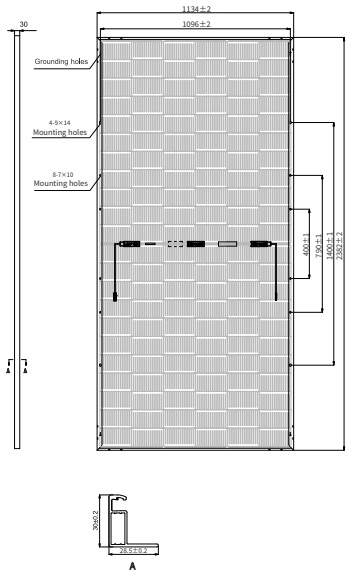
Made in China/Malaysia

Dimensions of PV Module

Unit: mm



ELECTRICAL DATA (STC)

Model Type	RSM132-11-610BNDG	RSM132-11-615BNDG	RSM132-11-620BNDG	RSM132-11-625BNDG	RSM132-11-630BNDG
Rated Power in Watts-Pmax(Wp)	**610**	**615**	**620**	**625**	**630**
Open Circuit Voltage-Voc(V)	48.69	48.89	49.08	49.27	49.46
Short Circuit Current-Isc(A)	15.92	15.98	16.04	16.10	16.16
Maximum Power Voltage-Vmpp(V)	40.46	40.64	40.81	40.98	41.17
Maximum Power Current-Impp(A)	15.08	15.14	15.20	15.26	15.31
Module Efficiency (%) ★	22.6	22.8	23.0	23.1	23.3
Short Circuit Current-Isc-aBSI(A)	19.50	19.58	19.65	19.72	19.80

STC: Irradiance 1000 W/m², 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; 30 Years Limited Power Warranty;
Bifacial factor:80±10(%) ★ Module Efficiency (%): Round-off to the nearest number
The first year degradation:1%,annual degradation:0.4%,power retention rate within 30 years:87.4%
φVoc=95%±5%, φIsc=80%±10%, φPmax=80%±10%;

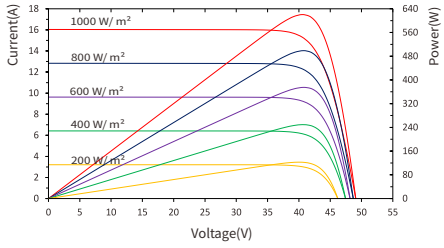
Electrical characteristics with 13.5% rear side power gain

Total Equivalent power -Pmax (Wp)	671	677	682	688	693
Open Circuit Voltage-Voc(V)	48.69	48.89	49.08	49.27	49.46
Short Circuit Current-Isc(A)	17.51	17.58	17.64	17.71	17.78
Maximum Power Voltage-Vmpp(V)	40.46	40.64	40.81	40.98	41.17
Maximum Power Current-Impp(A)	16.59	16.65	16.72	16.79	16.84

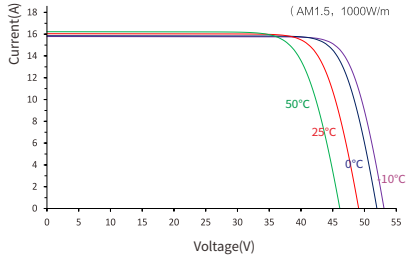
Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

RSM132-11-620BNDG

I-V characteristics at different irradiations



I-V characteristics at different temperatures



ELECTRICAL DATA (NMOT)

Model Type	RSM132-11-610BNDG	RSM132-11-615BNDG	RSM132-11-620BNDG	RSM132-11-625BNDG	RSM132-11-630BNDG
Maximum Power-Pmax (Wp)	462.0	465.9	469.7	473.5	477.3
Open Circuit Voltage-Voc (V)	45.28	45.47	45.64	45.82	46.00
Short Circuit Current-Isc (A)	13.05	13.10	13.15	13.20	13.25
Maximum Power Voltage-Vmpp (V)	37.55	37.71	37.87	38.03	38.21
Maximum Power Current-Impp (A)	12.31	12.35	12.40	12.45	12.49

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

MECHANICAL DATA

Solar cells	*n*-type TOPCon
Cell configuration	132 cells (6×11+6×11)
Module dimensions	2382×1134×30mm
Weight	32.5kg
Superstrate	High Transmission, Low Iron, Semi-Tempered ARC Glass
Substrate	Semi-Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm², 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	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	35A
Limiting Reverse Current	35A

PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	720	144
Number of modules per pallet	36	36
Number of pallets per container	20	4
Packaging box dimensions (LxWxH) in mm	2395×1110×1260	
Box gross weight[kg]	1238	

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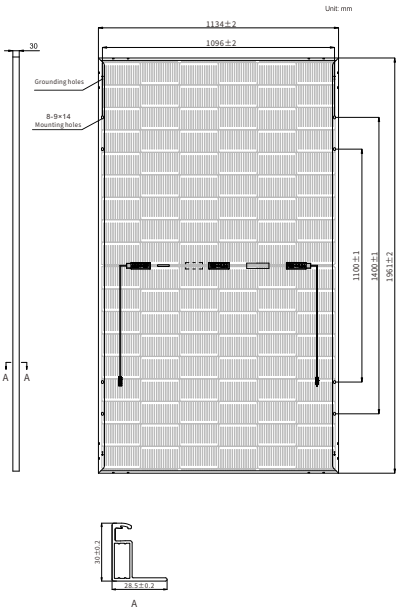
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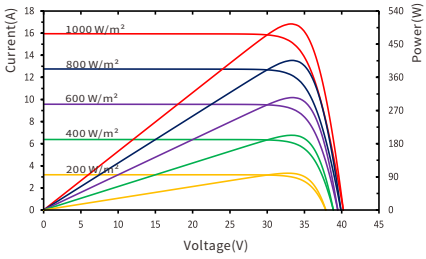
Made in China/Malaysia

Dimensions of PV Module

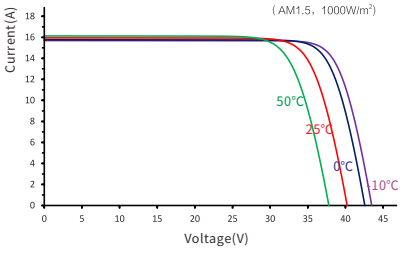


RSM108-11-505BNDG

I-V characteristics at different irradiations



I-V characteristics at different temperatures



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	1985×1110×1260	
Box gross weight[kg]	1022	

ELECTRICAL DATA (STC)

Model Type	RSM108-11-495BNDG	RSM108-11-500BNDG	RSM108-11-505BNDG	RSM108-11-510BNDG	RSM108-11-515BNDG
Rated Power in Watts-Pmax(Wp)	**495**	**500**	**505**	**510**	**515**
Open Circuit Voltage-Voc(V)	39.81	40.02	40.22	40.42	40.62
Short Circuit Current-Isc(A)	15.81	15.88	15.95	16.02	16.08
Maximum Power Voltage-Vmpp(V)	32.85	33.05	33.25	33.45	33.64
Maximum Power Current-Impp(A)	15.07	15.13	15.19	15.25	15.31
Module Efficiency (%) ★	22.3	22.5	22.7	22.9	23.2
Short Circuit Current-Isc-aBSI(A)	19.37	19.45	19.54	19.62	19.70

STC: Irradiance 1000 W/m², 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; 30 Years Limited Power Warranty;
Bifacial factor:80±10(%) ★ Module Efficiency (%): Round-off to the nearest number
The first year degradation:1%,annual degradation:0.4%,power retention rate within 30 years:87.4%
φVoc=95%±5%, φIsc=80%±10%, φPmax=80%±10%;

Electrical characteristics with 13.5% rear side power gain

Total Equivalent power -Pmax (Wp)	545	550	556	561	567
Open Circuit Voltage-Voc(V)	39.81	40.02	40.22	40.42	40.62
Short Circuit Current-Isc(A)	17.39	17.47	17.55	17.62	17.69
Maximum Power Voltage-Vmpp(V)	32.85	33.05	33.25	33.45	33.64
Maximum Power Current-Impp(A)	16.58	16.64	16.71	16.78	16.84

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA (NMOT)

Model Type	RSM108-11-495BNDG	RSM108-11-500BNDG	RSM108-11-505BNDG	RSM108-11-510BNDG	RSM108-11-515BNDG
Maximum Power-Pmax (Wp)	374.9	378.7	382.5	386.3	390.0
Open Circuit Voltage-Voc (V)	37.02	37.22	37.40	37.59	37.78
Short Circuit Current-Isc (A)	12.96	13.02	13.08	13.14	13.19
Maximum Power Voltage-Vmpp (V)	30.48	30.67	30.86	31.04	31.22
Maximum Power Current-Impp (A)	12.30	12.35	12.40	12.44	12.49

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

MECHANICAL DATA

Solar cells	*n*-type TOPCon
Cell configuration	108 cells (6×9+6×9)
Module dimensions	1961×1134×30mm
Weight	27kg
Superstrate	High Transmission, Low Iron, Semi-Tempered ARC Glass
Substrate	Semi-Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm², Positive(+)1400mm, Negative(-)1400mm (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	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	35A
Limiting Reverse Current	35A

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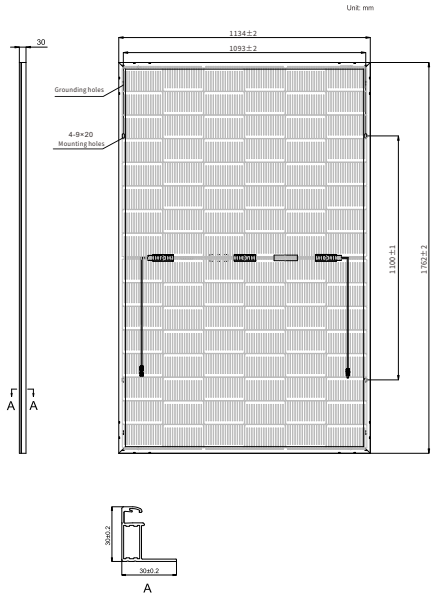
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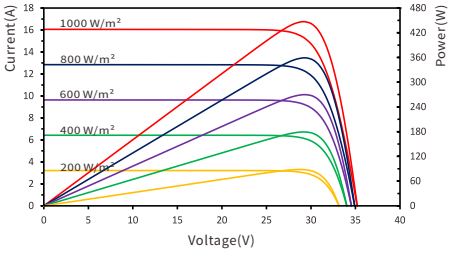
Made in China/Malaysia

Dimensions of PV Module

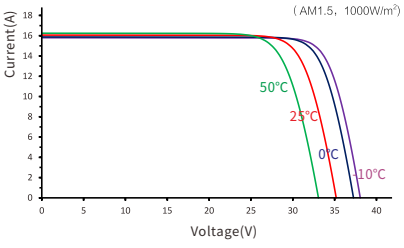


RSM96-11-445BNDG

I-V characteristics at different irradiations



I-V characteristics at different temperatures



PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	936	216
Number of modules per pallet	36	36
Number of pallets per container	26	6
Packaging box dimensions (LxWxH) in mm	1785×1110×1260	
Box gross weight[kg]	818	

ELECTRICAL DATA (STC)

Model Type	RSM96-11-440BNDG	RSM96-11-445BNDG	RSM96-11-450BNDG	RSM96-11-455BNDG	RSM96-11-460BNDG
Rated Power in Watts-Pmax(Wp)	440	445	450	455	460
Open Circuit Voltage-Voc(V)	34.98	35.19	35.40	35.59	35.79
Short Circuit Current-Isc(A)	15.98	16.06	16.14	16.22	16.30
Maximum Power Voltage-Vmpp(V)	29.50	29.70	29.90	30.10	30.28
Maximum Power Current-Impp(A)	14.92	14.99	15.06	15.12	15.22
Module Efficiency (%) ★	22.0	22.3	22.5	22.8	23.0
Short Circuit Current-Isc-aBSI(A)	19.58	19.67	19.77	19.87	19.97

STC: Irradiance 1000 W/m², 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; 30 Years Limited Power Warranty;
Bifacial factor:80±10(%) ★ Module Efficiency (%): Round-off to the nearest number
The first year degradation:1%,annual degradation:0.4%,power retention rate within 30 years:87.4%
φVoc=95%±5%, φIsc=80%±10%, φPmax=80%±10%;

Electrical characteristics with 13.5% rear side power gain

Total Equivalent power -Pmax (Wp)	484	490	495	501	507
Open Circuit Voltage-Voc(V)	34.98	35.19	35.40	35.59	35.79
Short Circuit Current-Isc(A)	17.58	17.67	17.75	17.84	17.93
Maximum Power Voltage-Vmpp(V)	29.50	29.70	29.90	30.10	30.28
Maximum Power Current-Impp(A)	16.41	16.49	16.57	16.63	16.74

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA (NMOT)

Model Type	RSM96-11-440BNDG	RSM96-11-445BNDG	RSM96-11-450BNDG	RSM96-11-455BNDG	RSM96-11-460BNDG
Maximum Power-Pmax (Wp)	333.3	337.1	341.0	344.6	349.0
Open Circuit Voltage-Voc (V)	32.53	32.73	32.92	33.10	33.28
Short Circuit Current-Isc (A)	13.10	13.17	13.23	13.30	13.37
Maximum Power Voltage-Vmpp (V)	27.38	27.56	27.75	27.93	28.10
Maximum Power Current-Impp (A)	12.17	12.23	12.29	12.34	12.42

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

MECHANICAL DATA

Solar cells	*n*-type TOPCon
Cell configuration	96 cells (6×8+6×8)
Module dimensions	1762×1134×30mm
Weight	21.5kg
Superstrate	High Transmission, Low Iron, Semi-Tempered ARC Glass
Substrate	Semi-Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm², Positive(+)1200mm, Negative(-)1200mm (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	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	35A
Limiting Reverse Current	35A

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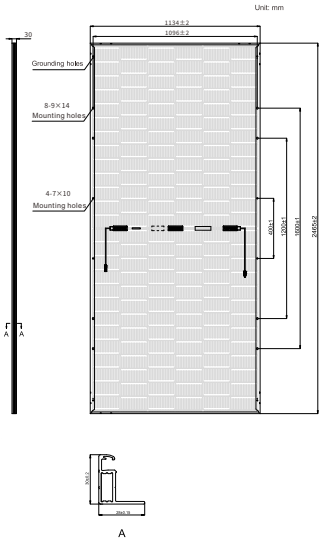
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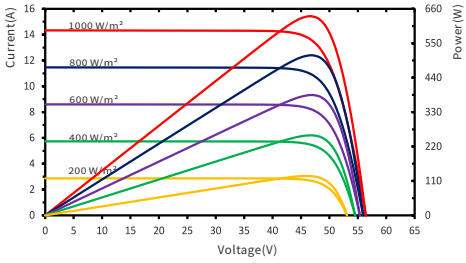
Made in China/Malaysia

Dimensions of PV Module

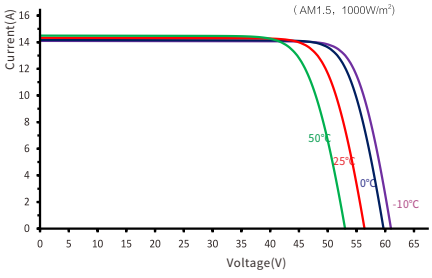


RSM156-9-640BNDG

I-V characteristics at different irradiations



I-V characteristics at different temperatures



ELECTRICAL DATA (STC)

Model Type	RSM156-9-640BNDG	RSM156-9-645BNDG
Rated Power in Watts-Pmax(Wp)	640	645
Open Circuit Voltage-Voc(V)	56.60	56.79
Short Circuit Current-Isc(A)	14.38	14.44
Maximum Power Voltage-Vmpp(V)	47.31	47.47
Maximum Power Current-Impp(A)	13.54	13.60
Module Efficiency (%) ★	22.9	23.1
Short Circuit Current-Isc-aBSI(A)	17.62	17.69

STC: Irradiance 1000 W/m², 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; 30 Years Limited Power Warranty;
Bifacial factor:80±10(%) ★ Module Efficiency (%): Round-off to the nearest number
The first year degradation:1%,annual degradation:0.4%,power retention rate within 30 years:87.4%
φVoc=95%±5%, φIsc=80%±10%, φPmax=80%±10%;

Electrical characteristics with 13.5% rear side power gain

Total Equivalent power -Pmax (Wp)	704	710
Open Circuit Voltage-Voc(V)	56.60	56.79
Short Circuit Current-Isc(A)	15.82	15.88
Maximum Power Voltage-Vmpp(V)	47.31	47.47
Maximum Power Current-Impp(A)	14.89	14.96

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA (NMOT)

Model Type	RSM156-9-640BNDG	RSM156-9-645BNDG
Maximum Power-Pmax (Wp)	484.9	488.9
Open Circuit Voltage-Voc (V)	52.64	52.81
Short Circuit Current-Isc (A)	11.79	11.84
Maximum Power Voltage-Vmpp (V)	43.90	44.05
Maximum Power Current-Impp (A)	11.04	11.10

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

MECHANICAL DATA

Solar cells	*n*-type TOPCon
Cell configuration	156 cells (6×13+6×13)
Module dimensions	2465×1134×30mm
Weight	33.5kg
Superstrate	High Transmission, Low Iron, Semi-Tempered ARC Glass
Substrate	Semi-Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm², Positive(+)350mm, Negative(-)230mm (Connector Included)
Connector	Zhejiang Twinsel Electronic Technology Co.,Ltd. PV-SY02, IP68

PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	576	144
Number of modules per pallet	36	36
Number of pallets per container	16	4
Packaging box dimensions (LxWxH) in mm	2485×1110×1260	
Box gross weight[kg]	1270	

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°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

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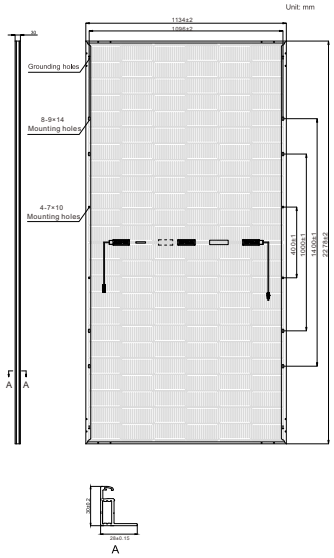
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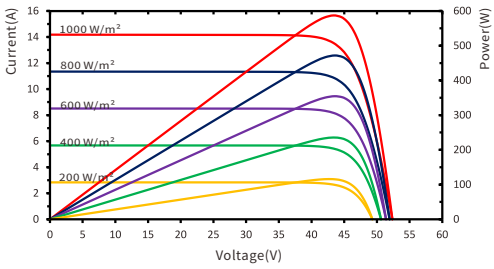
Made in China/Malaysia

Dimensions of PV Module

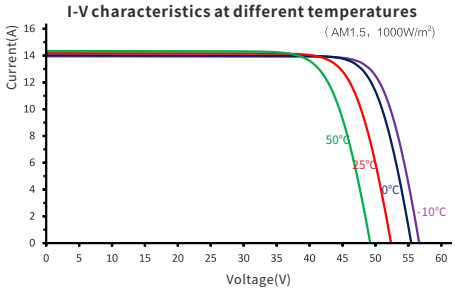


RSM144-9-595BNDG

I-V characteristics at different irradiations



I-V characteristics at different temperatures



ELECTRICAL DATA (STC)

Model Type	RSM144-9-595BNDG
Rated Power in Watts-Pmax(Wp)	595
Open Circuit Voltage-Voc(V)	52.73
Short Circuit Current-Isc(A)	14.30
Maximum Power Voltage-Vmpp(V)	44.32
Maximum Power Current-Impp(A)	13.43
Module Efficiency (%) ★	23.0
Short Circuit Current-Isc-aBSI(A)	17.52

STC: Irradiance 1000 W/m², 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; 30 Years Limited Power Warranty;
Bifacial factor:80±10(%) ★Module Efficiency (%): Round-off to the nearest number
The first year degradation:1%,annual degradation:0.4%,power retention rate within 30 years:87.4%
φVoc=95%±5%, φIsc=80%±10%, φPmax=80%±10%;

ELECTRICAL DATA (BNPI)

Total Equivalent power -Pmax (Wp)	655
Open Circuit Voltage-Voc(V)	52.73
Short Circuit Current-Isc(A)	15.73
Maximum Power Voltage-Vmpp(V)	44.32
Maximum Power Current-Impp(A)	14.77

The electrical data of the 10% rear side power gain is consistent with the BNPI data.
BNPI: front side irradiance 1 000 W/m², back side irradiance 135 W/m², 25 °C, AM 1.5 according to IEC TS 60904.

ELECTRICAL DATA (NMOT)

Model Type	RSM144-9-595BNDG
Maximum Power-Pmax (Wp)	450.7
Open Circuit Voltage-Voc (V)	49.04
Short Circuit Current-Isc (A)	11.73
Maximum Power Voltage-Vmpp (V)	41.13
Maximum Power Current-Impp (A)	10.96

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

MECHANICAL DATA

Solar cells	*n*-type TOPCon
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2278×1134×30mm
Weight	31kg
Superstrate	High Transmission, Low Iron, Semi-Tempered ARC Glass
Substrate	Semi-Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm², Positive(+)350mm, Negative(-)230mm (Connector Included)
Connector	Zhejiang Twinsel Electronic Technology Co.,Ltd. PV-SY02, IP68

PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	720	180
Number of modules per pallet	36	36
Number of pallets per container	20	5
Packaging box dimensions (LxWxH) in mm	2290×1110×1260	
Box gross weight[kg]	1170	

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°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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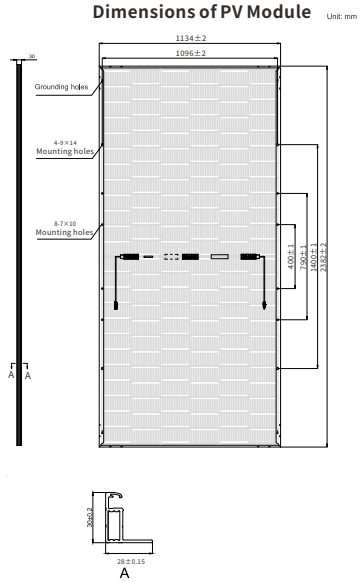
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Version: REM144-BNDG-16BB-EN-H1-1-2025-AU-CEC

Made in China/Malaysia

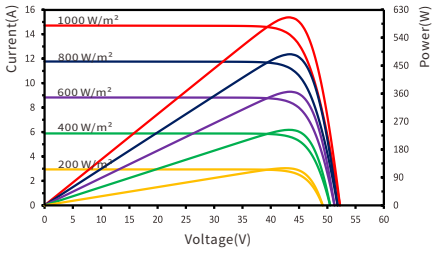
Dimensions of PV Module

Unit: mm

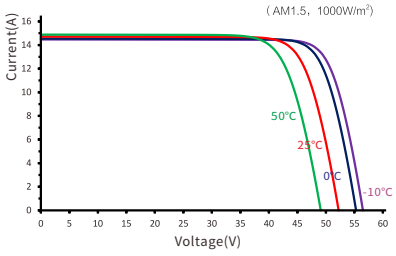


RSM144-10-620BNDG

I-V characteristics at different irradiations



I-V characteristics at different temperatures



PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	720	144
Number of modules per pallet	36	36
Number of pallets per container	20	4
Packaging box dimensions (LxWxH) in mm	2395×1110×1260	
Box gross weight[kg]	1220	

ELECTRICAL DATA (STC)

Model Type	RSM144-10-615BNDG	RSM144-10-620BNDG	RSM144-10-625BNDG	RSM144-10-630BNDG
Rated Power in Watts-Pmax(Wp)	615	620	625	630
Open Circuit Voltage-Voc(V)	52.62	52.82	53.00	53.17
Short Circuit Current-Isc(A)	14.82	14.88	14.94	15.01
Maximum Power Voltage-Vmpp(V)	43.72	43.90	44.08	44.26
Maximum Power Current-Impp(A)	14.07	14.13	14.20	14.26
Module Efficiency (%) ★	22.8	23.0	23.2	23.3
Short Circuit Current-Isc-aBSI(A)	18.15	18.23	18.30	18.39

STC: Irradiance 1000 W/m², 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; 30 Years Limited Power Warranty;
Bifacial factor:80±10(%) ★ Module Efficiency (%): Round-off to the nearest number
The first year degradation:1%,annual degradation:0.4%,power retention rate within 30 years:87.4%
φVoc=95%±5%, φIsc=80%±10%, φPmax=80%±10%;

ELECTRICAL DATA (BNPI)

Total Equivalent power -Pmax (Wp)	676	682	688	694
Open Circuit Voltage-Voc(V)	52.62	52.82	53.00	53.17
Short Circuit Current-Isc(A)	16.30	16.36	16.43	16.51
Maximum Power Voltage-Vmpp(V)	43.72	43.90	44.08	44.26
Maximum Power Current-Impp(A)	15.47	15.54	15.61	15.69

The electrical data of the 10% rear side power gain is consistent with the BNPI data.
BNPI: front side irradiance 1 000 W/m², back side irradiance 135 W/m², 25 °C, AM 1.5 according to IEC TS 60904.

ELECTRICAL DATA (NMOT)

Model Type	RSM144-10-615BNDG	RSM144-10-620BNDG	RSM144-10-625BNDG	RSM144-10-630BNDG
Maximum Power-Pmax (Wp)	465.6	469.7	473.8	477.9
Open Circuit Voltage-Voc (V)	48.94	49.12	49.29	49.45
Short Circuit Current-Isc (A)	12.15	12.20	12.25	12.31
Maximum Power Voltage-Vmpp (V)	40.57	40.74	40.91	41.07
Maximum Power Current-Impp (A)	11.48	11.53	11.58	11.64

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

MECHANICAL DATA

Solar cells	*n*-type TOPCon
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2382×1134×30mm
Weight	32kg
Superstrate	High Transmission, Low Iron, Semi-Tempered ARC Glass
Substrate	Semi-Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm², 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	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	30A

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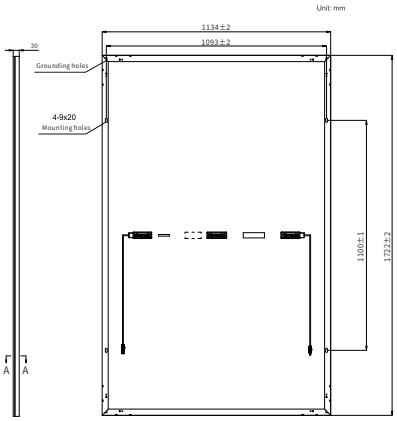
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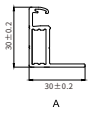
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Version: REM144-BNDG-16BB-EN-H1-1-2025-AU-CEC

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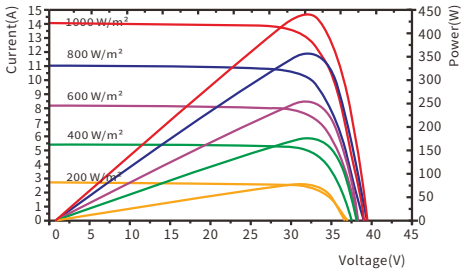
Dimensions of PV Module



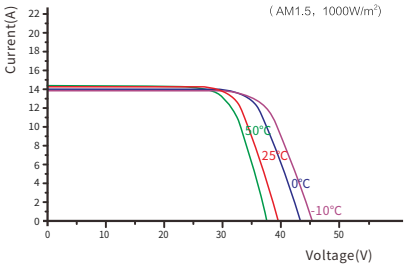


RSM108-9-425NDG

I-V characteristics at different irradiations



I-V characteristics at different temperatures



ELECTRICAL DATA (STC)

Model Type	RSM108-9-440NDG
Rated Power in Watts-Pmax(Wp)	440
Open Circuit Voltage-Voc(V)	39.65
Short Circuit Current-Isc(A)	14.09
Maximum Power Voltage-Vmpp(V)	33.38
Maximum Power Current-Impp(A)	13.19
Module Efficiency (%) ★	22.5

STC: Irradiance 1000 W/m', 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: 0-5W Measurement tolerance: ±3%
Short Circuit Current tolerance±4% Open Circuit Voltage tolerance: ±3%
15 Years Limited Product Warranty; 30 Years Limited Power Warranty
The first year degradation:1%,annual degradation:0.4%,power retention rate within 30 years:87.4%

ELECTRICAL DATA (NMOT)

Model Type	RSM108-9-440NDG
Maximum Power-Pmax (Wp)	333.4
Open Circuit Voltage-Voc (V)	36.84
Short Circuit Current-Isc (A)	11.55
Maximum Power Voltage-Vmpp (V)	30.98
Maximum Power Current-Impp (A)	10.76

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

MECHANICAL DATA

Solar cells	*n*-type TOPCon
Cell configuration	108 cells (6×9+6×9)
Module dimensions	1722×1134×30/35mm
Weight	20.5~28.5kg
Superstrate	High Transmission, Low Iron, Semi-Tempered ARC Glass
Substrate	Semi-Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm², Positive(+)1200mm, Negative(-)1200mm (Connector Included)
Connector	Zhejiang Twinsel Electronic Technology Co.,Ltd. PV-SY02, IP68

PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	936	216
Number of modules per pallet	36	36
Number of pallets per container	26	6
Packaging box dimensions (LxWxH) in mm	1745×1110×1260	
Box gross weight[kg]	780	

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°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

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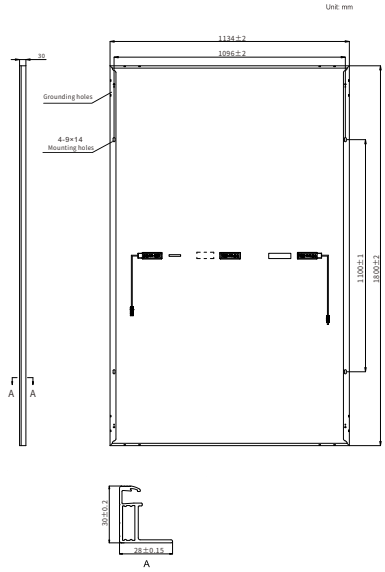
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Version: REM108-NDG-16BB-EN-H1-1-2024-AU-CEC

Made in China/Malaysia

Dimensions of PV Module



ELECTRICAL DATA (STC)

Model Type	RSM108-10-440NDG	RSM108-10-450NDG	RSM108-10-455NDG	RSM108-10-460NDG
Rated Power in Watts-Pmax(Wp)	440	450	455	460
Open Circuit Voltage-Voc(V)	38.61	39.05	39.26	39.47
Short Circuit Current-Isc(A)	14.55	14.66	14.72	14.79
Maximum Power Voltage-Vmpp(V)	32.08	32.44	32.64	32.84
Maximum Power Current-Impp(A)	13.74	13.88	13.94	14.01
Module Efficiency (%) ★	21.6	22.1	22.3	22.5

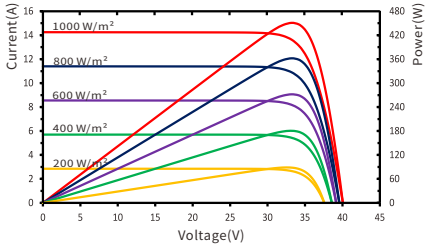
STC: Irradiance 1000 W/m', Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3
* Module Efficiency(%): Round-off to the nearest number
Sorting and binning tolerances: 0-5W Measurement tolerance: ±3%
Short Circuit Current tolerance±4% Open Circuit Voltage tolerance: ±3%
15 Years Limited Product Warranty; 30 Years Limited Power Warranty
The first year degradation:1%,annual degradation:0.4%,power retention rate within 30 years:87.4%

ELECTRICAL DATA (NMOT)

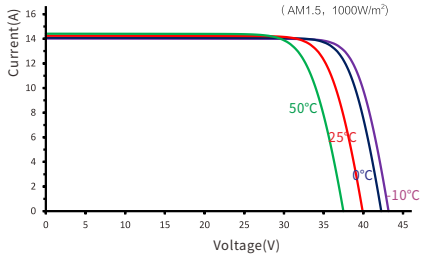
Model Type	RSM108-10-440NDG	RSM108-10-450NDG	RSM108-10-455NDG	RSM108-10-460NDG
Maximum Power-Pmax (Wp)	333.7	341.0	344.7	348.4
Open Circuit Voltage-Voc (V)	35.91	36.32	36.51	36.71
Short Circuit Current-Isc (A)	11.93	12.02	12.07	12.13
Maximum Power Voltage-Vmpp (V)	29.77	30.10	30.29	30.48
Maximum Power Current-Impp (A)	11.21	11.33	11.38	11.43

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

RSM108-10-455NDG
I-V characteristics at different irradiations



I-V characteristics at different temperatures



MECHANICAL DATA

Solar cells	*n*-type TOPCon
Cell configuration	108 cells (6×9+6×9)
Module dimensions	1800×1134×30/35mm
Weight	21.5~28.5kg
Superstrate	High Transmission, Low Iron, Semi-Tempered ARC Glass
Substrate	Semi-Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm², Positive(+)350mm, Negative(-)230mm (Connector Included)
Connector	Zhejiang Twinsel Electronic Technology Co.,Ltd. PV-SY02, IP68

PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	864	216
Number of modules per pallet	36	36
Number of pallets per container	24	6
Packaging box dimensions (LxWxH) in mm	1820×1110×1260	
Box gross weight[kg]	950	

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

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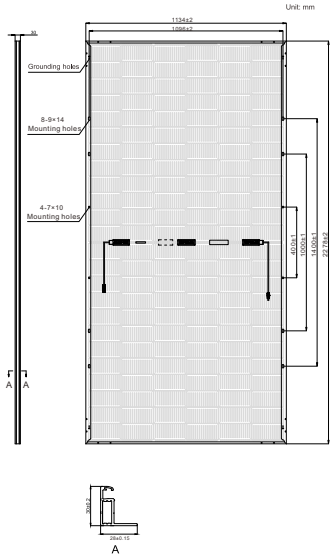
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Version: REM108-NDG-16BB-EN-H1-1-2024-AU-CEC

Made in China/Malaysia

Dimensions of PV Module



ELECTRICAL DATA (STC)

Model Type	RSM144-9-580BNDG	RSM144-9-585BNDG	RSM144-9-590BNDG
Rated Power in Watts-Pmax(Wp)	580	585	590
Open Circuit Voltage-Voc(V)	52.17	52.37	52.55
Short Circuit Current-Isc(A)	14.12	14.18	14.24
Maximum Power Voltage-Vmpp(V)	43.80	44.00	44.16
Maximum Power Current-Impp(A)	13.26	13.32	13.37
Module Efficiency (%) ★	22.5	22.7	22.8
Short Circuit Current-Isc-aBSI(A)	17.30	17.37	17.44

STC: Irradiance 1000 W/m², 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: 0-5W Measurement tolerance: ±3%
Short Circuit Current tolerance ±4% Open Circuit Voltage tolerance: ±3%.
15 Years Limited Product Warranty; 30 Years Limited Power Warranty;
Bifacial factor:80±10(%) ★ Module Efficiency (%): Round-off to the nearest number
The first year degradation:1%,annual degradation:0.4%,power retention rate within 30 years:87.4%
φVoc=95%±5%, φIsc=80%±10%, φPmax=80%±10%;

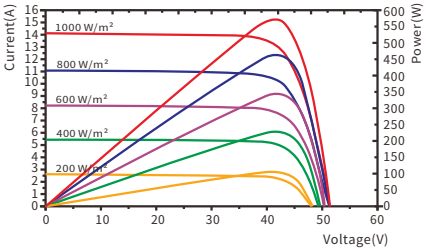
Electrical characteristics with 13.5% rear side power gain

Total Equivalent power -Pmax (Wp)	638	644	649
Open Circuit Voltage-Voc(V)	52.17	52.37	52.55
Short Circuit Current-Isc(A)	15.53	15.60	15.66
Maximum Power Voltage-Vmpp(V)	43.80	44.00	44.16
Maximum Power Current-Impp(A)	14.59	14.65	14.71

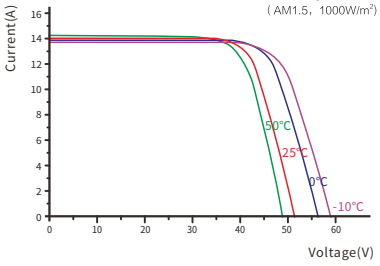
Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

RSM144-9-575BNDG

I-V characteristics at different irradiations



I-V characteristics at different temperatures



ELECTRICAL DATA (NMOT)

Model Type	RSM144-9-580BNDG	RSM144-9-585BNDG	RSM144-9-590BNDG
Maximum Power-Pmax (Wp)	439.8	443.6	447.1
Open Circuit Voltage-Voc (V)	48.52	48.70	48.87
Short Circuit Current-Isc (A)	11.58	11.63	11.68
Maximum Power Voltage-Vmpp (V)	40.65	40.83	40.98
Maximum Power Current-Impp (A)	10.82	10.87	10.91

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

MECHANICAL DATA

Solar cells	*n*-type TOPCon
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2278×1134×30/35mm
Weight	30.0~38.0kg
Superstrate	High Transmission, Low Iron, Semi-Tempered ARC Glass
Substrate	Semi-Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm², Positive(+)350mm, Negative(-)230mm (Connector Included)
Connector	Zhejiang Twinsel Electronic Technology Co.,Ltd. PV-SY02, IP68

PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	720	180
Number of modules per pallet	36	36
Number of pallets per container	20	5
Packaging box dimensions (LxWxH) in mm	2290×1110×1260	
Box gross weight[kg]	1170	

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°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

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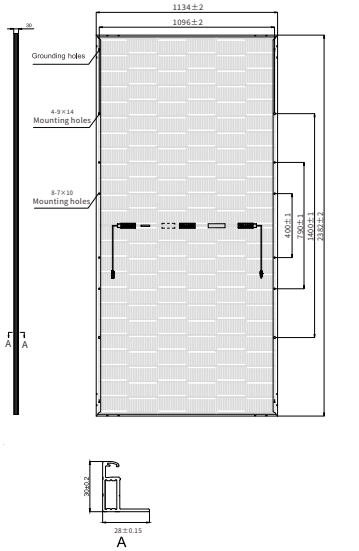
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No special undertaking or warranty for the suitability of special purpose or being installed in extraordinary surroundings is granted unless as otherwise specifically committed by manufacturer in contract document.

Version: REM144-BNDG-16BB-EN-H1-1-2024-AU-CEC

Made in China/Malaysia

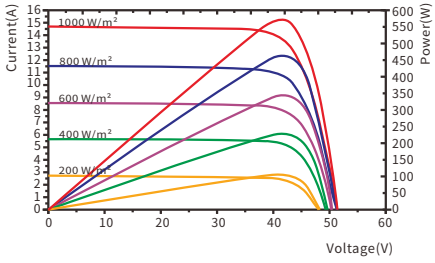
Dimensions of PV Module

Unit: mm

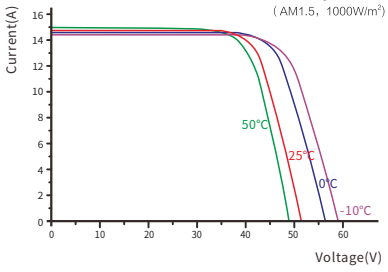


RSM144-10-605BNDG

I-V characteristics at different irradiations



I-V characteristics at different temperatures



ELECTRICAL DATA (STC)

Model Type	RSM144-10-605BNDG	RSM144-10-610BNDG
Rated Power in Watts-Pmax(Wp)	605	610
Open Circuit Voltage-Voc(V)	52.24	52.43
Short Circuit Current-Isc(A)	14.71	14.77
Maximum Power Voltage-Vmpp(V)	43.40	43.56
Maximum Power Current-Impp(A)	13.95	14.01
Module Efficiency (%) ★	22.4	22.6
Short Circuit Current-Isc-aBSI(A)	18.02	18.09

STC: Irradiance 1000 W/m², 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: 0-5W Measurement tolerance: ±3%
Short Circuit Current tolerance ±4% Open Circuit Voltage tolerance: ±3%.
15 Years Limited Product Warranty; 30 Years Limited Power Warranty;
Bifacial factor:80±10(%) ★ Module Efficiency (%): Round-off to the nearest number
The first year degradation:1%,annual degradation:0.4%,power retention rate within 30 years:87.4%
φVoc=95%±5%, φIsc=80%±10%, φPmax=80%±10%;

Electrical characteristics with 13.5% rear side power gain

Total Equivalent power -Pmax (Wp)	666	671
Open Circuit Voltage-Voc(V)	52.24	52.43
Short Circuit Current-Isc(A)	16.18	16.25
Maximum Power Voltage-Vmpp(V)	43.40	43.56
Maximum Power Current-Impp(A)	15.35	15.41

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA (NMOT)

Model Type	RSM144-10-605BNDG	RSM144-10-610BNDG
Maximum Power-Pmax (Wp)	458.5	462.1
Open Circuit Voltage-Voc (V)	48.58	48.76
Short Circuit Current-Isc (A)	12.06	12.11
Maximum Power Voltage-Vmpp (V)	40.28	40.42
Maximum Power Current-Impp (A)	11.38	11.43

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

MECHANICAL DATA

Solar cells	*n*-type TOPCon
Cell configuration	144 cells (6×12+6×12)
Module dimensions	2382/2384×1134×30/35mm
Weight	30.0~38.0kg
Superstrate	High Transmission, Low Iron, Semi-Tempered ARC Glass
Substrate	Semi-Tempered Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes
Cables	4.0mm², 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	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Fire Class According to UI790	CLASS C
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	720	144
Number of modules per pallet	36	36
Number of pallets per container	20	4
Packaging box dimensions (LxWxH) in mm	2395×1110×1260	
Box gross weight[kg]	1220	

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