	37.40
Maximum Power Current-Impp (A)	8.00	8.08	8.16	8.24	8.29	8.36

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2010/2020/2015*992/998/996*25/30/35/40 or 2108*1048*30/35/40mm
Weight	16.5~30kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (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	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

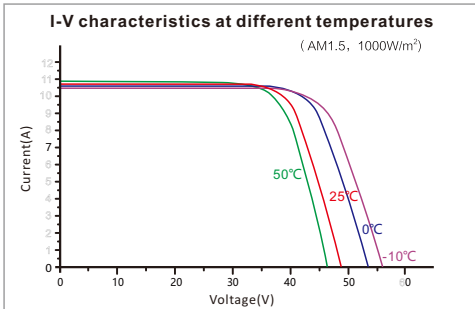
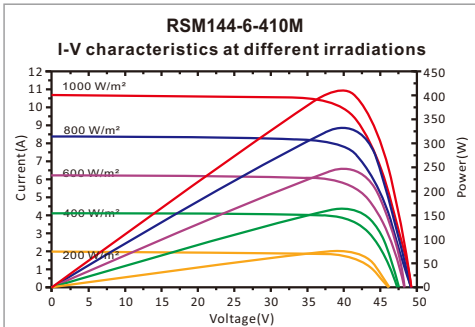
**PACKAGING CONFIGURATION**

	40ft(HQ)	20ft
Number of modules per container	594	270
Number of modules per pallet	27	27
Number of pallets per container	22	10
Packaging box dimensions (LxWxH) in mm	2040×1130×1130	2040×1130×1130
Box gross weight[kg]	670	670

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

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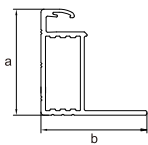
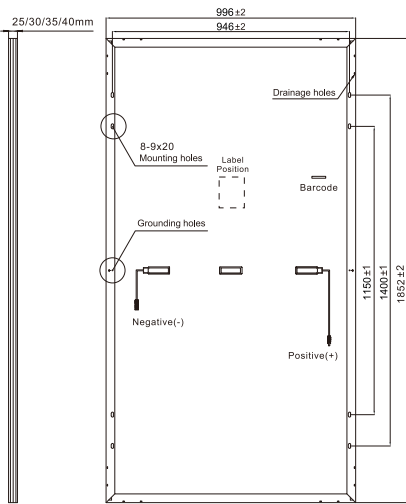
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Website: www.risenenergy.com

REM144-M-9BB-EN-H1-1-2023-AU

**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM132-6-370M
Rated Power in Watts-Pmax(Wp)	370
Open Circuit Voltage-Voc(V)	44.20
Short Circuit Current-Isc(A)	10.48
Maximum Power Voltage-Vmpp(V)	37.50
Maximum Power Current-Impp(A)	9.88
Module Efficiency (%)	20.1

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3  
 \* Module Efficiency(%): Round-off to the nearest number  
 Sorting and binning tolerances: 0-4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM132-6-370M
Maximum Power-Pmax (Wp)	276.9
Open Circuit Voltage-Voc (V)	40.70
Short Circuit Current-Isc (A)	8.59
Maximum Power Voltage-Vmpp (V)	34.40
Maximum Power Current-Impp (A)	8.06

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	132 cells (6×11+6×11)
Module dimensions	1852×996×25/30/35/40mm
Weight	20~24kg
Superstrate	3.2/4.0 mm, High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)270mm, Negative(-)100mm
Connector	Risen Twinsel PV-SY02, IP68

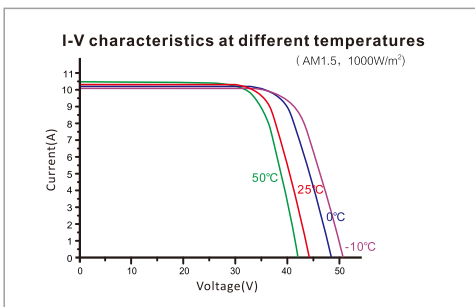
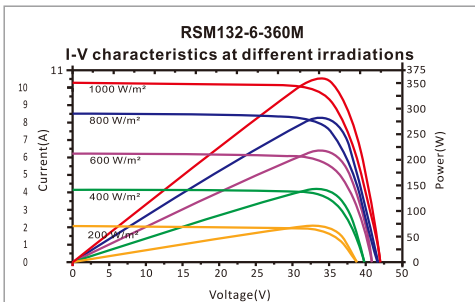
**TEMPERATURE & MAXIMUM RATINGS**

Nominal Module Operating Temperature (NMOT)	45°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

**PACKAGING CONFIGURATION**

eg. 1852×996×35mm	40ft	20ft
Number of modules per container	720	360
Number of modules per pallet	30	30
Number of pallets per container	24	12
Packaging box dimensions (LxWxH) in mm	1880×1105×1130	1880×1105×1130
Box gross weight[kg]	665	665

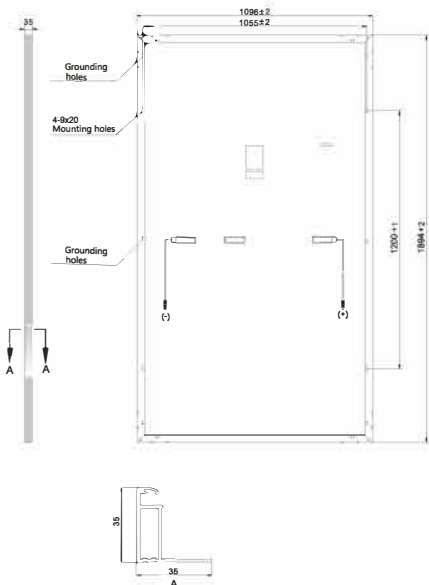
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 Website: www.risenenergy.com

**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM130-8-440M
Rated Power in Watts-Pmax(Wp)	440
Open Circuit Voltage-Voc(V)	44.85
Short Circuit Current-Isc(A)	12.50
Maximum Power Voltage-Vmpp(V)	37.34
Maximum Power Current-Impp(A)	11.79
Module Efficiency (%) *	21.2

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
 \* Module Efficiency (%): Round-off to the nearest number  
 Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM130-8-440M
Maximum Power-Pmax (Wp)	333.4
Open Circuit Voltage-Voc (V)	41.71
Short Circuit Current-Isc (A)	10.25
Maximum Power Voltage-Vmpp (V)	34.65
Maximum Power Current-Impp (A)	9.62

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	130 cells (5×13+5×13)
Module dimensions	1894×1096×35/40mm
Weight	22~28kg
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	4.0mm <sup>2</sup> (12AWG), Positive(+)350mm, Negative(-)350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68

**TEMPERATURE & MAXIMUM RATINGS**

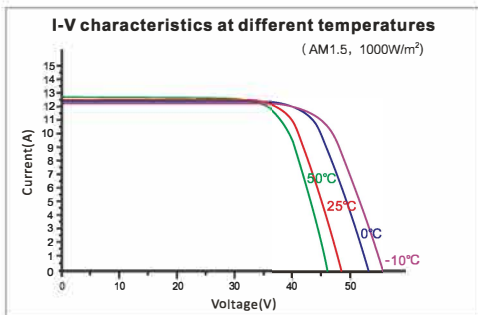
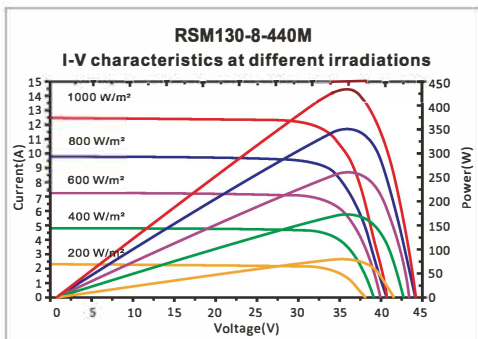
Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pmax	-0.34%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

**PACKAGING CONFIGURATION**

	40ft(HQ)	20ft
Number of modules per container	864	180
Number of modules per pallet	36	36
Number of pallets per container	24	5
Packaging box dimensions (LxWxH) in mm	1910×1120×1236	1910×1120×1236
Box gross weight[kg]	860	860

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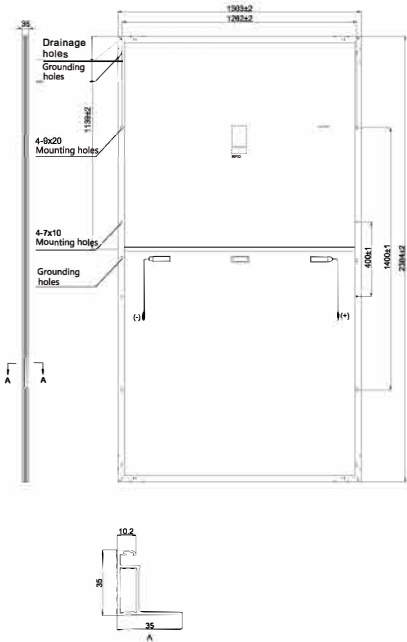
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 REM130-M-9BB-EN-H1-1-2022-CEC

**Dimensions of PV Module** Unit:mm



**ELECTRICAL DATA (STC)**

Model Number	RSM132-8-635M	RSM132-8-640M	RSM132-8-645M	RSM132-8-650M	RSM132-8-655M
Rated Power in Watts-Pmax(Wp)	<b>635</b>	<b>640</b>	<b>645</b>	<b>650</b>	<b>655</b>
Open Circuit Voltage-Voc(V)	44.75	44.95	45.15	45.35	45.55
Short Circuit Current-Isc(A)	18.08	18.13	18.18	18.23	18.28
Maximum Power Voltage-Vmpp(V)	37.22	37.40	37.58	37.76	37.94
Maximum Power Current-Imp(A)	17.07	17.12	17.17	17.22	17.27
Module Efficiency (%) *	20.4	20.6	20.8	20.9	21.1

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
 \* Module Efficiency (%): Round-off to the nearest number  
 Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM132-8-635M	RSM132-8-640M	RSM132-8-645M	RSM132-8-650M	RSM132-8-655M
Maximum Power-Pmax (Wp)	481.1	484.9	488.6	492.4	496.2
Open Circuit Voltage-Voc (V)	41.62	41.81	41.99	42.18	42.36
Short Circuit Current-Isc (A)	14.83	14.87	14.91	14.95	14.99
Maximum Power Voltage-Vmpp (V)	34.54	34.71	34.87	35.04	35.21
Maximum Power Current-Imp (A)	13.93	13.97	14.01	14.05	14.09

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	132 cells (6×11+6×11)
Module dimensions	2384×1303×35/40mm
Weight	32~34kg (approx)
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6005-2T6, Silver Color/ High strength alloy steel
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)350mm, Negative(-)350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68

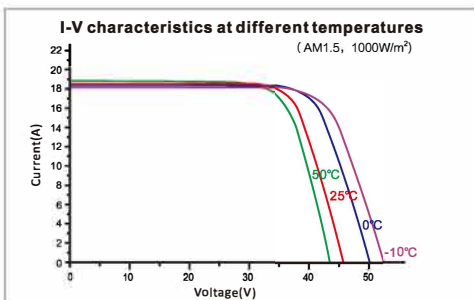
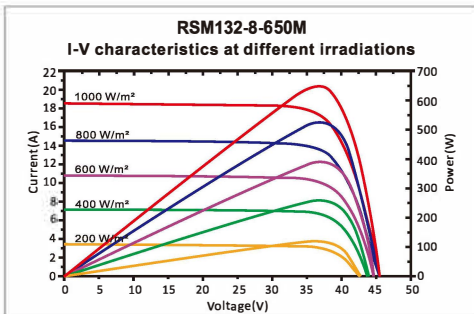
**TEMPERATURE & MAXIMUM RATINGS**

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
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

**PACKAGING CONFIGURATION**

	40ft(HQ)
Number of modules per container	558
Number of modules per pallet	31
Number of pallets per container	18
Box gross weight[kg]	1105

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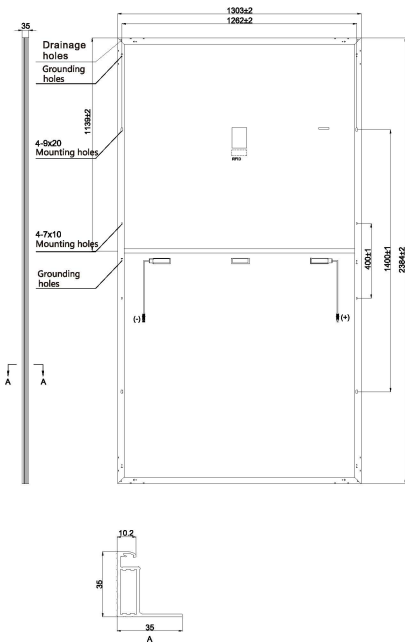


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 REM132-M-12BB-EN-H1-1-2022-CEC



**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM132-8-660M	RSM132-8-665M	RSM132-8-670M
Rated Power in Watts-Pmax(Wp)	<b>660</b>	<b>665</b>	<b>670</b>
Open Circuit Voltage-Voc(V)	45.75	45.95	46.15
Short Circuit Current-Isc(A)	18.33	18.38	18.43
Maximum Power Voltage-Vmpp(V)	38.12	38.30	38.48
Maximum Power Current-Impp(A)	17.32	17.37	17.42
Module Efficiency (%) ★	21.2	21.4	21.6

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
 ★ Module Efficiency (%): Round-off to the nearest number  
 Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM132-8-660M	RSM132-8-665M	RSM132-8-670M
Maximum Power-Pmax (Wp)	500.0	503.8	507.6
Open Circuit Voltage-Voc (V)	42.55	42.73	42.92
Short Circuit Current-Isc (A)	15.03	15.07	15.11
Maximum Power Voltage-Vmpp (V)	35.38	35.54	35.71
Maximum Power Current-Impp (A)	14.13	14.17	14.21

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	132 cells (6×11+6×11)
Module dimensions	2384×1303×35/40mm
Weight	32~34kg (approx)
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6005-2T6, Silver Color/ High strength alloy steel
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)350mm, Negative(-)350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68

**TEMPERATURE & MAXIMUM RATINGS**

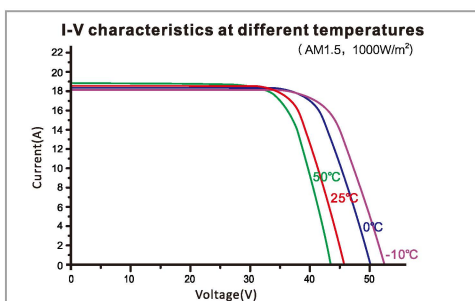
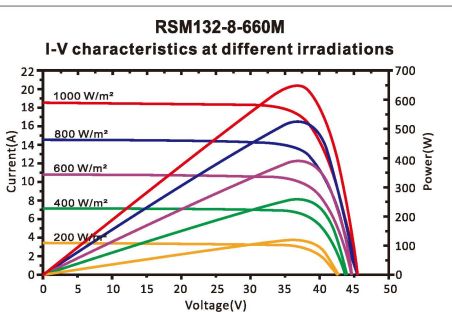
Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pmax	-0.34%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

**PACKAGING CONFIGURATION**

	40ft(HQ)
Number of modules per container	558
Number of modules per pallet	31
Number of pallets per container	18
Box gross weight[kg]	1105

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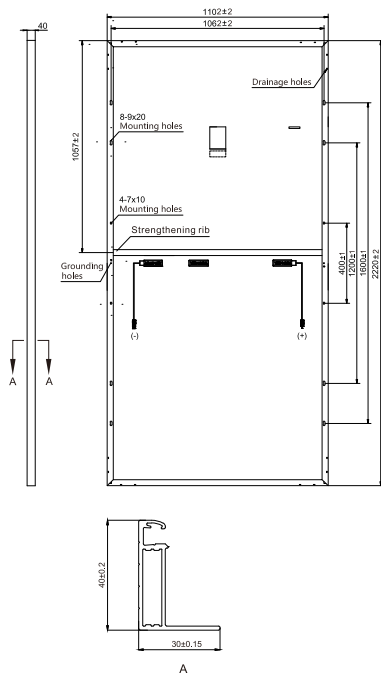
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 REM132-M-12BB-EN-H1-1-2022-CEC

### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM150-8-505M	RSM150-8-510M	RSM150-8-515M
Rated Power in Watts-Pmax(Wp)	505	510	515
Open Circuit Voltage-Voc(V)	51.23	51.45	51.67
Short Circuit Current-Isc(A)	12.53	12.60	12.67
Maximum Power Voltage-Vmpp(V)	43.10	43.32	43.54
Maximum Power Current-Impp(A)	11.74	11.80	11.86
Module Efficiency (%) *	20.6	20.8	21.1

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3% Output power tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM150-8-505M	RSM150-8-510M	RSM150-8-515M
Maximum Power-Pmax (Wp)	383.2	387.1	391.0
Open Circuit Voltage-Voc (V)	47.64	47.85	48.05
Short Circuit Current-Isc (A)	10.27	10.33	10.39
Maximum Power Voltage-Vmpp (V)	40.00	40.20	40.41
Maximum Power Current-Impp (A)	9.58	9.63	9.63

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

### MECHANICAL DATA

Solar cells	Monocrystalline 210×70mm
Cell configuration	150 cells (5×15+5×15)
Module dimensions	2220x1108x40mm or 2220x1102x40mm
Weight	28~29kg (approx)
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	4.0mm <sup>2</sup> (12AWG), Positive(+) 270mm, Negative(-) 270mm
Connector	Risen Twinsel PV-SY02, IP68

### TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°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
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

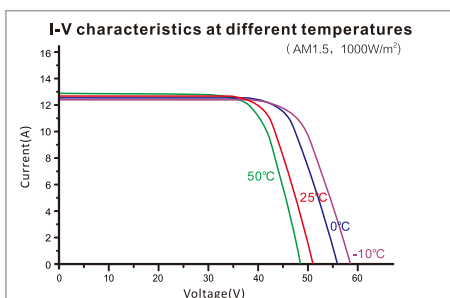
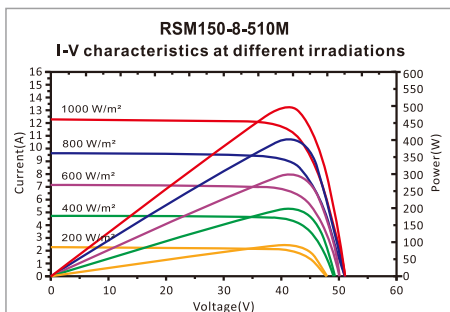
### PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	540	135
Number of modules per pallet	27	27
Number of pallets per container	20	5
Packaging box dimensions (LxWxH) in mm	2250×1130×1235	2250×1130×1235
Box gross weight[kg]	810	810

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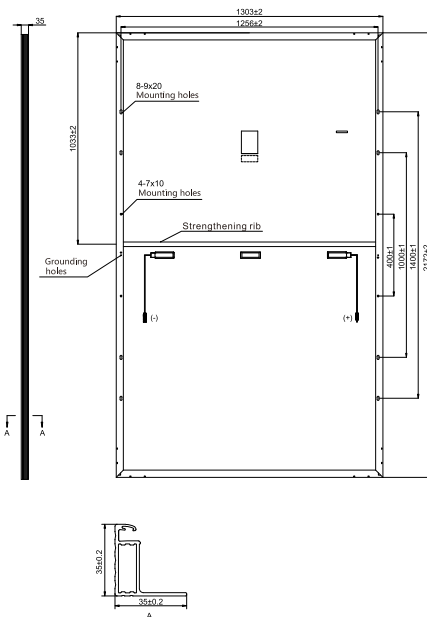
Website: www.risenenergy.com

REM150-M-9BB-EN-H1-5-2020



### Dimensions of PV Module

Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM120-8-610M
Rated Power in Watts-Pmax(Wp)	<b>610</b>
Open Circuit Voltage-Voc(V)	42.00
Short Circuit Current-Isc(A)	18.42
Maximum Power Voltage-Vmpp(V)	35.08
Maximum Power Current-Impp(A)	17.40
Module Efficiency (%) *	21.6

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3% Output power tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM120-8-610M
Maximum Power-Pmax (Wp)	462.2
Open Circuit Voltage-Voc (V)	39.06
Short Circuit Current-Isc (A)	15.10
Maximum Power Voltage-Vmpp (V)	32.55
Maximum Power Current-Impp (A)	14.20

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

### MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	120 cells (6×10×6×10)
Module dimensions	2172x1303x35/40mm
Weight	30~34kg (approx)
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	4.0mm <sup>2</sup> (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
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

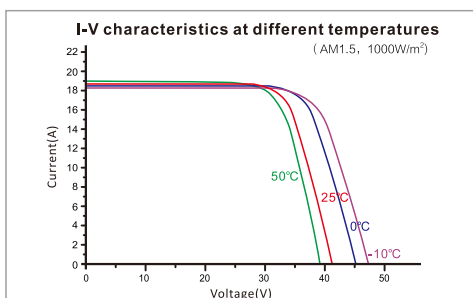
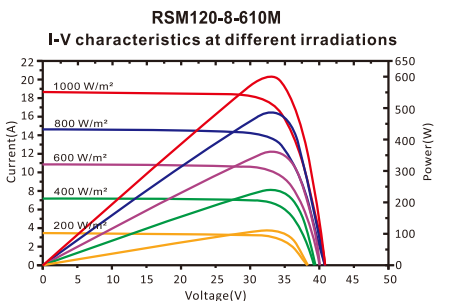
### PACKAGING CONFIGURATION

	40ft(HQ)
Number of modules per container	527
Number of modules per pallet	31
Number of pallets per container	17
Box gross weight[kg]	1000

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

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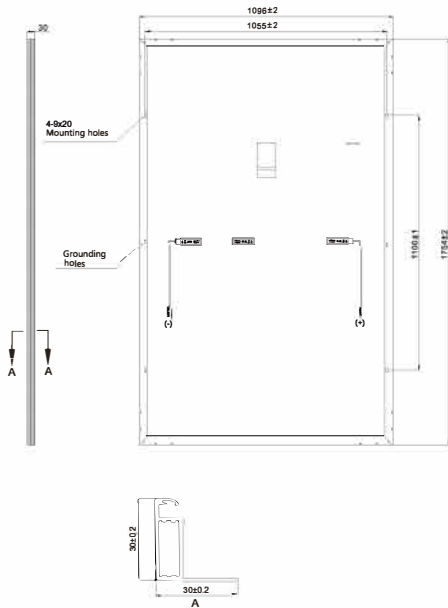
Fax: +86-574-59953599

E-mail: marketing@risenenergy.com

Website: www.risenenergy.com

REM120-M-12BB-EN-H2-5-2020-CEC-AU

**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM40-8-390MB	RSM40-8-395MB	RSM40-8-400MB
Rated Power in Watts-Pmax(Wp)	<b>390</b>	<b>395</b>	<b>400</b>
Open Circuit Voltage-Voc(V)	40.69	41.00	41.30
Short Circuit Current-Isc(A)	12.21	12.27	12.34
Maximum Power Voltage-Vmpp(V)	33.88	34.14	34.39
Maximum Power Current-Imp(A)	11.52	11.58	11.64
Module Efficiency (%) *	20.3	20.5	20.8

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3  
 \* Module Efficiency (%): Round-off to the nearest number  
 Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3% Output power tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM40-8-390MB	RSM40-8-395MB	RSM40-8-400MB
Maximum Power-Pmax (Wp)	295.6	299.4	303.1
Open Circuit Voltage-Voc (V)	37.84	38.13	38.41
Short Circuit Current-Isc (A)	10.01	10.07	10.12
Maximum Power Voltage-Vmpp (V)	31.44	31.68	31.91
Maximum Power Current-Imp (A)	9.40	9.45	9.50

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	120 cells (5×12+5×12)
Module dimensions	1754x1096/1108x30/35mm
Weight	21~24kg approx
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Back-sheet (Front side: Black, Back side: White)
Frame	Anodized Aluminium Alloy type 6063T5, Black
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)/350mm, Negative(-)/350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68

**TEMPERATURE & MAXIMUM RATINGS**

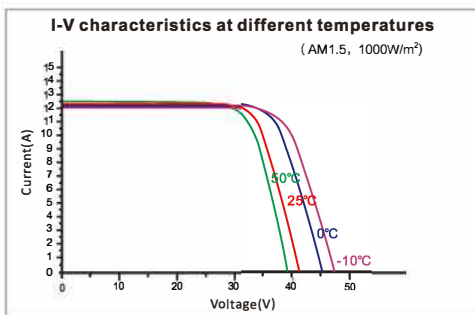
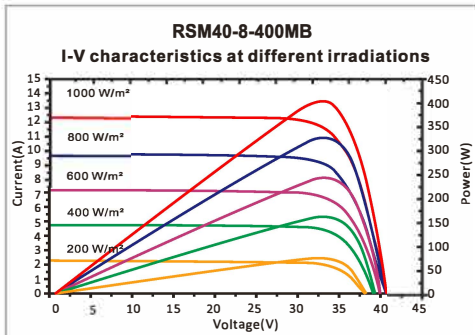
Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pmax	-0.34%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

**PACKAGING CONFIGURATION**

	40ft(HQ)	20ft
Number of modules per container	936	180
Number of modules per pallet	36	36
Number of pallets per container	26	5
Box gross weight[kg]	820	820

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.  
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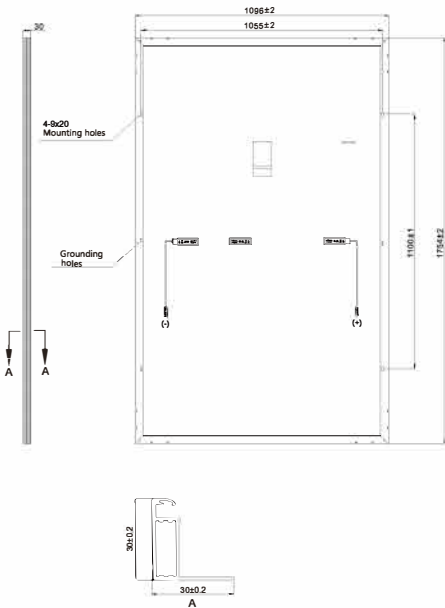
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 Website: www.risenenergy.com  
 REM40-MB-9BB-EN-H1-2-2021

**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM40-8-405MB	RSM40-8-410MB	RSM40-8-415MB
Rated Power in Watts-Pmax(Wp)	<b>405</b>	<b>410</b>	<b>415</b>
Open Circuit Voltage-Voc(V)	41.60	41.90	42.20
Short Circuit Current-Isc(A)	12.40	12.47	12.53
Maximum Power Voltage-Vmpp(V)	34.64	34.89	35.14
Maximum Power Current-Imp(A)	11.70	11.76	11.82
Module Efficiency (%) *	21.1	21.3	21.6

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3% Output power tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM40-8-405MB	RSM40-8-410MB	RSM40-8-415MB
Maximum Power-Pmax (Wp)	306.9	310.7	314.5
Open Circuit Voltage-Voc (V)	38.69	38.97	39.25
Short Circuit Current-Isc (A)	10.17	10.22	10.27
Maximum Power Voltage-Vmpp (V)	32.15	32.38	32.61
Maximum Power Current-Imp (A)	9.55	9.60	9.65

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	120 cells (5×12+5×12)
Module dimensions	1754x1096/1108x30/35mm
Weight	21~24kg approx
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Back-sheet (Front side: Black, Back side: White)
Frame	Anodized Aluminium Alloy type 6063T5, Black
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (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
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

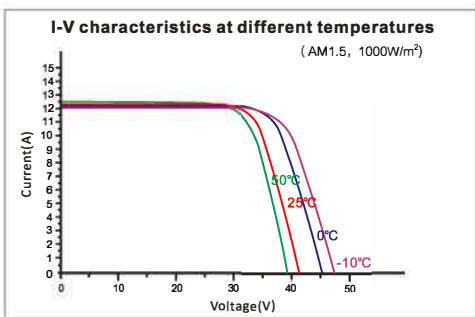
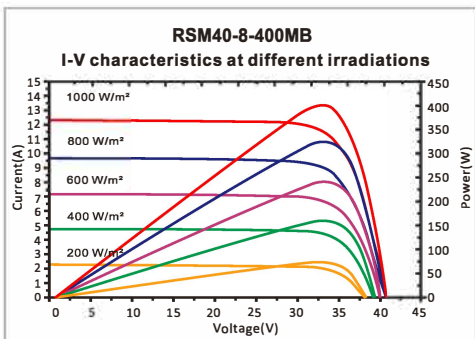
**PACKAGING CONFIGURATION**

	40ft(HQ)	20ft
Number of modules per container	936	180
Number of modules per pallet	36	36
Number of pallets per container	26	5
Box gross weight[kg]	820	820

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

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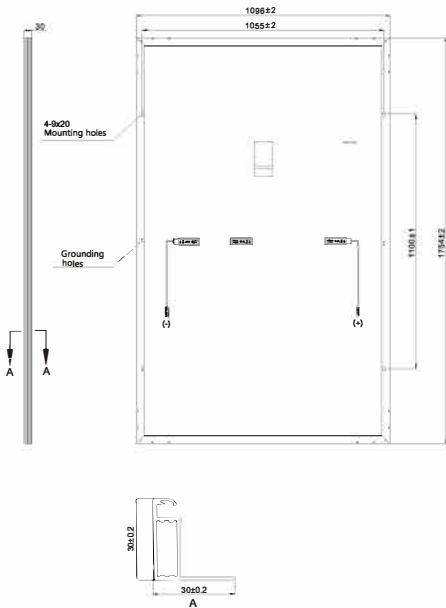
Fax: +86-574-59953599

E-mail: marketing@risenenergy.com

Website: www.risenenergy.com

REM40-MB-9BB-EN-H1-2-2021

### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM40-8-390M	RSM40-8-395M	RSM40-8-400M
Rated Power in Watts-Pmax(Wp)	<b>390</b>	<b>395</b>	<b>400</b>
Open Circuit Voltage-Voc(V)	40.69	41.00	41.30
Short Circuit Current-Isc(A)	12.21	12.27	12.34
Maximum Power Voltage-Vmpp(V)	33.88	34.14	34.39
Maximum Power Current-Imp(A)	11.52	11.58	11.64
Module Efficiency (%) *	20.3	20.5	20.8

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3% Output power tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM40-8-390M	RSM40-8-395M	RSM40-8-400M
Maximum Power-Pmax(Wp)	295.6	299.4	303.1
Open Circuit Voltage-Voc(V)	37.84	38.13	38.41
Short Circuit Current-Isc(A)	10.01	10.07	10.12
Maximum Power Voltage-Vmpp(V)	31.44	31.68	31.91
Maximum Power Current-Imp(A)	9.40	9.45	9.50

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

### MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	120 cells (5×12+5×12)
Module dimensions	1754x1096/1108x30/35mm
Weight	21~24kg approx
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6005-2T6
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (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
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

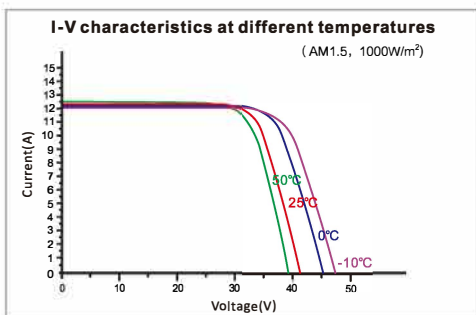
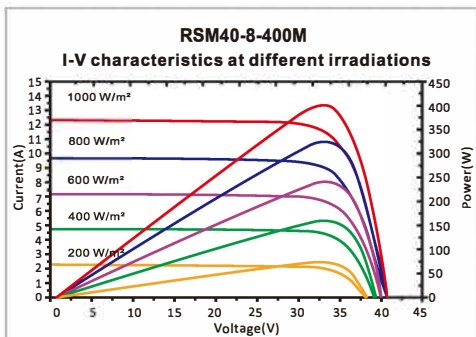
### PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	936	180
Number of modules per pallet	36	36
Number of pallets per container	26	5
Box gross weight[kg]	820	820

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

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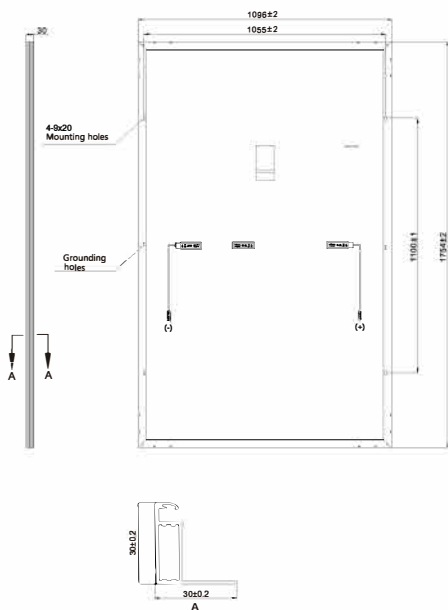
Fax: +86-574-59953599

E-mail: marketing@risenenergy.com

Website: www.risenenergy.com

REM40-M-9BB-EN-H1-2-2021

### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM40-8-405M	RSM40-8-410M	RSM40-8-415M
Rated Power in Watts-Pmax(Wp)	405	410	415
Open Circuit Voltage-Voc(V)	41.60	41.90	42.20
Short Circuit Current-Isc(A)	12.40	12.47	12.53
Maximum Power Voltage-Vmpp(V)	34.64	34.89	35.14
Maximum Power Current-Imp(A)	11.70	11.76	11.82
Module Efficiency (%) *	21.1	21.3	21.6

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3% Output power tolerance: ±3%  
15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM40-8-405M	RSM40-8-410M	RSM40-8-415M
Maximum Power-Pmax(Wp)	306.9	310.7	314.5
Open Circuit Voltage-Voc(V)	38.69	38.97	39.25
Short Circuit Current-Isc(A)	10.17	10.22	10.27
Maximum Power Voltage-Vmpp(V)	32.15	32.38	32.61
Maximum Power Current-Imp(A)	9.55	9.60	9.65

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

### MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	120 cells (5×12+5×12)
Module dimensions	1754x1096/1108x30/35mm
Weight	21~24kg approx
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6005-2T6
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (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
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

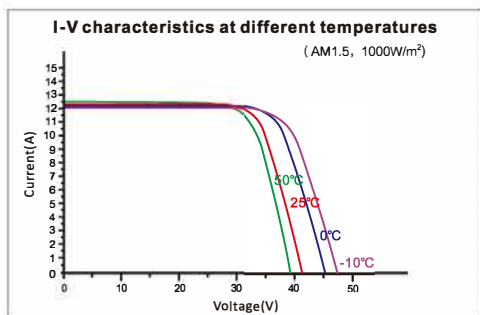
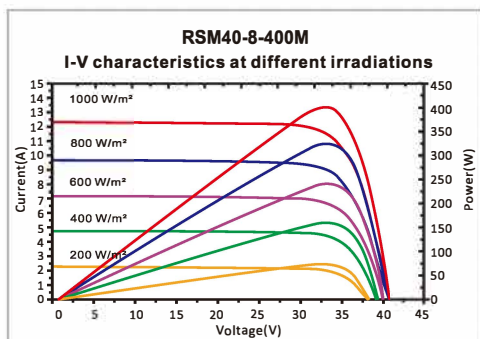
### PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	936	180
Number of modules per pallet	36	36
Number of pallets per container	26	5
Box gross weight[kg]	820	820

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

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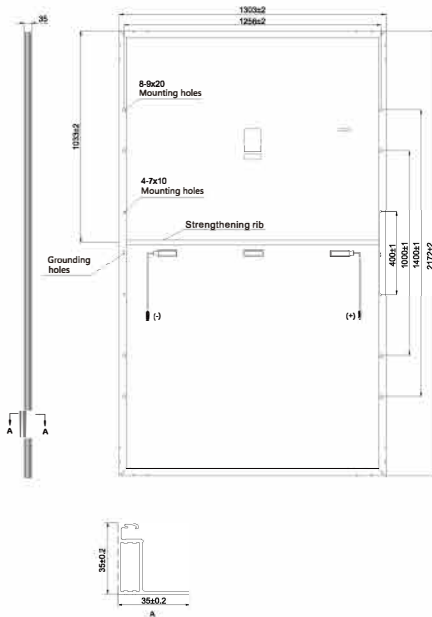
E-mail: marketing@risenenergy.com

Website: www.risenenergy.com

REM40-M-9BB-EN-H1-2-2021



**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM120-8-590M	RSM120-8-595M	RSM120-8-600M	RSM120-8-605M
Rated Power in Watts-Pmax(Wp)	590	595	600	605
Open Circuit Voltage-Voc(V)	41.20	41.40	41.60	41.80
Short Circuit Current-Isc(A)	18.21	18.26	18.32	18.37
Maximum Power Voltage-Vmpp(V)	34.32	34.50	34.70	34.88
Maximum Power Current-Imp(A)	17.20	17.25	17.30	17.35
Module Efficiency (%) *	20.8	21.0	21.2	21.4

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
 \* Module Efficiency (%): Round-off to the nearest number  
 Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM120-8-590M	RSM120-8-595M	RSM120-8-600M	RSM120-8-605M
Maximum Power-Pmax (Wp)	447.0	450.7	454.6	458.3
Open Circuit Voltage-Voc (V)	38.32	38.50	38.69	38.87
Short Circuit Current-Isc (A)	14.93	14.97	15.02	15.06
Maximum Power Voltage-Vmpp (V)	31.85	32.02	32.20	32.37
Maximum Power Current-Imp (A)	14.04	14.08	14.12	14.16

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	120 cells (6×10×6×10)
Module dimensions	2172×1303×35/40mm
Weight	30~34kg (approx)
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	4.0mm <sup>2</sup> (12AWG), Positive(+)350mm, Negative(-)350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68

**TEMPERATURE & MAXIMUM RATINGS**

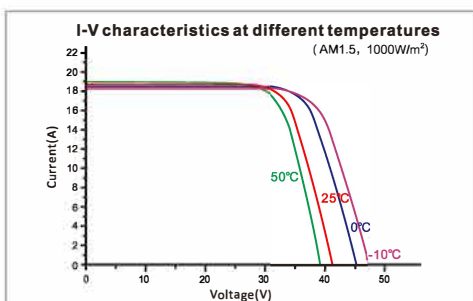
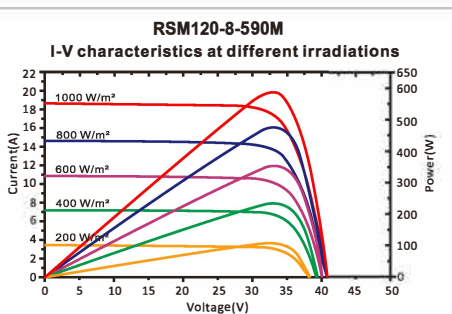
Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pmax	-0.34%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

**PACKAGING CONFIGURATION**

	40ft(HQ)
Number of modules per container	527
Number of modules per pallet	31
Number of pallets per container	17
Box gross weight[kg]	1000

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.  
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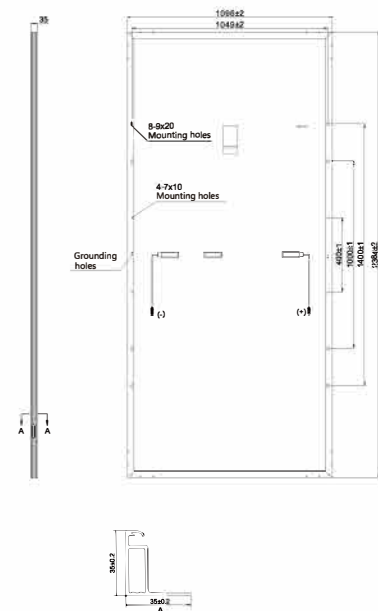
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 REM120-M-12BB-EN-H2-5-2020-CEC-AU

### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM110-8-540M	RSM110-8-545M	RSM110-8-550M	RSM110-8-555M	RSM110-8-560M
Rated Power in Watts-Pmax(Wp)	540	545	550	555	560
Open Circuit Voltage-Voc(V)	37.78	38.02	38.24	38.46	38.68
Short Circuit Current-Isc(A)	18.18	18.23	18.28	18.33	18.38
Maximum Power Voltage-Vmpp(V)	31.46	31.66	31.86	32.06	32.26
Maximum Power Current-Imp(A)	17.17	17.22	17.27	17.32	17.37
Module Efficiency (%) *	20.7	20.9	21.0	21.2	21.4

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM110-8-540M	RSM110-8-545M	RSM110-8-550M	RSM110-8-555M	RSM110-8-560M
Maximum Power-Pmax (Wp)	409.0	412.8	416.7	420.5	424.3
Open Circuit Voltage-Voc (V)	35.14	35.36	35.56	35.77	35.97
Short Circuit Current-Isc (A)	14.91	14.95	14.99	15.03	15.07
Maximum Power Voltage-Vmpp (V)	29.19	29.38	29.57	29.75	29.94
Maximum Power Current-Imp (A)	14.01	14.05	14.09	14.13	14.17

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

### MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	110 cells (5×11+5×11)
Module dimensions	2384×1096×35/40mm
Weight	27-31kg (approx)
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	4.0mm <sup>2</sup> (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
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

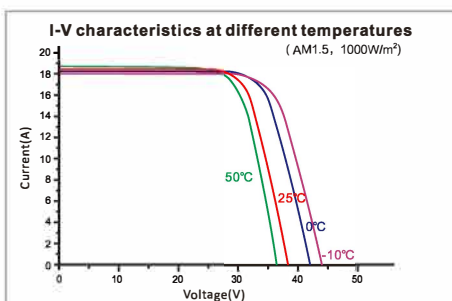
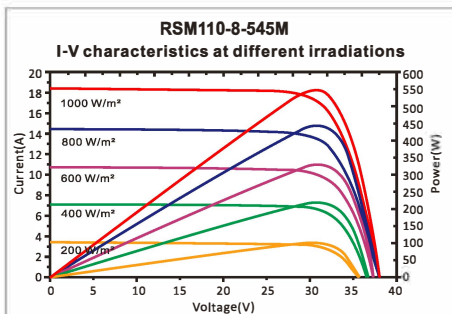
### PACKAGING CONFIGURATION

	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.

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THE POWER OF RISING VALUE



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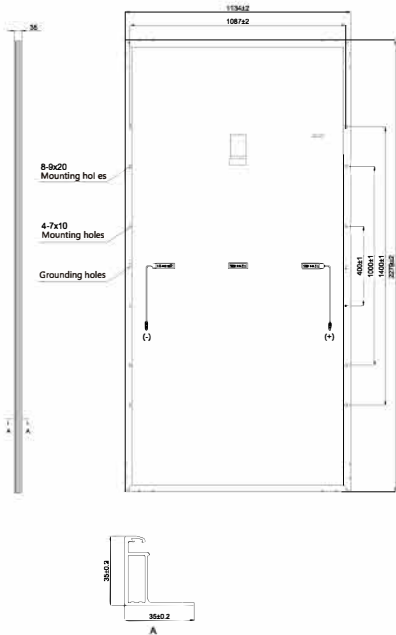
E-mail: marketing@risenenergy.com

Website: www.risenenergy.com

REM110-M-12BB-EN-H2-3-2020-CEC-AU



**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM144-9-525M	RSM144-9-530M	RSM144-9-535M	RSM144-9-540M	RSM144-9-545M
Rated Power in Watts-Pmax(Wp)	<b>525</b>	<b>530</b>	<b>535</b>	<b>540</b>	<b>545</b>
Open Circuit Voltage-Voc(V)	49.30	49.40	49.50	49.60	49.70
Short Circuit Current-Isc(A)	13.45	13.55	13.64	13.74	13.84
Maximum Power Voltage-Vmpp(V)	41.65	41.75	41.87	41.99	42.11
Maximum Power Current-Imp(A)	12.61	12.70	12.79	12.87	12.96
Module Efficiency (%) *	20.3	20.5	20.7	20.9	21.1

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM144-9-525M	RSM144-9-530M	RSM144-9-535M	RSM144-9-540M	RSM144-9-545M
Maximum Power-Pmax (Wp)	390.8	394.6	398.5	402.0	405.8
Open Circuit Voltage-Voc (V)	46.49	46.58	46.68	46.77	46.87
Short Circuit Current-Isc (A)	11.03	11.11	11.18	11.27	11.35
Maximum Power Voltage-Vmpp (V)	38.50	38.60	38.70	38.80	38.90
Maximum Power Current-Imp (A)	10.15	10.22	10.30	10.36	10.43

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	144 cells (6×12×6×12)
Module dimensions	2279x1134x35/40mm; 2274x1134x35/40mm; 2266x1134x35/40mm 2256x1132x35/40mm; 2250x1132x35/40mm
Weight	27~35kg approx
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	4.0mm <sup>2</sup> (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	-0.275%/°C
Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Pmax	-0.35%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

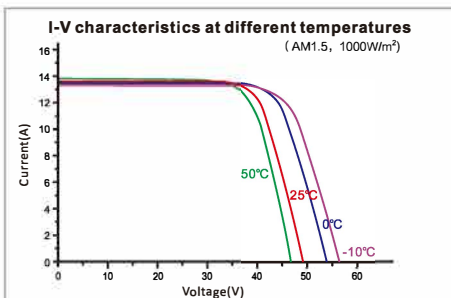
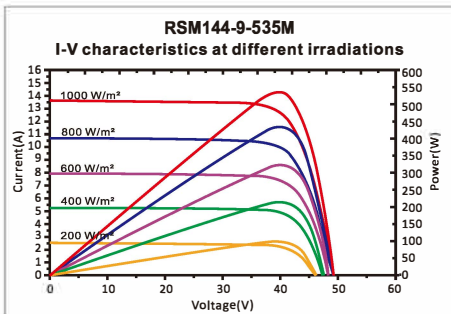
**PACKAGING CONFIGURATION**

	40ft(HQ)
Number of modules per container	620
Number of modules per pallet	31
Number of pallets per container	20
Packaging box dimensions (LxWxH) in mm	2325×1150×1250
Box gross weight[kg]	910

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

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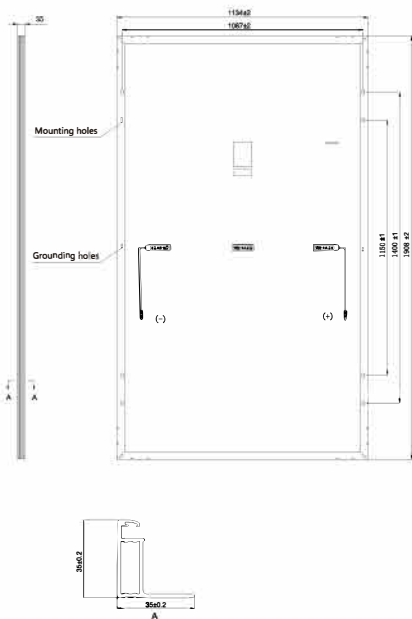
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Website: www.risenenergy.com

REM144-M-10BB-EN-H2-5-2020-CEC-AU

### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM120-9-445M	RSM120-9-450M	RSM120-9-455M	RSM120-9-460M	RSM120-9-465M
Rated Power in Watts-Pmax(Wp)	<b>445</b>	<b>450</b>	<b>455</b>	<b>460</b>	<b>465</b>
Open Circuit Voltage-Voc(V)	40.50	40.60	40.70	40.80	40.91
Short Circuit Current-Isc(A)	13.68	13.78	13.88	13.98	14.04
Maximum Power Voltage-Vmpp(V)	34.91	35.05	35.15	35.25	35.35
Maximum Power Current-Imp(A)	12.75	12.85	12.95	13.05	13.12
Module Efficiency (%) *	20.6	20.8	21.0	21.3	21.5

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM120-9-445M	RSM120-9-450M	RSM120-9-455M	RSM120-9-460M	RSM120-9-465M
Maximum Power-Pmax (Wp)	397.2	401.4	405.5	409.7	413.0
Open Circuit Voltage-Voc (V)	38.19	38.29	38.38	38.47	38.58
Short Circuit Current-Isc (A)	11.22	11.30	11.38	11.46	11.51
Maximum Power Voltage-Vmpp (V)	38.70	38.80	38.90	39.00	39.10
Maximum Power Current-Imp (A)	10.26	10.34	10.42	10.51	10.56

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

### MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	120 cells (6×10+6×10)
Module dimensions	1884x1132x35/40mm; 1889x1132x35/40mm; 1908x1134x35/40mm
Weight	22~28kg approx
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	4.0mm <sup>2</sup> (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	-0.275%/°C
Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Pmax	-0.35%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

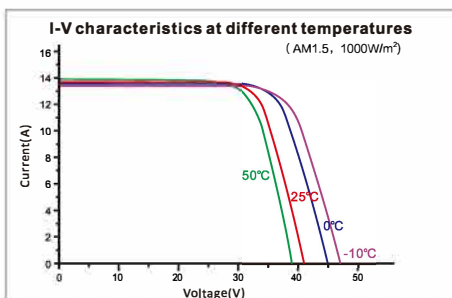
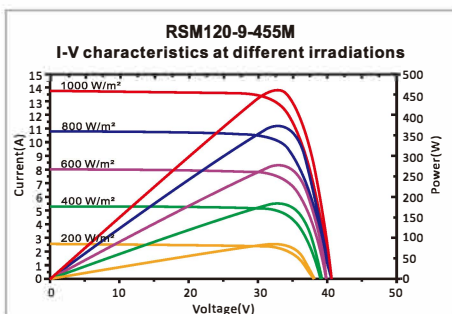
### PACKAGING CONFIGURATION

	40ft(HQ)
Number of modules per container	744
Number of modules per pallet	31
Number of pallets per container	24
Packaging box dimensions (LxWxH) in mm	1935×1120×1245
Box gross weight[kg]	765

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

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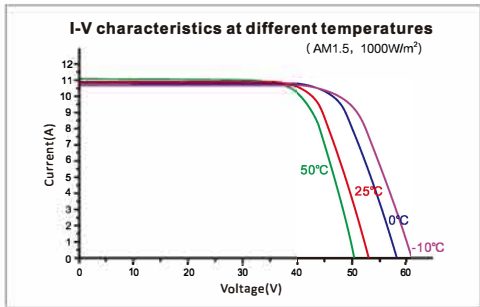
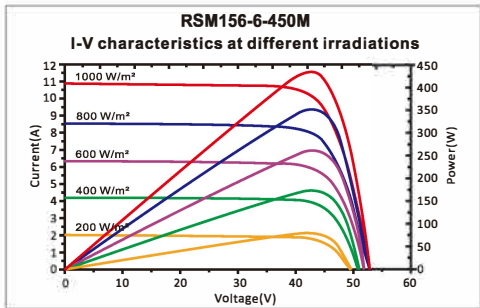
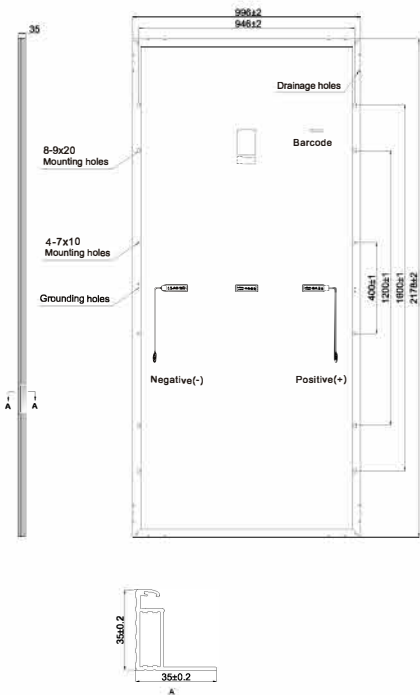
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Website: www.risenenergy.com

REM120-M-10BB-EN-H2-1-2020-CEC-AU

**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM156-6-450M
Rated Power in Watts-Pmax(Wp)	450
Open Circuit Voltage-Voc(V)	52.82
Short Circuit Current-Isc(A)	10.87
Maximum Power Voltage-Vmpp(V)	44.00
Maximum Power Current-Imp(A)	10.24
Module Efficiency (%) *	20.7

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM156-6-450M
Maximum Power-Pmax (Wp)	336.6
Open Circuit Voltage-Voc (V)	48.59
Short Circuit Current-Isc (A)	8.91
Maximum Power Voltage-Vmpp (V)	40.33
Maximum Power Current-Imp (A)	8.35

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

**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	156 cells (6×13+6×13)
Module dimensions	2136/2178X996X25/30/35/40mm
Weight	22~39 kg(approx)
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)/350mm, Negative(-)/350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68 ; MC4 EV02

**TEMPERATURE & MAXIMUM RATINGS**

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

**PACKAGING CONFIGURATION**

	40ft(HQ)	20ft
Number of modules per container	620	310
Number of modules per pallet	31	31
Number of pallets per container	20	10
Packaging box dimensions (LxWxH) in mm	2205×1135×1130	2205×1135×1130
Box gross weight[kg]	830	830

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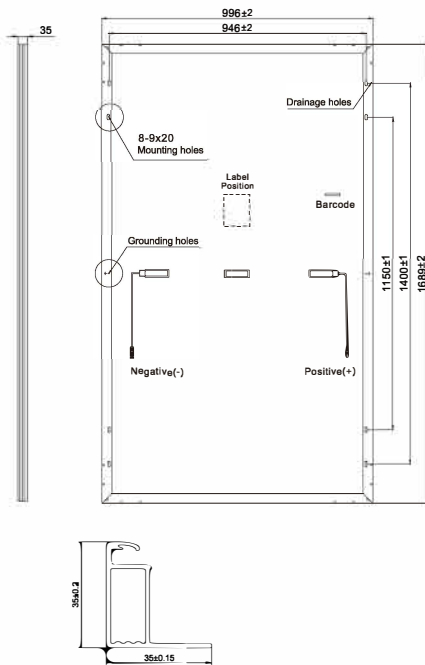


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REM156-M-9BB-EN-H2-3-2020

### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM120-6-330MB	RSM120-6-335MB	RSM120-6-340MB	RSM120-6-345MB	RSM120-6-350MB
Rated Power in Watts-Pmax(Wp)	330	335	340	345	350
Open Circuit Voltage-Voc(V)	40.30	40.40	40.50	40.60	40.70
Short Circuit Current-Isc(A)	10.30	10.40	10.50	10.60	10.70
Maximum Power Voltage-Vmpp(V)	34.05	34.20	34.40	34.55	34.70
Maximum Power Current-Impp(A)	9.70	9.80	9.90	10.00	10.10
Module Efficiency (%) *	19.6	19.9	20.2	20.5	20.8

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM120-6-330MB	RSM120-6-335MB	RSM120-6-340MB	RSM120-6-345MB	RSM120-6-350MB
Maximum Power-Pmax (Wp)	246.9	250.5	254.6	258.2	262.0
Open Circuit Voltage-Voc (V)	37.00	37.10	37.30	37.35	37.44
Short Circuit Current-Isc (A)	8.45	8.53	8.61	8.69	8.77
Maximum Power Voltage-Vmpp (V)	31.20	31.30	31.50	31.65	31.79
Maximum Power Current-Impp (A)	7.92	8.00	8.08	8.16	8.24

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

### MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	120 cells (6×10+6×10)
Module dimensions	1685/1695/1689x992/998/996x25/30/35/40mm; or 1768x1048x35/40mm
Weight	22/22.5/22.5/23kg or 18.5/19/19.5/20kg or 13/13.5/13.5/14kg or 21kg approx
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Back-sheet (Front side: Black, Back side: White)
Frame	Anodized Aluminium Alloy type 6063T5, Black
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)350mm, Negative(-)350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68 ; MC4 EV02

### TEMPERATURE & MAXIMUM RATINGS

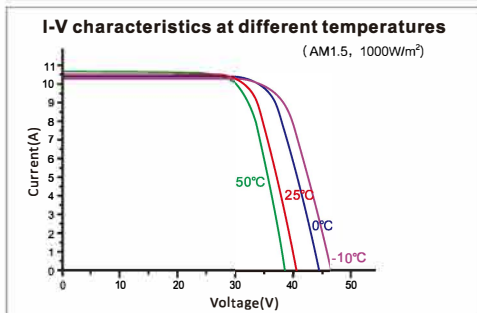
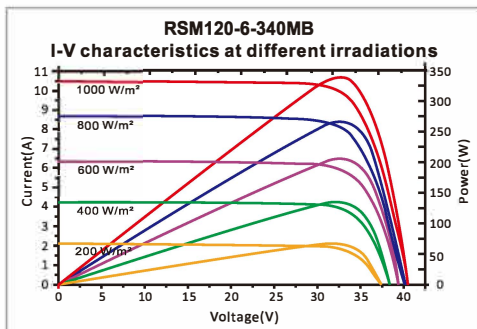
Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

### PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	780	360
Number of modules per pallet	30	30
Number of pallets per container	26	12
Packaging box dimensions (LxWxH) in mm	1715×1105×1130	1715×1105×1130
Box gross weight[kg]	630	630

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

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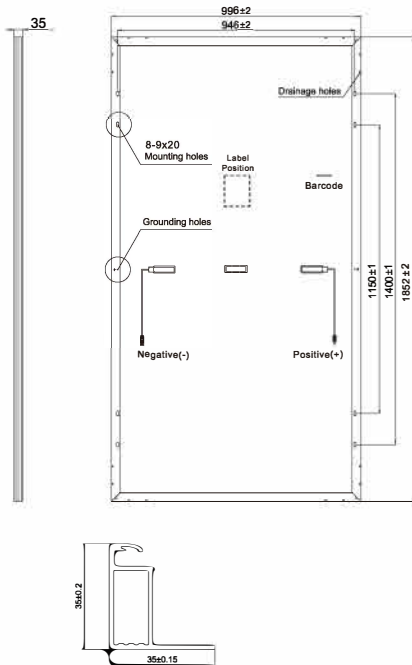
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Website: www.risenenergy.com

REM120-MB-9BB-EN-H2-2-2020



### Dimensions of PV Module Unit:mm



### ELECTRICAL DATA (STC)

Model Number	RSM132-6-365MB	RSM132-6-370MB	RSM132-6-375MB	RSM132-6-380MB	RSM132-6-385MB
Rated Power in Watts-Pmax(Wp)	365	370	375	380	385
Open Circuit Voltage-Voc(V)	44.10	44.20	44.30	44.40	44.50
Short Circuit Current-Isc(A)	10.38	10.48	10.58	10.68	10.78
Maximum Power Voltage-Vmpp(V)	37.35	37.50	37.65	37.80	37.95
Maximum Power Current-Impp(A)	9.79	9.88	9.97	10.07	10.16
Module Efficiency (%) *	19.8	20.1	20.3	20.6	20.9

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air MassAM1.5 according to EN 60904-3.

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM132-6-365MB	RSM132-6-370MB	RSM132-6-375MB	RSM132-6-380MB	RSM132-6-385MB
Maximum Power-Pmax (Wp)	273.2	276.9	280.7	284.4	288.1
Open Circuit Voltage-Voc (V)	40.60	40.70	40.80	40.85	40.94
Short Circuit Current-Isc (A)	8.52	8.59	8.68	8.76	8.84
Maximum Power Voltage-Vmpp (V)	34.20	34.40	34.50	34.62	34.76
Maximum Power Current-Impp (A)	7.99	8.06	8.14	8.21	8.29

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

### MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	132 cells (6×11+6×11)
Module dimensions	1852x996x25/30/35/40mm
Weight	20/20.5 /21kg approx
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Back-sheet (Front side: Black, Back side: White)
Frame	Anodized Aluminium Alloy type 6063T5, Black
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)/350mm, Negative(-)/350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68 :MC4 EV02

### TEMPERATURE & MAXIMUM RATINGS

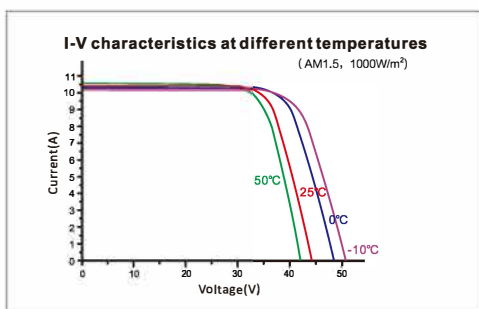
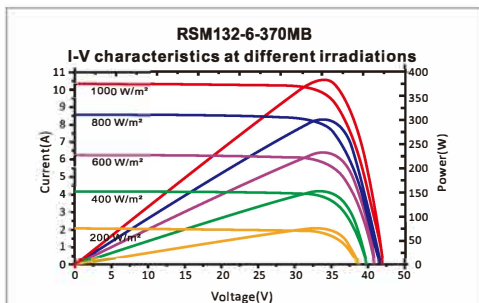
Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

### PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	720	360
Number of modules per pallet	30	30
Number of pallets per container	24	12
Packaging box dimensions (LxWxH) in mm	1880×1105×1130	1880×1105×1130
Box gross weight[kg]	665	665

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

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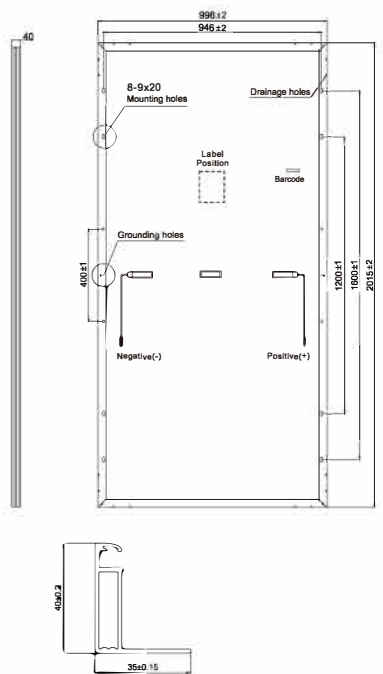
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Website: www.risenenergy.com

REM132-MB-9BB-EN-H2-2-2020

### Dimensions of PV Module



### ELECTRICAL DATA (STC)

Model Number	RSM144-6-400MB	RSM144-6-405MB	RSM144-6-410MB	RSM144-6-415MB	RSM144-6-420MB
Rated Power in Watts-Pmax(Wp)	400	405	410	415	420
Open Circuit Voltage-Voc(V)	48.60	48.75	48.90	49.00	49.10
Short Circuit Current-Isc(A)	10.50	10.60	10.70	10.80	10.90
Maximum Power Voltage-Vmpp(V)	40.45	40.55	40.65	40.70	40.80
Maximum Power Current-Impp(A)	9.90	10.00	10.10	10.20	10.30
Module Efficiency (%) *	19.9	20.2	20.4	20.7	20.9

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air MassAM1.5 according to EN 60904-3.  
 \* Module Efficiency (%): Round-off to the nearest number  
 Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM144-6-400MB	RSM144-6-405MB	RSM144-6-410MB	RSM144-6-415MB	RSM144-6-420MB
Maximum Power-Pmax (Wp)	299.3	303.1	306.9	309.2	312.7
Open Circuit Voltage-Voc (V)	44.70	44.90	44.99	45.63	45.70
Short Circuit Current-Isc (A)	8.61	8.69	8.77	8.80	8.87
Maximum Power Voltage-Vmpp (V)	37.05	37.14	37.24	37.30	37.40
Maximum Power Current-Impp (A)	8.08	8.16	8.24	8.29	8.36

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

### MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2010/2020/2015x992/998/996x25/30/35/40mm or 2108x1048x35/40mm
Weight	26/26.5/26.5/27kg or 22/22.5/22.5/23/23.5kg or 16.5/17/17/17.5kg or 25kg approx
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Back-sheet (Front side: Black, Back side: White)
Frame	Anodized Aluminium Alloy type 6063T5, Black
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)-350mm, Negative(-)-350mm (Connector Included)
Connector	Risen Twinsel PV-SY02, IP68 ; MC4 EV02

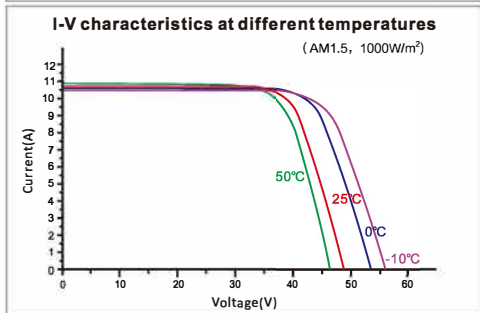
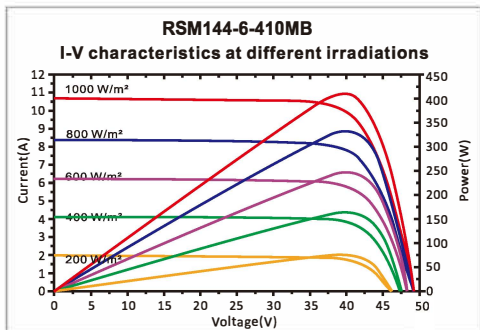
### TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

### PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	594	270
Number of modules per pallet	27	27
Number of pallets per container	22	10
Packaging box dimensions (LxWxH) in mm	2040×1130×1130	2040×1130×1130
Box gross weight[kg]	670	670

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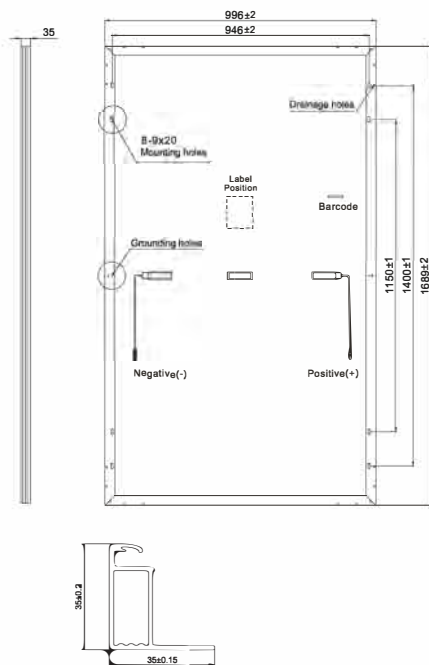


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REM144-MB-9BB-EN-H2-2-2020

### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM120-6-345M	RSM120-6-350M
Rated Power in Watts-Pmax(Wp)	345	350
Open Circuit Voltage-Voc(V)	40.60	40.70
Short Circuit Current-Isc(A)	10.60	10.70
Maximum Power Voltage-Vmpp(V)	34.55	34.70
Maximum Power Current-Impp(A)	10.00	10.10
Module Efficiency (%) *	20.5	20.8

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
 \* Module Efficiency (%): Round-off to the nearest number  
 Sorting and binning tolerances: 0-4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%  
 15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM120-6-345M	RSM120-6-350M
Maximum Power-Pmax (Wp)	258.2	262.0
Open Circuit Voltage-Voc (V)	37.35	37.44
Short Circuit Current-Isc (A)	8.69	8.77
Maximum Power Voltage-Vmpp (V)	31.65	31.79
Maximum Power Current-Impp (A)	8.16	8.24

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

### MECHANICAL DATA

Solar cells	Monocrystalline, 9BB
Cell configuration	120 cells (6×10+6×10)
Module dimensions	1689×996×35mm
Weight	19.5kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)270mm, Negative(-)270mm
Connector	Risen Twinsel PV-SY02, IP68

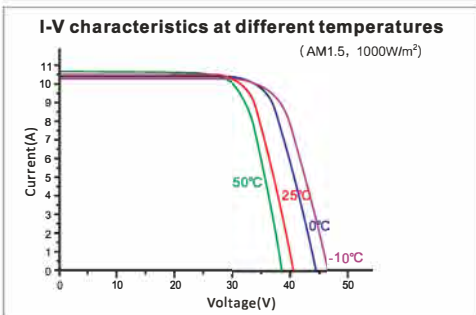
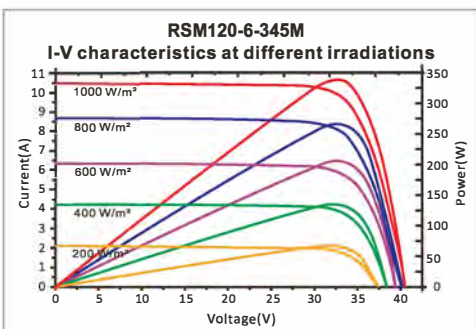
### TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

### PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	780	360
Number of modules per pallet	30	30
Number of pallets per container	26	12
Packaging box dimensions (LxWxH) in mm	1715×1105×1130	1715×1105×1130
Box gross weight[kg]	630	630

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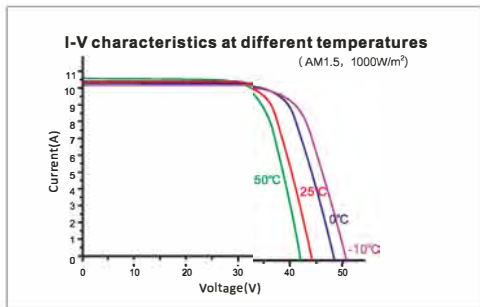
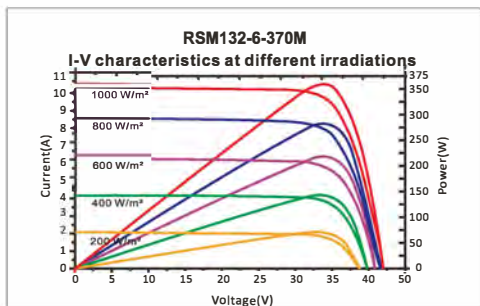
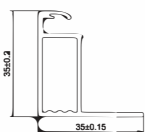
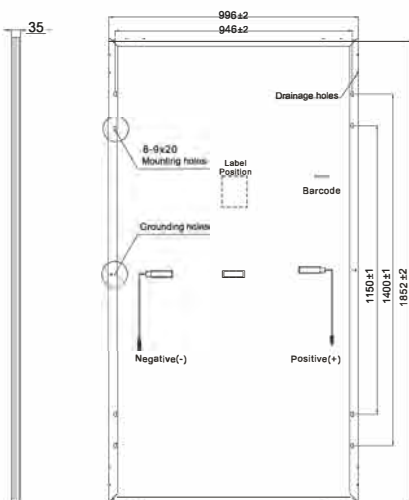
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REM120-M-9BB-EN-H1-1-2020



**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM132-6-375M	RSM132-6-380M
Rated Power in Watts-Pmax(Wp)	375	380
Open Circuit Voltage-Voc(V)	44.30	44.40
Short Circuit Current-Isc(A)	10.58	10.68
Maximum Power Voltage-Vmpp(V)	37.65	37.80
Maximum Power Current-Impp(A)	9.97	10.07
Module Efficiency (%) *	20.3	20.6

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%  
Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

**15 Years Limited Product Warranty; 25 Years Limited Power Warranty**

**ELECTRICAL DATA (NMOT)**

Model Number	RSM132-6-375M	RSM132-6-380M
Maximum Power-Pmax (Wp)	280.7	284.4
Open Circuit Voltage-Voc (V)	40.80	40.85
Short Circuit Current-Isc (A)	8.68	8.76
Maximum Power Voltage-Vmpp (V)	34.50	34.62
Maximum Power Current-Impp (A)	8.14	8.21

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

**MECHANICAL DATA**

Solar cells	Monocrystalline, 9BB
Cell configuration	132 cells (6×11+6×11)
Module dimensions	1852×996×35mm
Weight	20.5kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)270mm, Negative(-)270mm
Connector	Risen TwinseIPV-SY02, IP68

**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	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

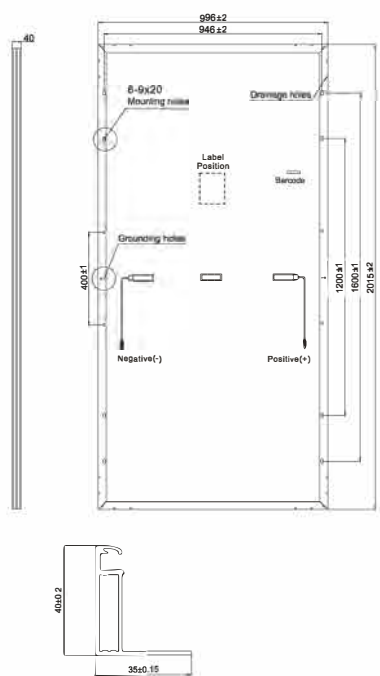
**PACKAGING CONFIGURATION**

	40ft	20ft
Number of modules per container	720	360
Number of modules per pallet	30	30
Number of pallets per container	24	12
Packaging box dimensions (LxWxH) in mm	1880×1105×1130	1880×1105×1130
Box gross weight[kg]	665	665

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

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Dimensions of PV Module Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM144-6-410M	RSM144-6-415M
Rated Power in Watts-Pmax(Wp)	410	415
Open Circuit Voltage-Voc(V)	48.90	49.00
Short Circuit Current-Isc(A)	10.70	10.80
Maximum Power Voltage-Vmpp(V)	40.65	40.70
Maximum Power Current-Imp(A)	10.10	10.20
Module Efficiency (%) *	20.4	20.7

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
 \* Module Efficiency (%): Round-off to the nearest number

Sorting and binning tolerances: 0-4.99W Measurement tolerance: ±3%  
 Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM144-6-410M	RSM144-6-415M
Maximum Power-Pmax (Wp)	306.9	309.2
Open Circuit Voltage-Voc (V)	44.99	45.63
Short Circuit Current-Isc (A)	8.77	8.80
Maximum Power Voltage-Vmpp (V)	37.24	37.30
Maximum Power Current-Imp (A)	8.24	8.29

NMOT: Irradiance at 800 W/m<sup>2</sup>, 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	2015×996×40mm
Weight	23kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)270mm, Negative(-)270mm
Connector	Risen Twinsel PV-SY02, IP68

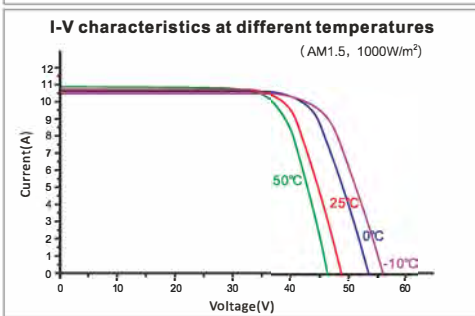
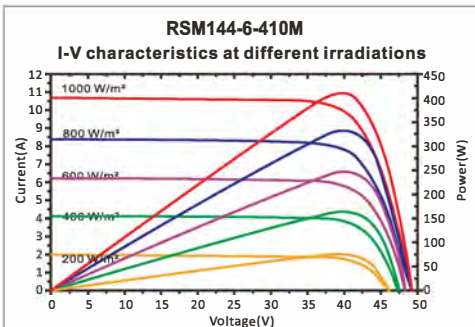
**TEMPERATURE & MAXIMUM RATINGS**

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	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

**PACKAGING CONFIGURATION**

	40ft	20ft
Number of modules per container	594	270
Number of modules per pallet	27	27
Number of pallets per container	22	10
Packaging box dimensions (LxWxH) in mm	2040×1130×1130	2040×1130×1130
Box gross weight[kg]	670	670

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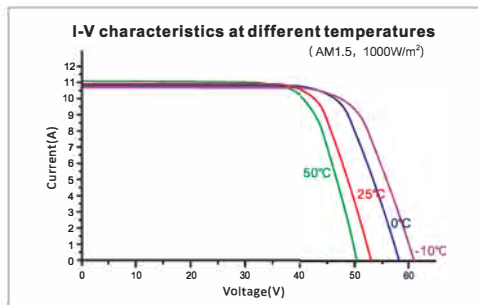
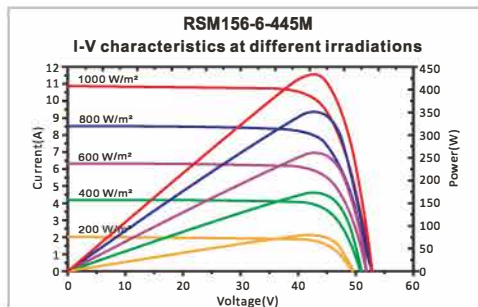
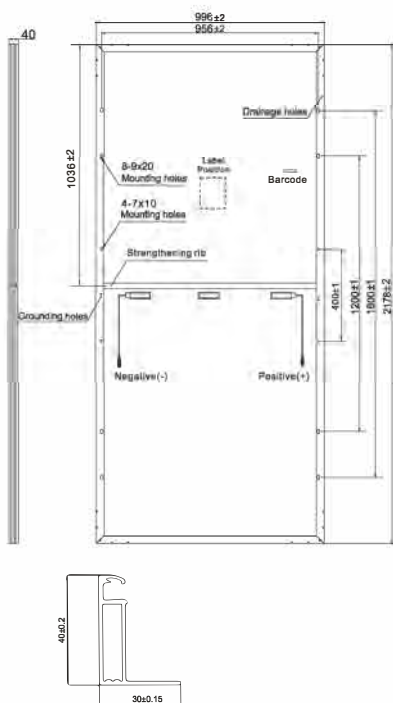


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REM144-M-9BB-EN-H1-1-2020

### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	RSM156-6-430M	RSM156-6-435M	RSM156-6-440M	RSM156-6-445M
Rated Power in Watts-Pmax(Wp)	430	435	440	445
Open Circuit Voltage-Voc(V)	52.38	52.50	52.62	52.72
Short Circuit Current-Isc(A)	10.47	10.57	10.67	10.77
Maximum Power Voltage-Vmpp(V)	43.60	43.70	43.80	43.90
Maximum Power Current-Imp(A)	9.87	9.97	10.06	10.15
Module Efficiency (%) *	19.8	20.1	20.3	20.5

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM156-6-430M	RSM156-6-435M	RSM156-6-440M	RSM156-6-445M
Maximum Power-Pmax (Wp)	321.8	325.5	329.3	332.9
Open Circuit Voltage-Voc (V)	48.20	48.30	48.41	48.50
Short Circuit Current-Isc (A)	8.59	8.67	8.75	8.83
Maximum Power Voltage-Vmpp (V)	39.90	40.09	40.18	40.26
Maximum Power Current-Imp (A)	8.06	8.12	8.20	8.27

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

### MECHANICAL DATA

Solar cells	Monocrystalline, 9BB
Cell configuration	156 cells (6×13+6×13)
Module dimensions	2178×996×40mm
Weight	25.5kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+)270mm, Negative(-)270mm
Connector	Risen Twinsel PV-SY02, IP68

### 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	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

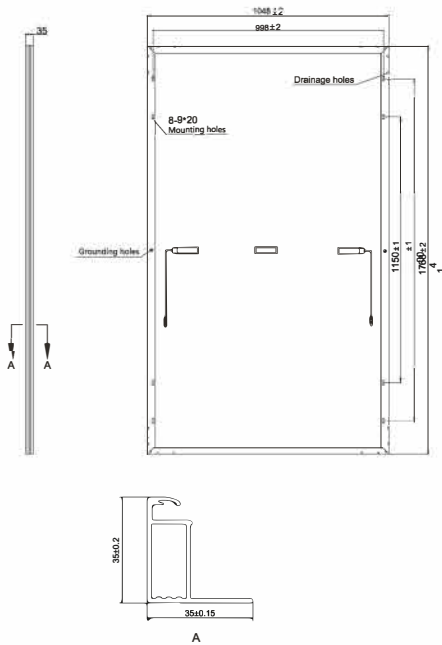
### PACKAGING CONFIGURATION

	40ft	20ft
Number of modules per container	540	270
Number of modules per pallet	27	27
Number of pallets per container	20	10
Packaging box dimensions (LxWxH) in mm	2205×1130×1130	2205×1130×1130
Box gross weight[kg]	745	745

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

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### Dimensions of PV Module Unit:mm



### ELECTRICAL DATA (STC)

Model Number	RSM120-7-360M	RSM120-7-365M	RSM120-7-370M	RSM120-7-375M
Rated Power in Watts-Pmax(Wp)	<b>360</b>	<b>365</b>	<b>370</b>	<b>375</b>
Open Circuit Voltage-Voc(V)	40.70	40.80	40.90	41.00
Short Circuit Current-Isc(A)	11.42	11.54	11.66	11.78
Maximum Power Voltage-Vmpp(V)	33.35	33.50	33.65	33.80
Maximum Power Current-Imp(A)	10.80	10.90	11.00	11.10
Module Efficiency (%) *	19.4	19.7	20.0	20.2

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%  
Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

### ELECTRICAL DATA (NMOT)

Model Number	RSM120-7-360M	RSM120-7-365M	RSM120-7-370M	RSM120-7-375M
Maximum Power-Pmax (Wp)	269.2	272.9	276.7	280.4
Open Circuit Voltage-Voc (V)	37.44	37.54	37.63	37.72
Short Circuit Current-Isc (A)	9.36	9.46	9.56	9.66
Maximum Power Voltage-Vmpp (V)	30.55	30.69	30.82	30.92
Maximum Power Current-Imp (A)	8.81	8.89	8.98	9.06

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

### MECHANICAL DATA

Solar cells	Monocrystalline 166×83mm
Cell configuration	120 cells (6×10×6×10)
Module dimensions	1768×1048×35mm
Weight	21.0kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+) 270mm, Negative(-) 270mm
Connector	Risen Twinsel PV-SY02, IP68

### TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

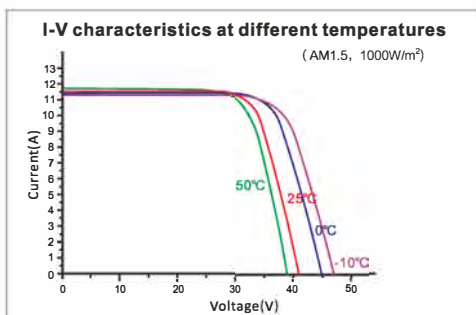
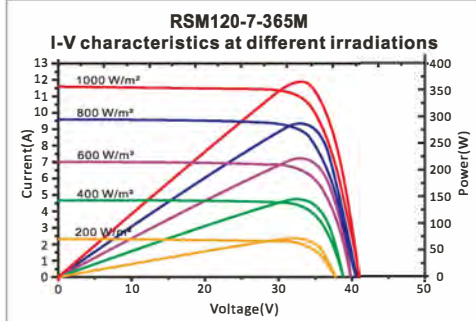
### PACKAGING CONFIGURATION

	40ft	20ft
Number of modules per container	780	180
Number of modules per pallet	30	30
Number of pallets per container	26	6
Packaging box dimensions (LxWxH) in mm	1800×1105×1180	1800×1105×1180
Box gross weight[kg]	680	680

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

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THE POWER OF RISING VALUE



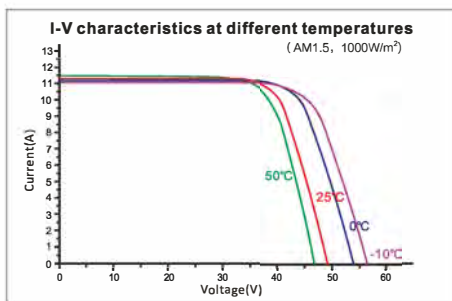
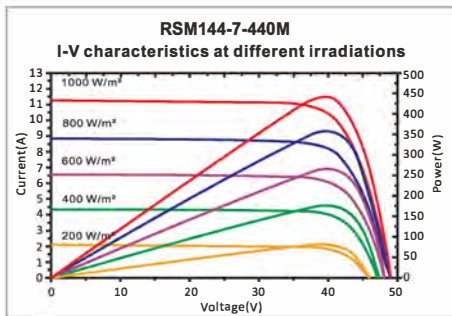
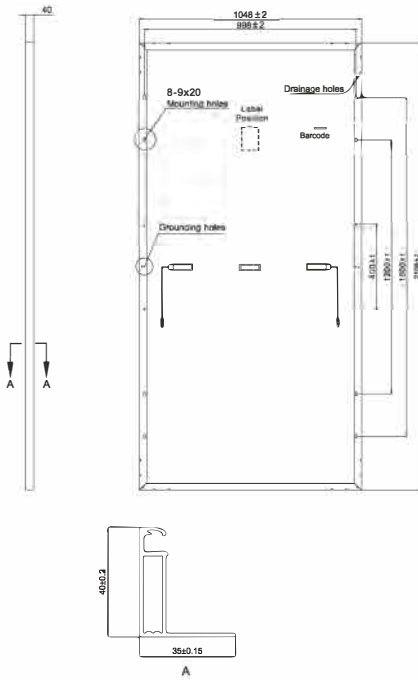
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REM120-M-9BB-EN-H1-1-2020



**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM144-7-430M	RSM144-7-435M	RSM144-7-440M	RSM144-7-445M	RSM144-7-450M
Rated Power in Watts-Pmax(Wp)	<b>430</b>	<b>435</b>	<b>440</b>	<b>445</b>	<b>450</b>
Open Circuit Voltage-Voc(V)	49.30	49.40	49.50	49.60	49.70
Short Circuit Current-Isc(A)	11.10	11.20	11.30	11.40	11.50
Maximum Power Voltage-Vmpp(V)	40.96	41.05	41.13	41.25	41.30
Maximum Power Current-Impp(A)	10.50	10.60	10.70	10.80	10.90
Module Efficiency (%) *	19.5	19.7	19.9	20.1	20.4

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

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

**15 Years Limited Product Warranty; 25 Years Limited Power Warranty**

**ELECTRICAL DATA (NMOT)**

Model Number	RSM144-7-430M	RSM144-7-435M	RSM144-7-440M	RSM144-7-445M	RSM144-7-450M
Maximum Power-Pmax (Wp)	321.5	325.2	329.6	333.9	338.2
Open Circuit Voltage-Voc (V)	45.36	45.45	46.18	46.39	46.43
Short Circuit Current-Isc (A)	9.10	9.18	9.27	9.35	9.43
Maximum Power Voltage-Vmpp (V)	37.53	37.60	37.80	37.90	38.00
Maximum Power Current-Impp (A)	8.57	8.65	8.72	8.81	8.90

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

**MECHANICAL DATA**

Solar cells	Monocrystalline 166×83mm
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2108×1048×40mm
Weight	25kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+) 270mm, Negative(-) 270mm
Connector	Risen Twinsel PV-SY02, IP68

**TEMPERATURE & MAXIMUM RATINGS**

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.29%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.37%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

**PACKAGING CONFIGURATION**

	40ft	20ft
Number of modules per container	594	135
Number of modules per pallet	27	27
Number of pallets per container	22	5
Packaging box dimensions (LxWxH) in mm	2140×1130×1180	2140×1130×1180
Box gross weight[kg]	730	730

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

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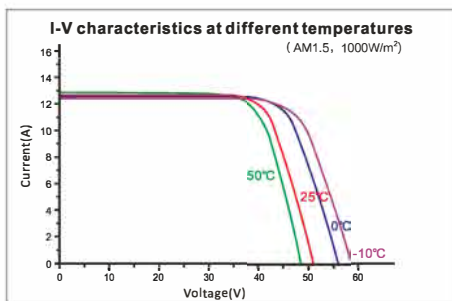
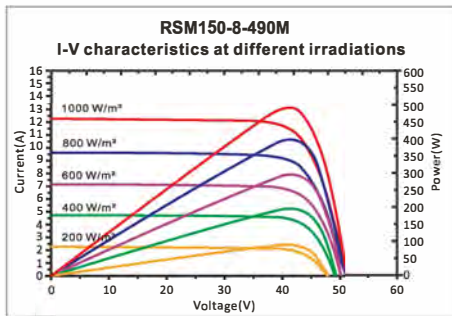
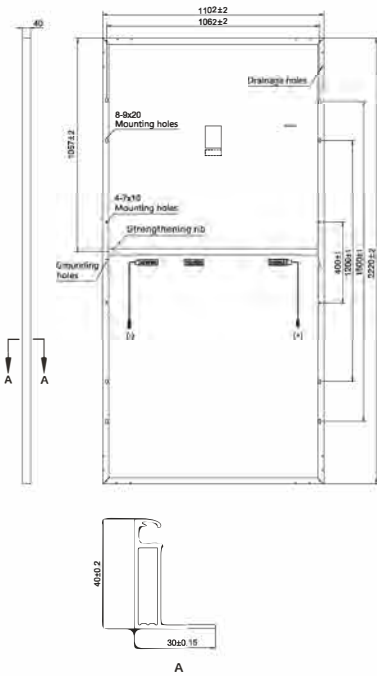


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**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM150-8-485M	RSM150-8-490M	RSM150-8-495M	RSM150-8-500M
Rated Power in Watts-Pmax(Wp)	485	490	495	500
Open Circuit Voltage-Voc(V)	50.35	50.57	50.79	51.01
Short Circuit Current-Isc(A)	12.25	12.32	12.39	12.46
Maximum Power Voltage-Vmpp(V)	42.22	42.44	42.66	42.88
Maximum Power Current-Imp(A)	11.50	11.56	11.62	11.68
Module Efficiency (%) *	19.8	20.0	20.2	20.4

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air MassAM1.5 according to EN 60904-3.

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

Sorting and binning tolerances: 0~4.99W Measurement tolerance: ±3%

Short Circuit Current tolerance: ±4% Open Circuit Voltage tolerance: ±3%

15 Years Limited Product Warranty; 25 Years Limited Power Warranty

**ELECTRICAL DATA (NMOT)**

Model Number	RSM150-8-485M	RSM150-8-490M	RSM150-8-495M	RSM150-8-500M
Maximum Power-Pmax (Wp)	367.7	371.5	375.4	379.3
Open Circuit Voltage-Voc (V)	46.83	47.03	47.23	47.44
Short Circuit Current-Isc (A)	10.05	10.10	10.16	10.22
Maximum Power Voltage-Vmpp (V)	39.18	39.38	39.59	39.79
Maximum Power Current-Imp (A)	9.38	9.43	9.48	9.53

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

**MECHANICAL DATA**

Solar cells	Monocrystalline 210×70mm
Cell configuration	150 cells (5×15+5×15)
Module dimensions	2220×1102×40mm
Weight	28kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> (12AWG), Positive(+) 270mm, Negative(-) 270mm
Connector	Risen Twinsel PV-SY02, IP68

**TEMPERATURE & MAXIMUM RATINGS**

Nominal Module Operating Temperature (NMOT)	44 °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
Module Fire Performance	CLASS C (IEC)
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

**PACKAGING CONFIGURATION**

	40ft(HQ)
Number of modules per container	540
Number of modules per pallet	27
Number of pallets per container	20
Packaging box dimensions (LxWxH) in mm	2250×1130×1240
Box gross weight[kg]	810

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REM150-M-9BB-EN-H1-4-2020