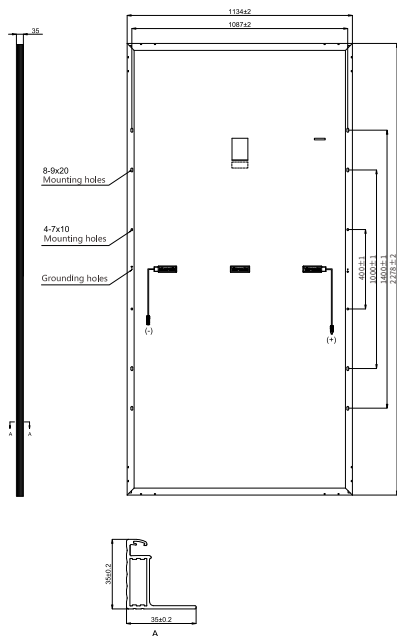


Dimensions of PV Module Unit: mm



ELECTRICAL DATA (STC)

Model Type	RSM144-9-545M	RSM144-9-550M	RSM144-9-555M
Rated Power in Watts-Pmax(Wp)	545	550	555
Open Circuit Voltage-Voc(V)	49.70	49.80	49.91
Short Circuit Current-Isc(A)	13.84	13.94	14.04
Maximum Power Voltage-Vmpp(V)	42.11	42.20	42.29
Maximum Power Current-Impp(A)	12.96	13.04	13.13
Module Efficiency (%) *	21.1	21.3	21.5

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  
 Power sorting and binning tolerances: 0-5W; Power 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	RSM144-9-550M	RSM144-9-555M
Maximum Power-Pmax (Wp)	405.8	409.4	413.3
Open Circuit Voltage-Voc (V)	46.87	46.96	47.07
Short Circuit Current-Isc (A)	11.35	11.43	11.51
Maximum Power Voltage-Vmpp (V)	38.90	39.00	39.10
Maximum Power Current-Impp (A)	10.43	10.50	10.57

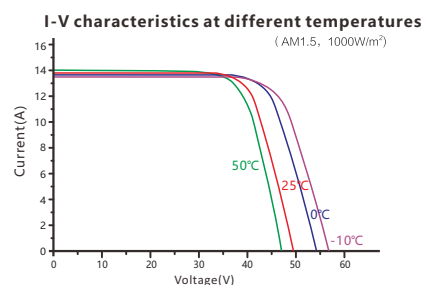
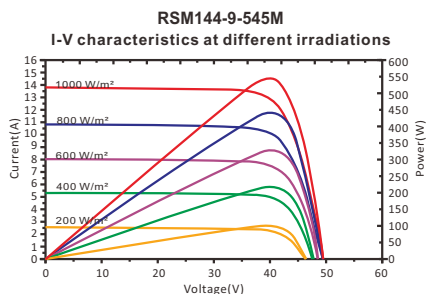
NMOT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	144 cells (6×12×6×12)
Module dimensions	2278×1134×35mm
Weight	27.8kg
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 UI790	CLASS C
Max Series Fuse Rating	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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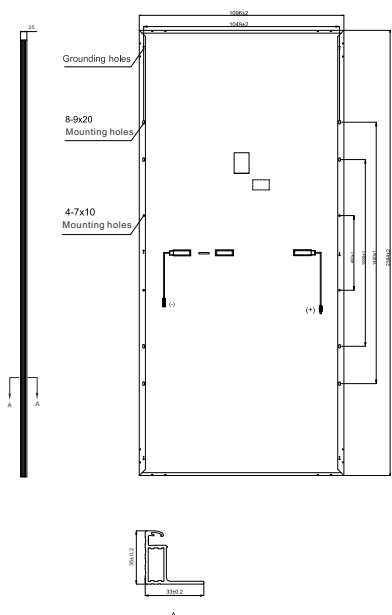
Website: www.risenenergy.com

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**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Type	RSM110-8-545M	RSM110-8-550M	RSM110-8-555M
Rated Power in Watts-Pmax(Wp)	545	550	555
Open Circuit Voltage-Voc(V)	38.02	38.24	38.46
Short Circuit Current-Isc(A)	18.23	18.28	18.33
Maximum Power Voltage-Vmpp(V)	31.66	31.86	32.06
Maximum Power Current-Impp(A)	17.22	17.27	17.32
Module Efficiency (%) *	20.9	21.0	21.2

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  
 Power sorting and binning tolerances: 0-5W; Power 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%

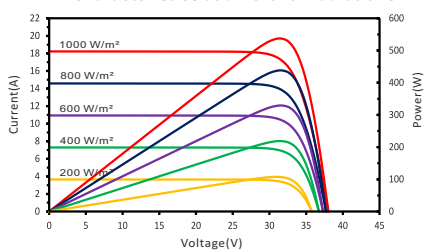
**ELECTRICAL DATA (NMOT)**

Model Type	RSM110-8-545M	RSM110-8-550M	RSM110-8-555M
Maximum Power-Pmax (Wp)	412.8	416.7	420.5
Open Circuit Voltage-Voc (V)	35.36	35.56	35.77
Short Circuit Current-Isc (A)	14.95	14.99	15.03
Maximum Power Voltage-Vmpp (V)	29.38	29.57	29.75
Maximum Power Current-Impp (A)	14.05	14.09	14.13

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

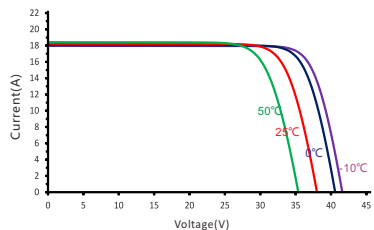
**RSM110-8-550M**

**I-V characteristics at different irradiances**



**I-V characteristics at different temperatures**

(AM1.5, 1000W/m<sup>2</sup>)



**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	110 cells (5×11+5×11)
Module dimensions	2384×1096×35mm
Weight	28.5kg
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

**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

**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



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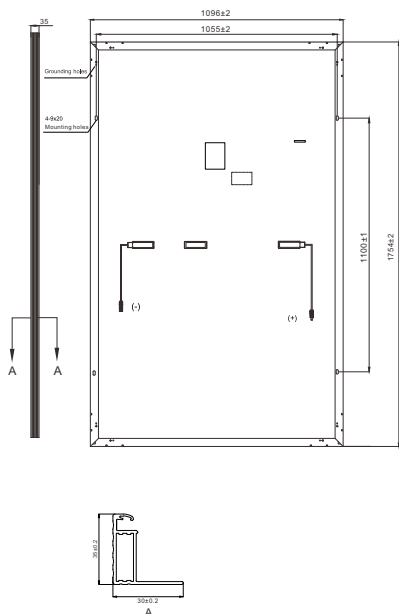
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**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Type	RSM40-8-415M
Rated Power in Watts-Pmax(Wp)	415
Open Circuit Voltage-Voc(V)	42.20
Short Circuit Current-Isc(A)	12.53
Maximum Power Voltage-Vmpp(V)	35.14
Maximum Power Current-Impp(A)	11.82
Module Efficiency (%) *	21.6

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  
 Power sorting and binning tolerances: 0-5W; Power measurement tolerance: ±3%  
 Short Circuit Current tolerance ±4%; Open Circuit Voltage tolerance: ±3%  
 25 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%

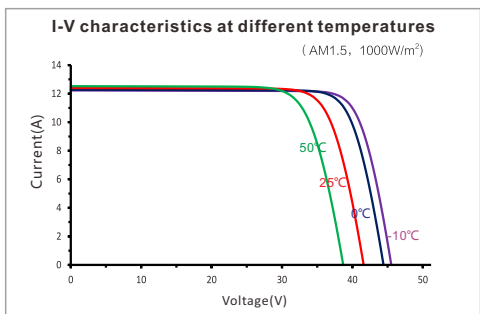
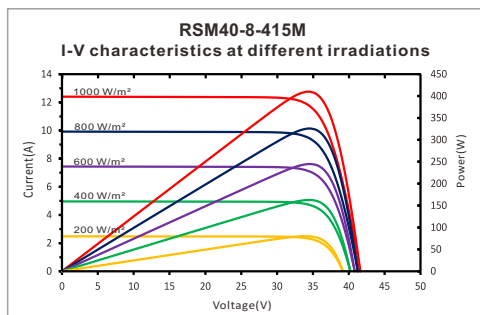
**ELECTRICAL DATA (NMOT)**

Model Type	RSM40-8-415M
Maximum Power-Pmax (Wp)	314.5
Open Circuit Voltage-Voc (V)	39.25
Short Circuit Current-Isc (A)	10.27
Maximum Power Voltage-Vmpp (V)	32.61
Maximum Power Current-Impp (A)	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	120cells (5×12+5×12)
Module dimensions	1754×1096×35mm
Weight	21kg
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



**PACKAGING CONFIGURATION**

	40ft(HQ)
Number of modules per container	936
Number of modules per pallet	36
Number of pallets per container	26
Packaging box dimensions (LxWxH) in mm	1770×1120×1236
Box gross weight [kg]	800

**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 UI790	CLASS C
Max Series Fuse Rating	20A



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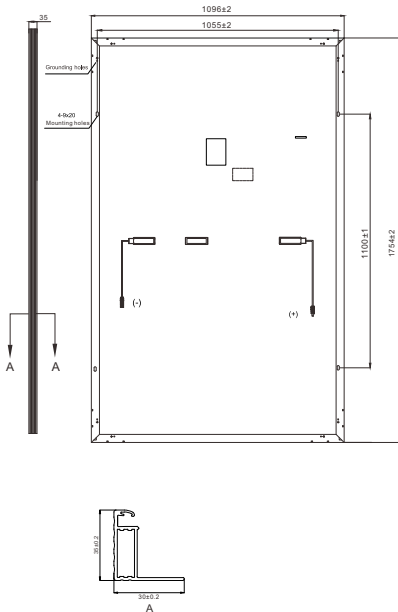
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Dimensions of PV Module Unit: mm



ELECTRICAL DATA (STC)

Model Type	RSM40-8-390M
Rated Power in Watts-Pmax(Wp)	390
Open Circuit Voltage-Voc(V)	40.69
Short Circuit Current-Isc(A)	12.21
Maximum Power Voltage-Vmpp(V)	33.88
Maximum Power Current-Impp(A)	11.52
Module Efficiency (%) *	20.3

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  
 Power sorting and binning tolerances: 0-5W; Power measurement tolerance: ±3%  
 Short Circuit Current tolerance ±4%; Open Circuit Voltage tolerance: ±3%  
 25 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	RSM40-8-390M
Maximum Power-Pmax (Wp)	295.6
Open Circuit Voltage-Voc (V)	37.84
Short Circuit Current-Isc (A)	10.01
Maximum Power Voltage-Vmpp (V)	31.44
Maximum Power Current-Impp (A)	9.40

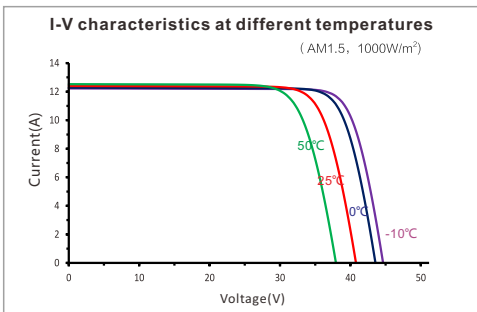
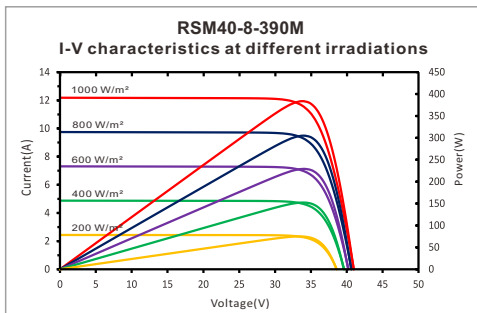
NMOT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	120cells (5 × 12+5 × 12)
Module dimensions	1754 × 1096 × 35mm
Weight	21kg
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	20A



PACKAGING CONFIGURATION

	40ft(HQ)
Number of modules per container	936
Number of modules per pallet	36
Number of pallets per container	26
Packaging box dimensions (LxWxH) in mm	1770 × 1120 × 1236
Box gross weight [kg]	800



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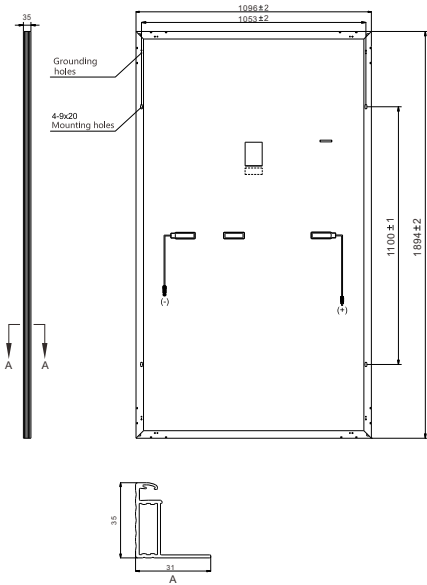
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**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Type	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 AM 1.5 according to EN 60904-3  
 \* Module Efficiency(%): Round-off to the nearest number  
 Power sorting and binning tolerances: 0-5W; Power measurement tolerance: ±3%  
 Short Circuit Current tolerance ±4%; Open Circuit Voltage tolerance: ±3%  
 25 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	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.

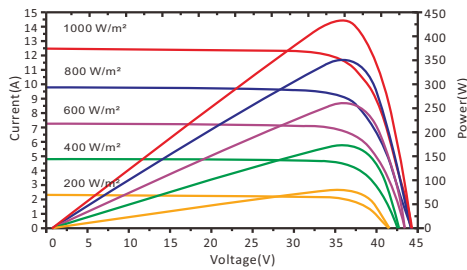
**MECHANICAL DATA**

Solar cells	Monocrystalline
Cell configuration	130cells (5×13+5×13)
Module dimensions	1894×1096×35mm
Weight	22.5kg
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

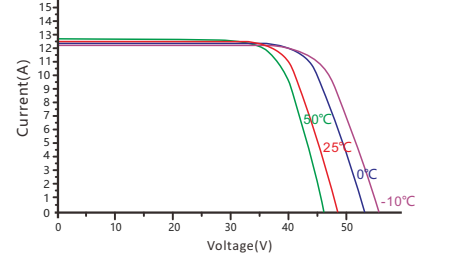
**TEMPERATURE & MAXIMUM RATINGS**

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	20A

**RSM130-8-440M**  
I-V characteristics at different irradianations



I-V characteristics at different temperatures  
(AM1.5, 1000W/m<sup>2</sup>)



**PACKAGING CONFIGURATION**

	40ft(HQ)
Number of modules per container	864
Number of modules per pallet	36
Number of pallets per container	24
Packaging box dimensions (LxWxH) in mm	1910×1110×1236
Box gross weight [kg]	850



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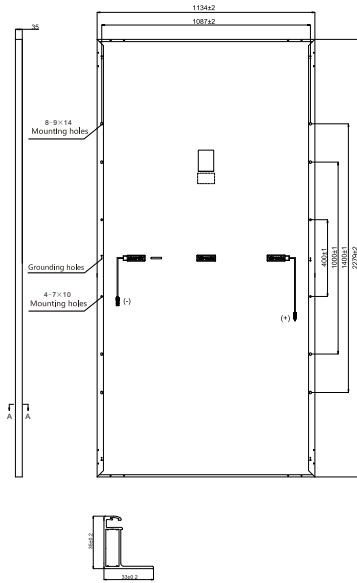
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**Dimensions of PV Module** Unit: mm



**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

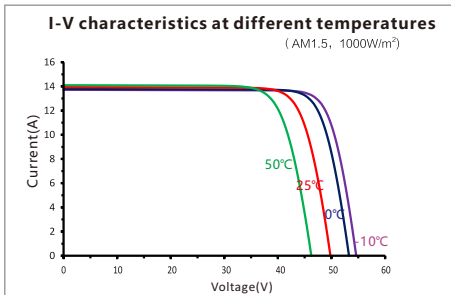
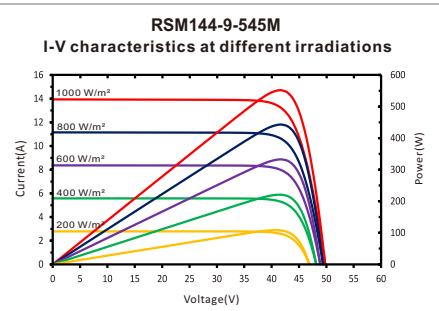
NMOT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

**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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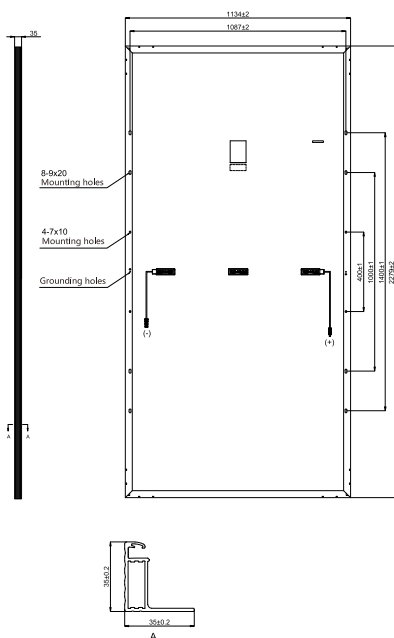
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**Dimensions of PV Module** Unit: mm



**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**

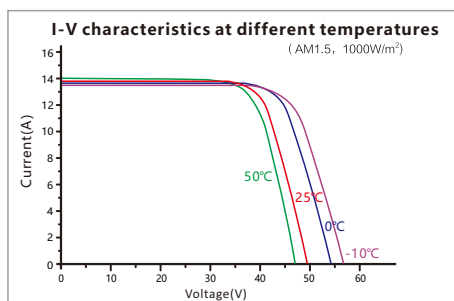
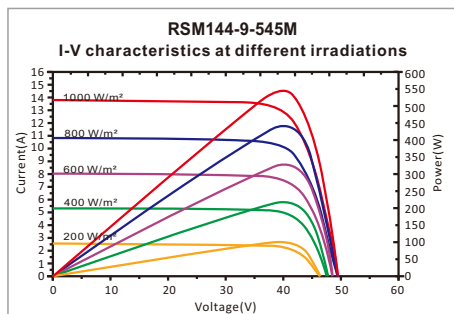
Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Pmax	-0.35%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating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

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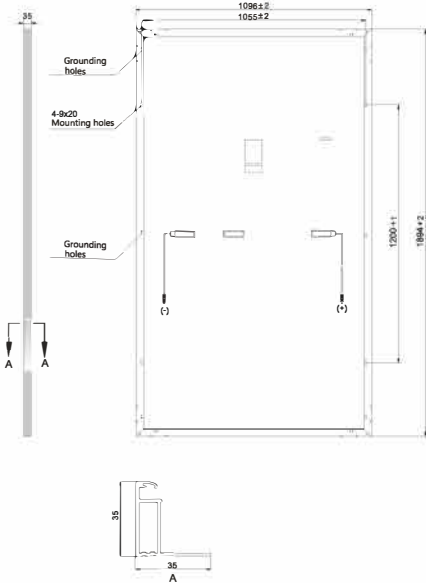


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REM144-M-10BB-EN-H1-2-2022-AU

**Dimensions of PV Module** Unit: mm



**ELECTRICAL DATA (STC)**

Model Number	RSM130-8-440M
Rated Power in Watts-Pmax(Wp)	<b>440</b>
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

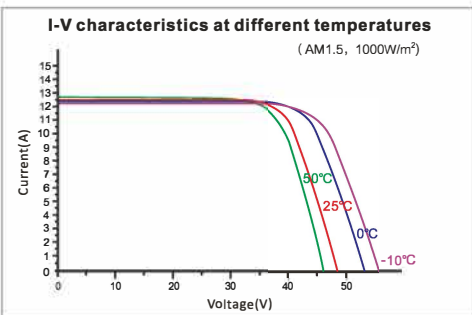
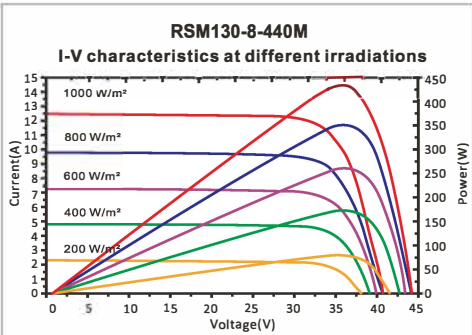
**TEMPERATURE & MAXIMUM RATINGS**

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

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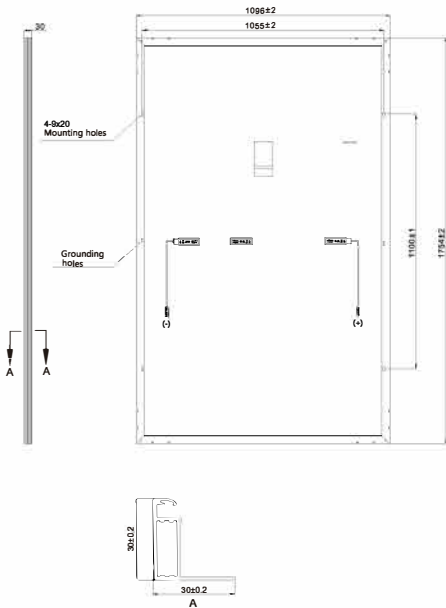


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 REM130-M-9BB-EN-H1-1-2022-CEC



### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	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

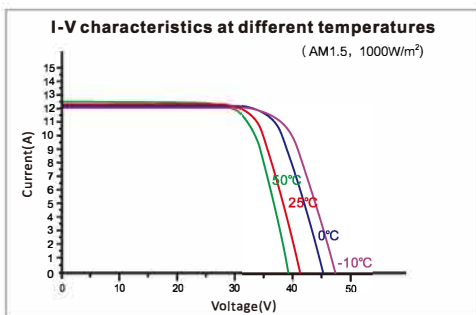
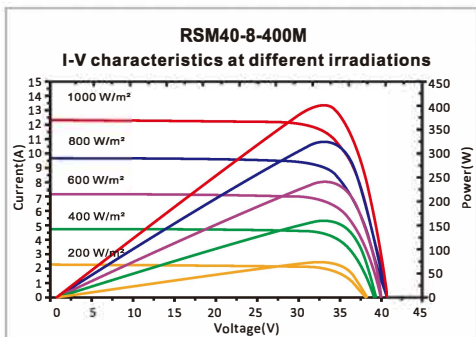
### PACKAGING CONFIGURATION

	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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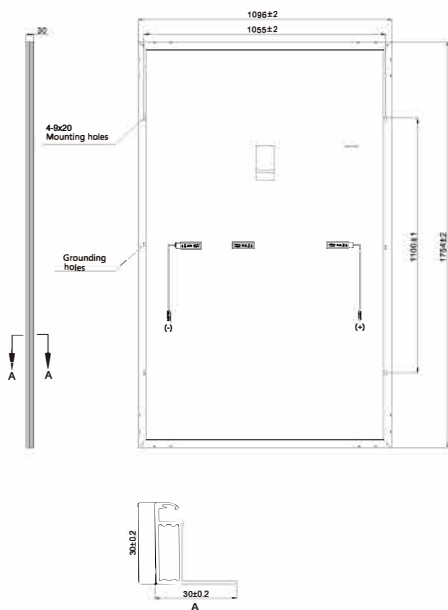
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E-mail: marketing@risenenergy.com

Website: www.risenenergy.com

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

### Dimensions of PV Module Unit: mm



### ELECTRICAL DATA (STC)

Model Number	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

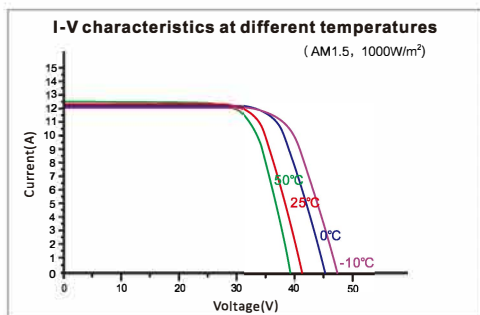
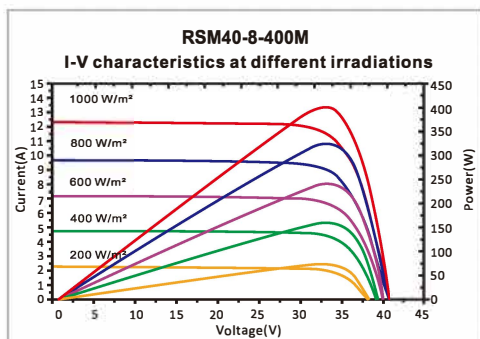
### PACKAGING CONFIGURATION

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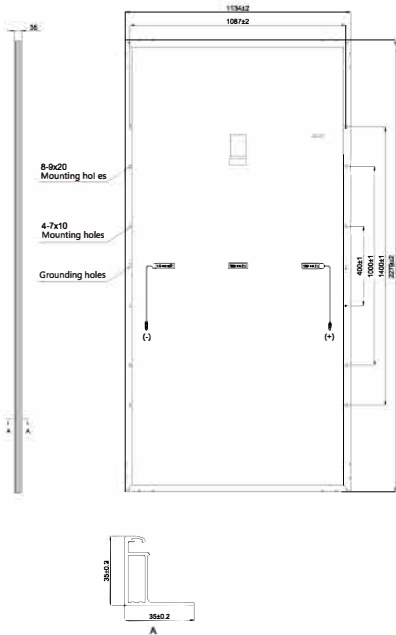
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REM40-M-9BB-EN-H1-2-2021

**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)	525	530	535	540	545
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-Impp(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-Impp (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

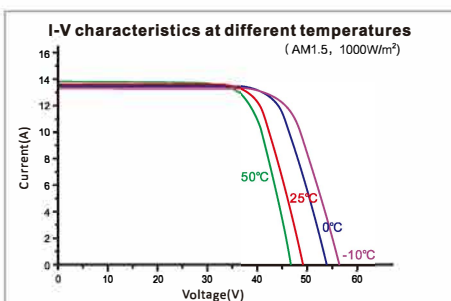
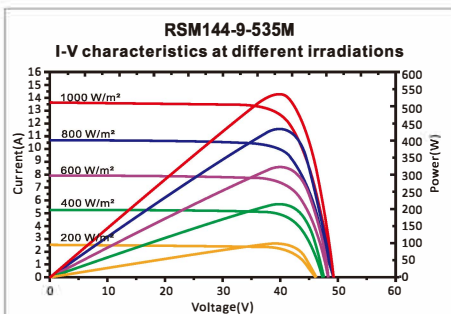
**PACKAGING CONFIGURATION**

	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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