

# PRODUCT BROCHUES

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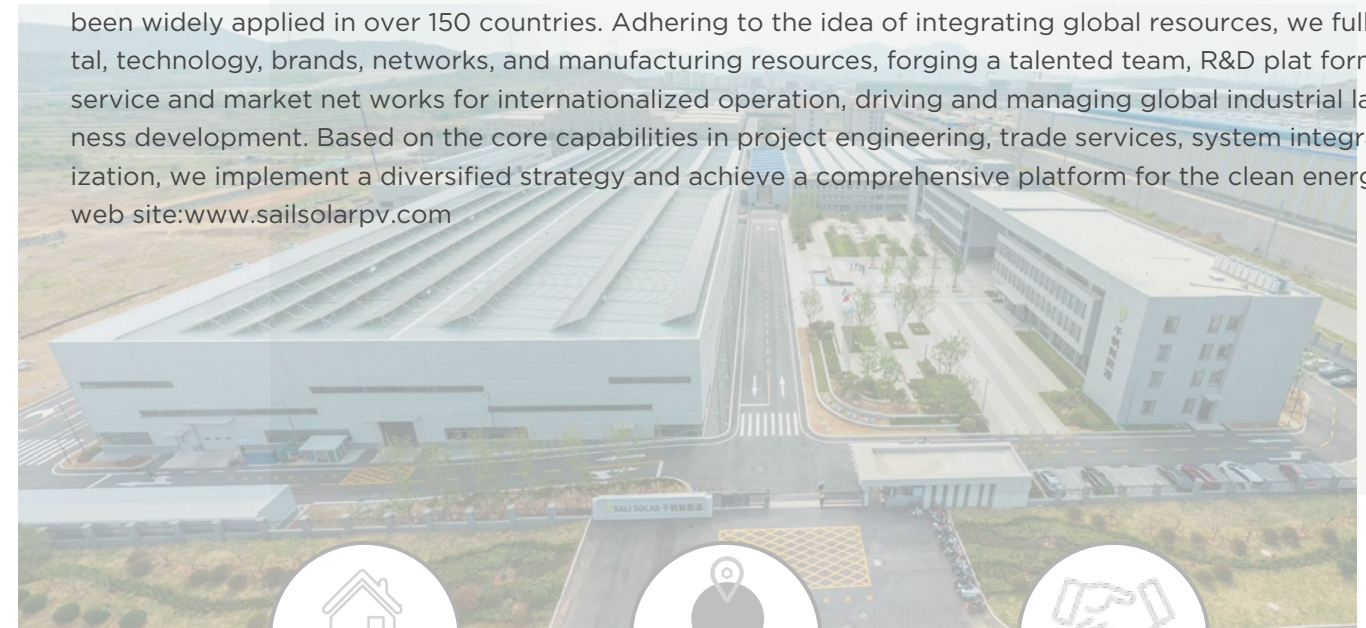
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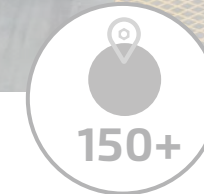
## About SAIL SOLAR

As a professional solar products manufacturer, Sail Solar specializes in research, development, production, and sales of solar PV products. Since its foundation in 2008, Sail Solar has accomplished significant achievements which out-paced most of our main competitors in terms of production capacity and in the number of innovative designs. Sail Solar upholds its belief that innovation is the key driver behind advancement by pursuing new technologies of technological innovations.

Sail Solar serves worldwide customers with high-quality products. So far more than 20GW Sail Solar's products have been widely applied in over 150 countries. Adhering to the idea of integrating global resources, we fully integrate capital, technology, brands, networks, and manufacturing resources, forging a talented team, R&D platform, after-sales service and market networks for internationalized operation, driving and managing global industrial layout and business development. Based on the core capabilities in project engineering, trade services, system integration and globalization, we implement a diversified strategy and achieve a comprehensive platform for the clean energy industry. Our web site: [www.sailsolarpv.com](http://www.sailsolarpv.com)



Area



Global  
Footprints



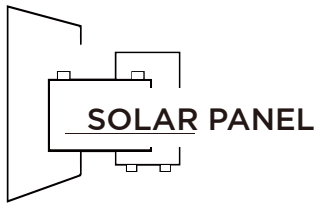
Supply chain  
Partners



Workers



Serve



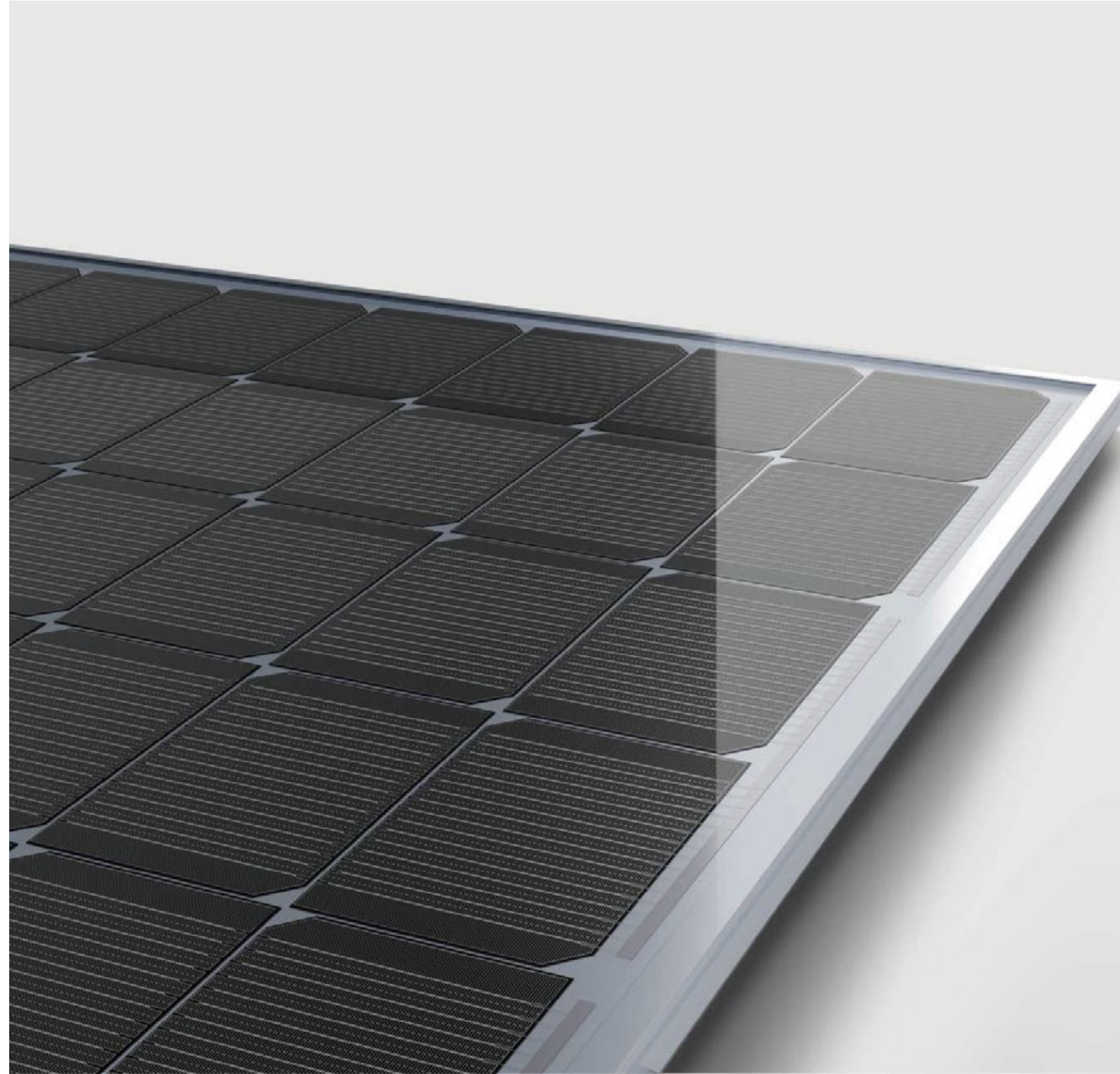
# SOLAR PANEL

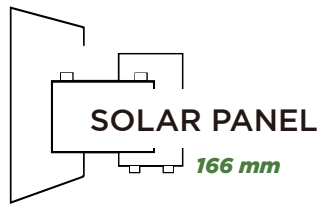
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M6 Series  
Solar Panels

166mm Series

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Hi Pro **3**

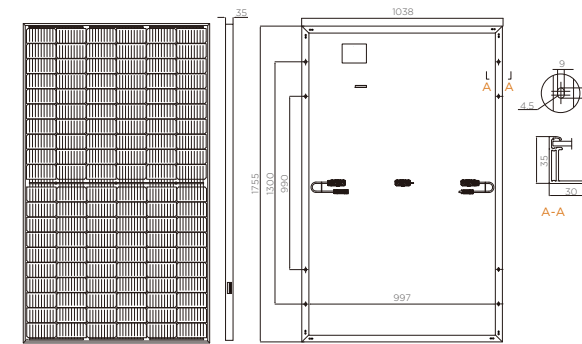


**345~370W** All Black

High Efficiency Low LID Mono PERC with MBB & Half-cut Technology



Design (mm)



\*Units: mm \*Tolerance: ±2mm

Cell Orientation	120 (6x20)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight:	19.5kg
Dimension	1755x1038x35mm
Packaging	30pcs per pallet 180pcs per 20'GP 780pcs per 40'HC

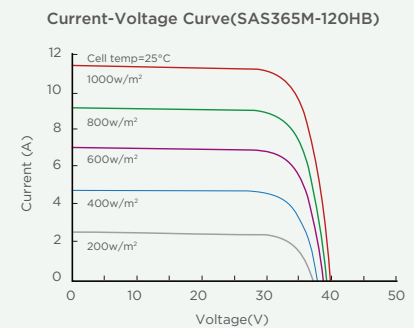
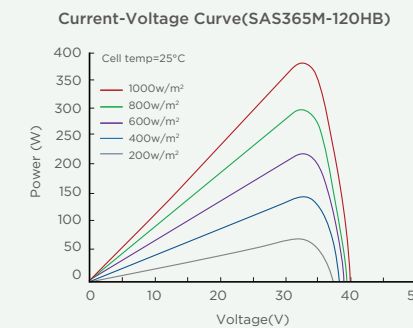
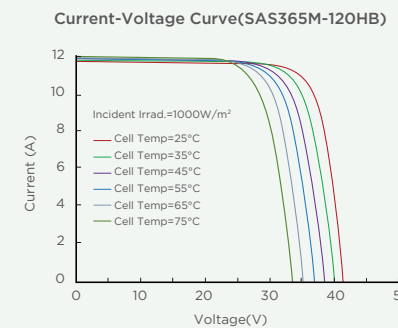
Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Ratin	20A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa

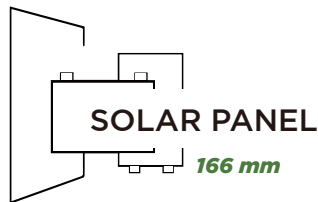
Electrical Characteristics

Model Number	SAS350M-120HB		SAS355M-120HB		SAS360M-120HB		SAS365M-120HB		SAS370M-120HB		SAS375M-120HB		SAS380M-120HB	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	350	261.4	355	265.1	360	268.8	365	272.6	370	276.3	375	280.0	380	283.8
Open Circuit Voltage (Voc/V)	40.1	37.6	40.3	37.8	40.5	38.0	40.7	38.2	40.9	38.3	41.1	38.5	41.3	38.7
Short Circuit Current (Isc/A)	11.15	9.02	11.25	9.10	11.35	9.17	11.43	9.25	11.52	9.32	11.60	9.38	11.69	9.45
Voltage at Maximum Power (Vmp/V)	33.6	31.3	33.8	31.5	34.0	31.7	34.2	31.8	34.4	32.0	34.6	32.2	34.8	32.4
Current at Maximum Power (Imp/A)	10.42	8.35	10.51	8.43	10.59	8.49	10.68	8.56	10.76	8.63	10.84	8.69	10.92	8.76
Module Efficiency(%)	19.2		19.5		19.8		20.0		20.3		20.6		20.9	
Temperature Coefficient of Isc														
Temperature Coefficient of Voc														
Temperature Coefficient of Pmax														

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

I-V Curve



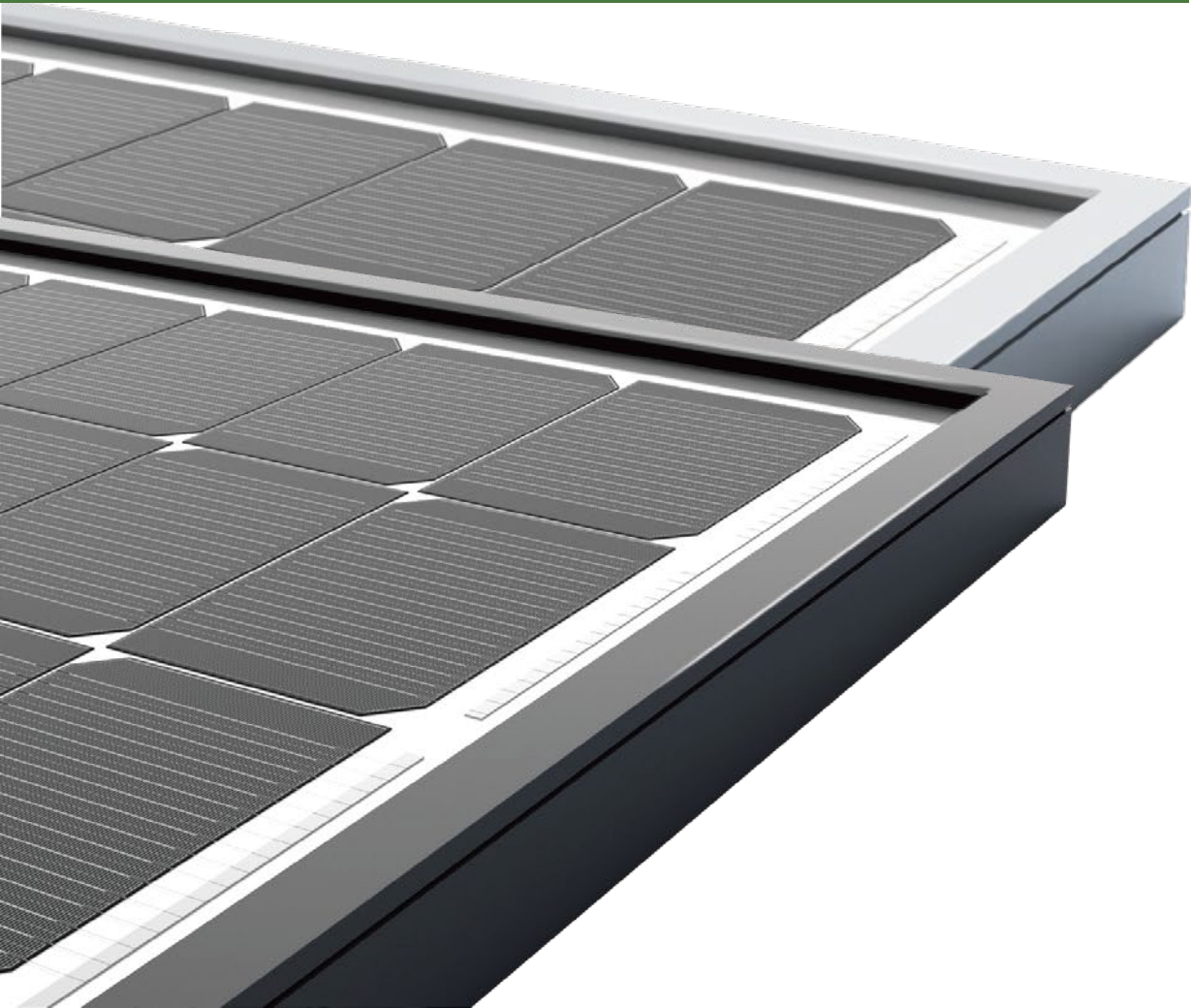


# Hi Pro 3

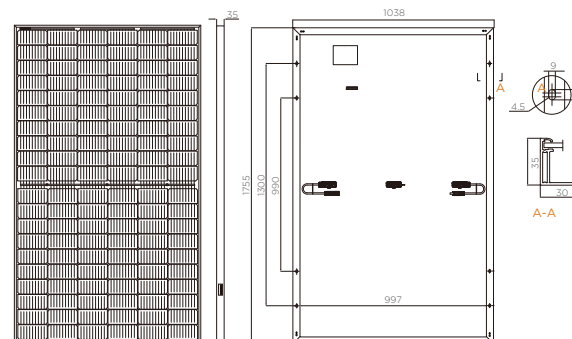


# 365~390W

## High Efficiency Low LID Mono PERC with MBB & Half-cut Technology



### Design (mm)



\*Units: mm \*Tolerance: ±2mm

<b>Cell Orientation</b>	120 (6x20)
<b>Junction Box</b>	IP68, three diodes
<b>Output Cable</b>	4mm <sup>2</sup> , 300mm in length, length can be customized
<b>Glass</b>	Single glass 3.2mm coated tempered glass
<b>Frame</b>	Anodized aluminum alloy frame
<b>Weight:</b>	19.5kg
<b>Dimension</b>	1755x1038x35mm
<b>Packaging</b>	30pcs per pallet 180pcs per 20'GP 780pcs per 40'HC

<b>Operational Temperature</b>	-40°C~+85°C
<b>Power Output Tolerance</b>	0~+5W
<b>Voc &amp; Isc Tolerance</b>	±3%
<b>Max. System Voltage</b>	DC1000V(IEC/UL)
<b>Max. Series Fuse Ratin</b>	20A
<b>NOCT</b>	45±2°C
<b>Safety Class</b>	II
<b>Fire Rating</b>	UL type 1 or 2
<b>Max. Static Load(Front)</b>	5400Pa
<b>Max. Static Load(Back)</b>	2400Pa

### Electrical Characteristics

Model Number	SAS365M-120H		SAS370M-120H		SAS375M-120H		SAS380M-120H		SAS385M-120H		SAS390M-120H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
<b>Maximum Power (Pmax/W)</b>	365	276	370	280	375	284	380	287	385	291	390	295
<b>Open Circuit Voltage (Voc/V)</b>	41.13	38.41	41.30	38.65	41.45	38.89	41.62	39.14	41.78	39.38	41.94	39.63
<b>Short Circuit Current (Isc/A)</b>	11.30	9.15	11.35	9.20	11.41	9.25	11.47	9.30	11.53	9.35	11.58	9.40
<b>Voltage at Maximum Power (Vmp/V)</b>	33.96	32.05	34.23	32.30	34.50	32.55	34.77	32.72	35.04	32.96	35.33	33.20
<b>Current at Maximum Power (Imp/A)</b>	10.75	8.61	10.81	8.66	10.87	8.71	10.93	8.78	10.99	8.83	11.04	8.88
<b>Module Efficiency(%)</b>	19.6		19.9		20.2		20.4		20.7		21.0	
<b>Temperature Coefficient of Isc</b>												+0.044%/°C
<b>Temperature Coefficient of Voc</b>												-0.272%/°C
<b>Temperature Coefficient of Pmax</b>												-0.350%/°C

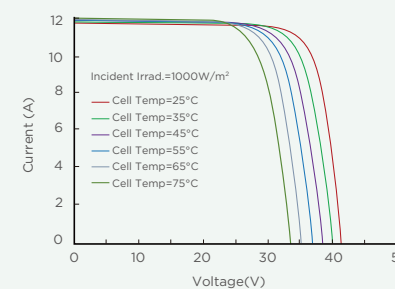
\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5

\* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

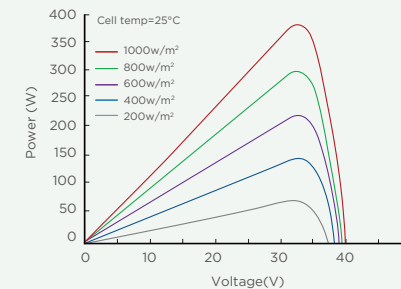
\*Test uncertainty for Pmax: ±3%

### I-V Curve

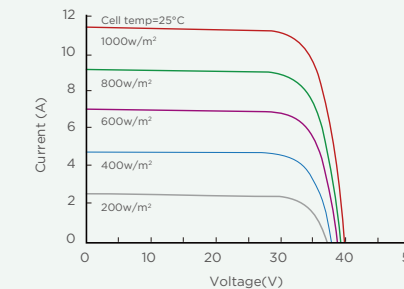
Current-Voltage Curve(SAS365M-120H)

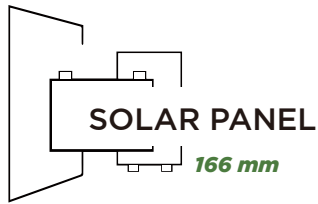


Power-Voltage Curve(SAS365M-120H)



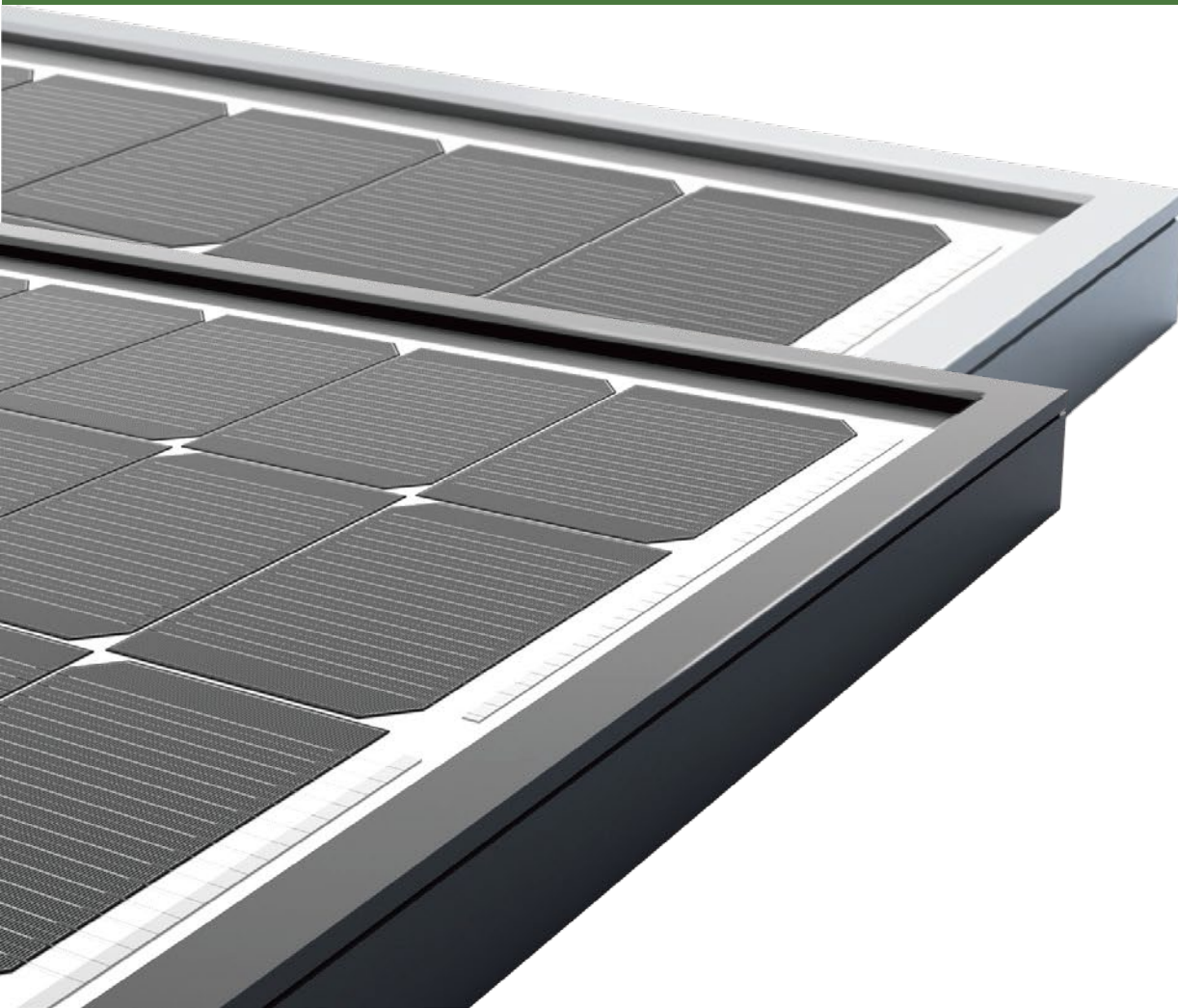
Current-Voltage Curve(SAS365M-120H)



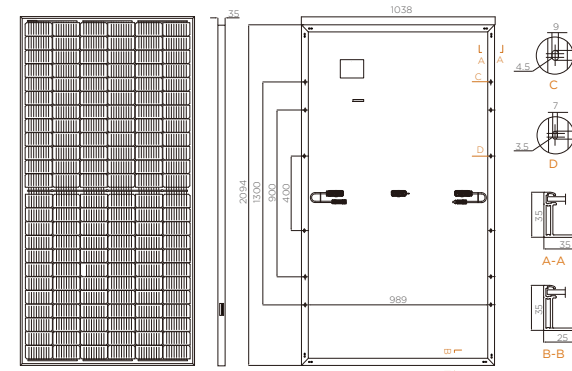


445~470W

High Efficiency Low LID Mono PERC with MBB & Half-cut Technology



Design (mm)



\*Units: mm \*Tolerance: ±2mm

Cell Orientation	144 (6x24)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight:	23.5kg
Dimension	2094x1038x35mm
Packaging	30pcs per pallet 150pcs per 20' GP 660pcs per 40' HC

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Rating	20A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa

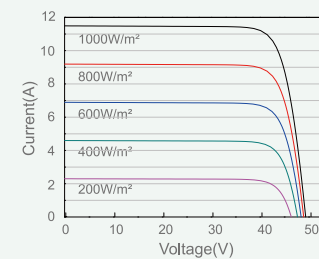
Electrical Characteristics

Model Number	SAS445M-144H		SAS450M-144H		SAS455M-144H		SAS460M-144H		SAS465M-144H		SAS470M-144H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	445	336	450	340	455	344	460	348	465	352	470	355
Open Circuit Voltage (Voc/V)	49.56	46.65	49.70	46.90	49.85	47.15	50.01	47.38	50.15	47.61	50.31	47.84
Short Circuit Current (Isc/A)	11.32	9.20	11.36	9.25	11.41	9.29	11.45	9.33	11.49	9.38	11.53	9.42
Voltage at Maximum Power (Vmp/V)	41.21	38.95	41.52	39.19	41.82	39.44	42.13	39.68	42.43	38.90	42.69	40.10
Current at Maximum Power (Imp/A)	10.80	8.64	10.84	8.68	10.88	8.72	10.92	8.76	10.96	8.81	11.01	8.86
Module Efficiency(%)	20.0		20.3		20.5		20.7		20.9		21.2	
Temperature Coefficient of Isc												+0.044%/°C
Temperature Coefficient of Voc												-0.272%/°C
Temperature Coefficient of Pmax												-0.350%/°C

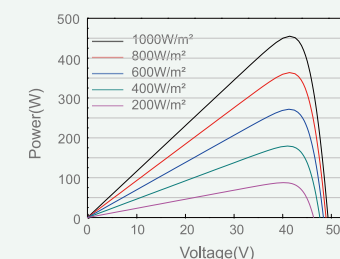
\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \*Test uncertainty for Pmax: ±3%

I-V Curve

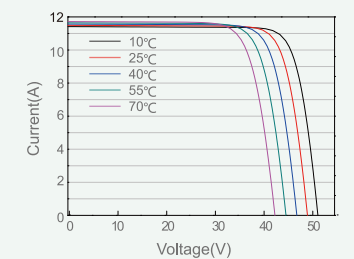
Current-Voltage Curve(SAS455M-144H)

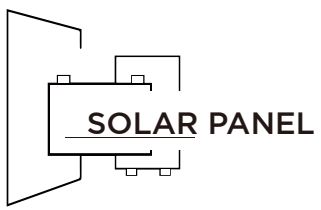


Power-Voltage Curve(SAS455M-144H)



Current-Voltage Curve(SAS455M-144H)





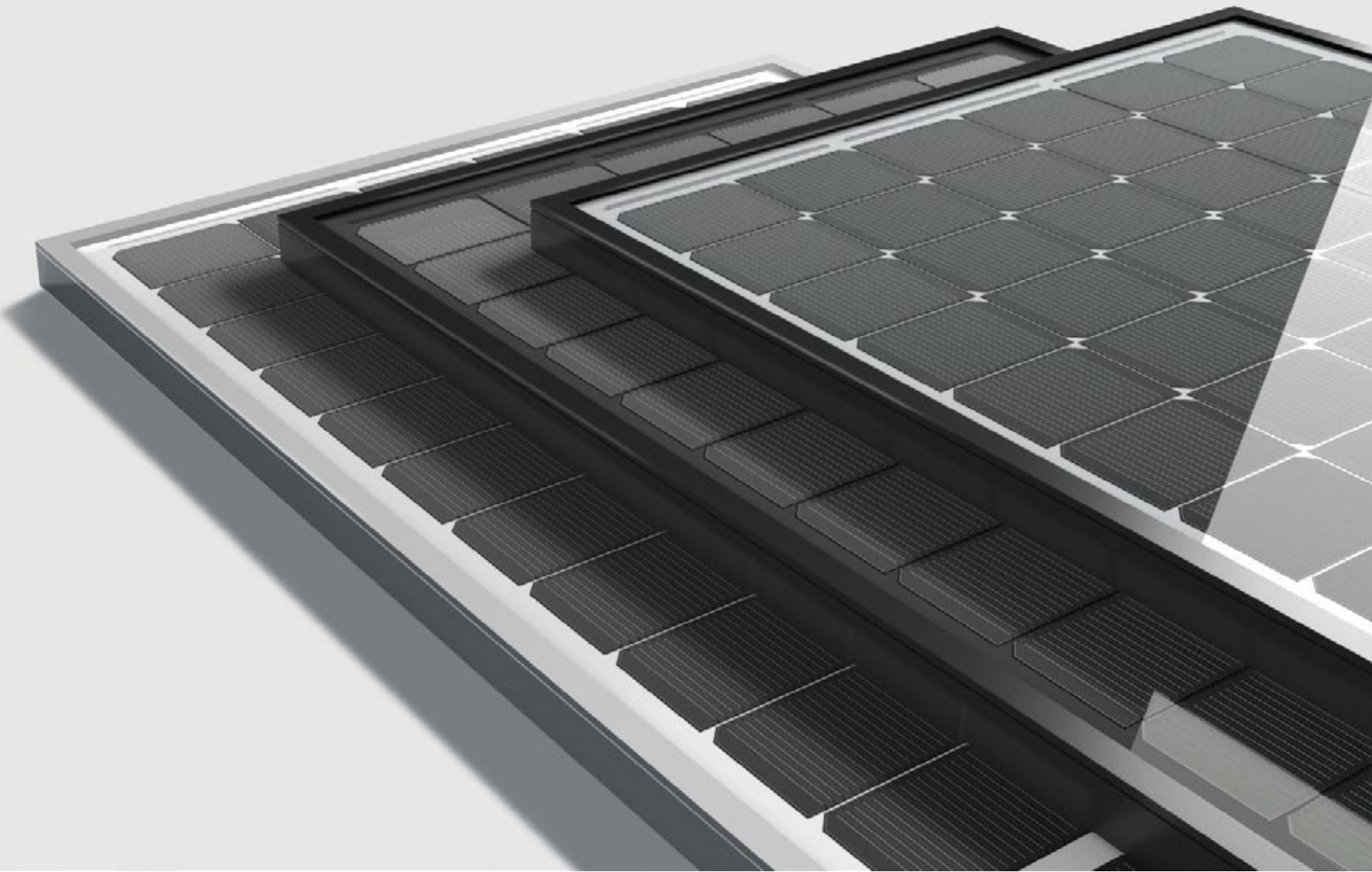
# SOLAR PANEL

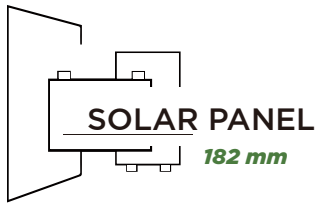
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M10 Series  
Solar Panels

182mm Series

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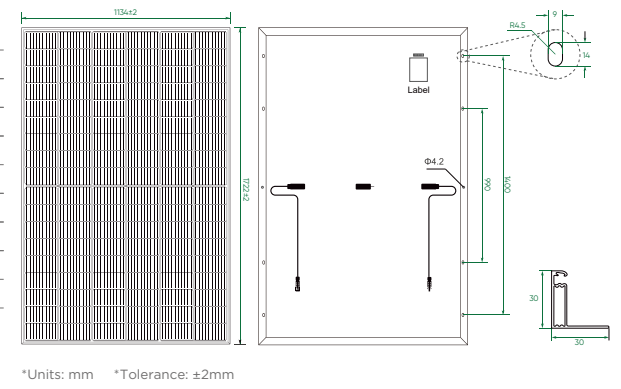
## 415~440W All Black

- N-TOPCon Cell Technology
- Excellent Durability
- Low Power Degradation
- Excellent Low Irradiance Performance
- Excellent An-PID, Low LID Performance
- Higher Power Output



### Mechanical Parameters

<b>Cell Orientation</b>	108 (2x54)	<b>Operational Temperature</b>	-40°C~+85°C
<b>Junction Box</b>	IP68, three diodes	<b>Power Output Tolerance</b>	0~+5W
<b>Output Cable</b>	4mm <sup>2</sup> , 300mm in length, length can be customized	<b>Voc &amp; Isc Tolerance</b>	±3%
<b>Glass</b>	Single glass 3.2mm coated tempered glass	<b>Max. System Voltage</b>	DC1500V(IEC/UL)
<b>Frame</b>	Anodized aluminum alloy frame	<b>Max. Series Fuse Rating</b>	25A
<b>Weight</b>	20.5kg±3%	<b>NOCT</b>	45±2°C
<b>Dimension</b>	1722×1134×30mm	<b>Safety Class</b>	II
<b>Packaging</b>	36pcs per pallet 936pcs per 40'ft Container 216pcs per 20'ft Container	<b>Fire Rating</b>	UL type 1 or 2
		<b>Max. Static Load(Front)</b>	5400Pa
		<b>Max. Static Load(Back)</b>	2400Pa

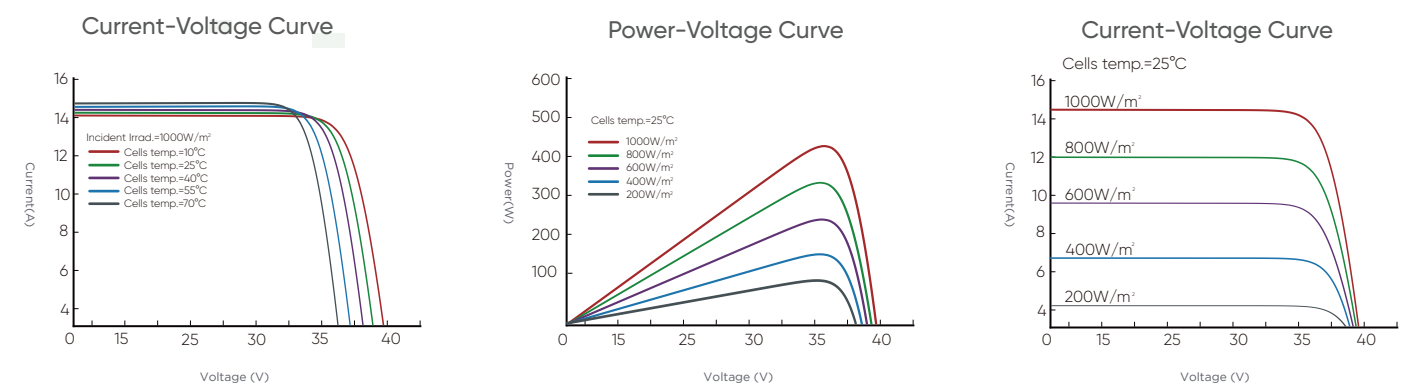


### Electrical Characteristics

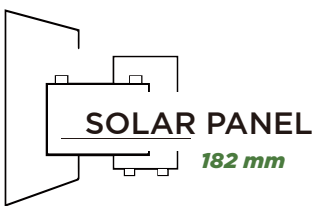
Model Number	SAS415MN-108HB		SAS420MN-108HB		SAS425MN-108HB		SAS430MN-108HB		SAS435MN-108HB		SAS440MN-108HB		
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
Maximum Power (Pmax/W)	415	317	420	321	425	325	430	329	435	333	440	337	
Open Circuit Voltage (Voc/V)	38.33	36.40	38.46	36.50	38.59	36.60	38.72	36.80	38.85	36.94	38.98	37.10	
Short Circuit Current (Isc/A)	14.01	11.30	14.09	11.36	14.17	11.42	14.25	11.49	14.33	11.56	14.41	11.63	
Voltage at Maximum Power (Vmp/V)	31.79	29.70	31.97	29.90	32.16	30.00	32.34	30.20	32.52	30.40	32.70	30.60	
Current at Maximum Power (Imp/A)	13.06	10.68	13.14	10.75	13.22	10.82	13.30	10.89	13.38	10.96	13.46	11.04	
Module Efficiency(%)	21.26		21.51		21.77		22.02		22.28		22.54		
Temperature Coefficient of Isc													+0.045%/°C
Temperature Coefficient of Voc													-0.250%/°C
Temperature Coefficient of Pmax													-0.290%/°C

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

### V-Curve (SAS425MN-108HB)





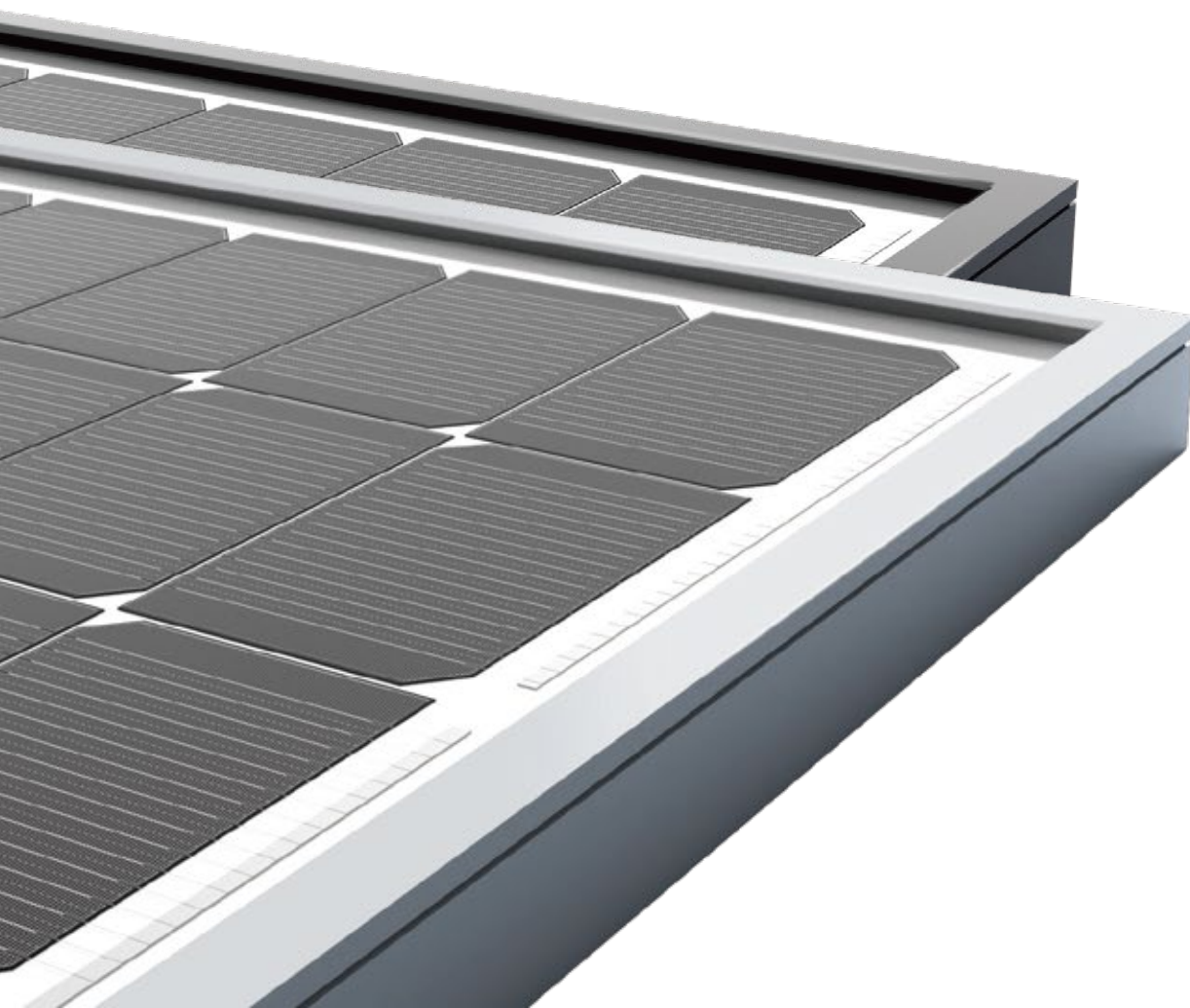


# Hi Neo 4



# 420~440W

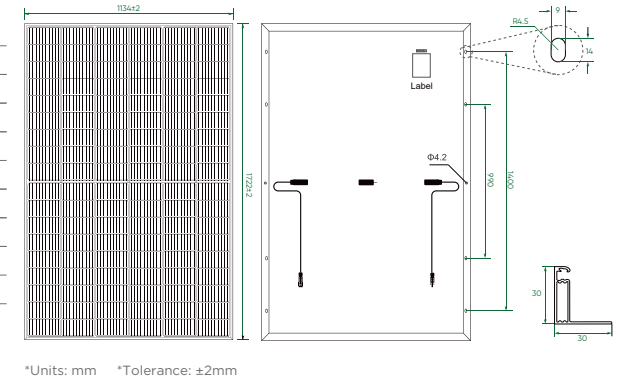
- N-TOPCon Cell Technology
- Excellent Durability
- Low Power Degradation
- Excellent Low Irradiance Performance
- Excellent An-PID, Low LID Performance
- Higher Power Output



### Mechanical Parameters

Cell Orientation	108 (2x54)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	20.5kg±3%
Dimension	1722×1134×30mm
Packaging	36pcs per pallet 936pcs per 40'ft Container 216pcs per 20'ft Container

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Rating	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa

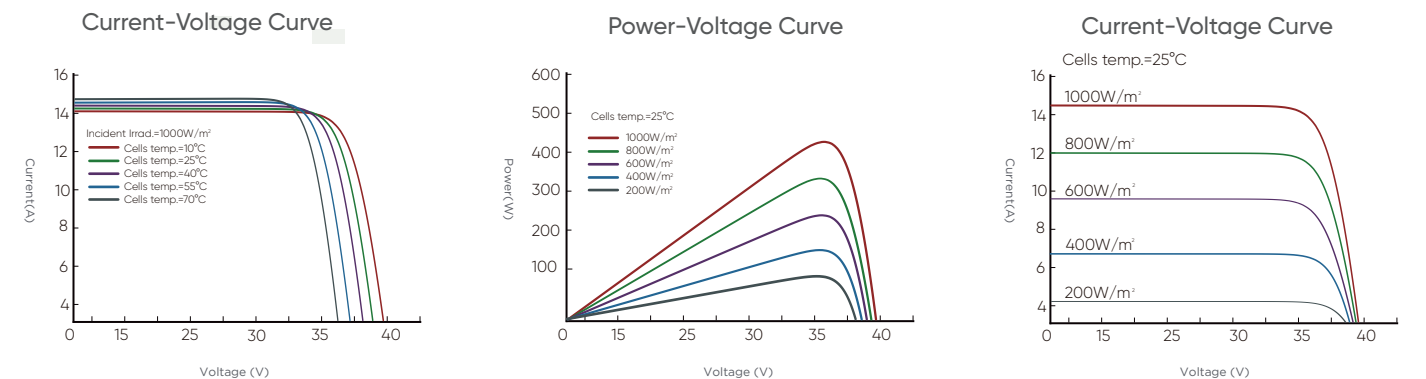


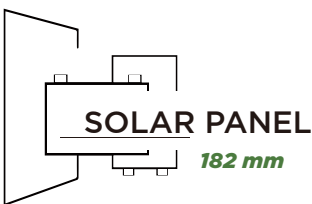
### Electrical Characteristics

Model Number	SAS420MN-108B		SAS425MN-108B		SAS430MN-108B		SAS435MN-108B		SAS440MN-108B	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition										
Maximum Power (Pmax/W)	420	319	425	323	430	326	435	330	440	334
Open Circuit Voltage (Voc/V)	38.11	36.10	38.30	36.20	38.49	36.40	38.68	36.50	38.87	36.60
Short Circuit Current (Isc/A)	14.07	11.34	14.15	11.41	14.23	11.47	14.31	11.53	14.39	11.59
Voltage at Maximum Power (Vmp/V)	31.52	29.70	31.71	29.90	31.89	30.10	32.08	30.30	32.26	30.50
Current at Maximum Power (Imp/A)	13.33	10.74	13.41	10.80	13.49	10.87	13.57	10.90	13.65	10.95
Module Efficiency(%)	21.51		21.77		22.02		22.28		22.53	
Temperature Coefficient of Isc	+0.045%/°C									
Temperature Coefficient of Voc	-0.250%/°C									
Temperature Coefficient of Pmax	-0.290%/°C									

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

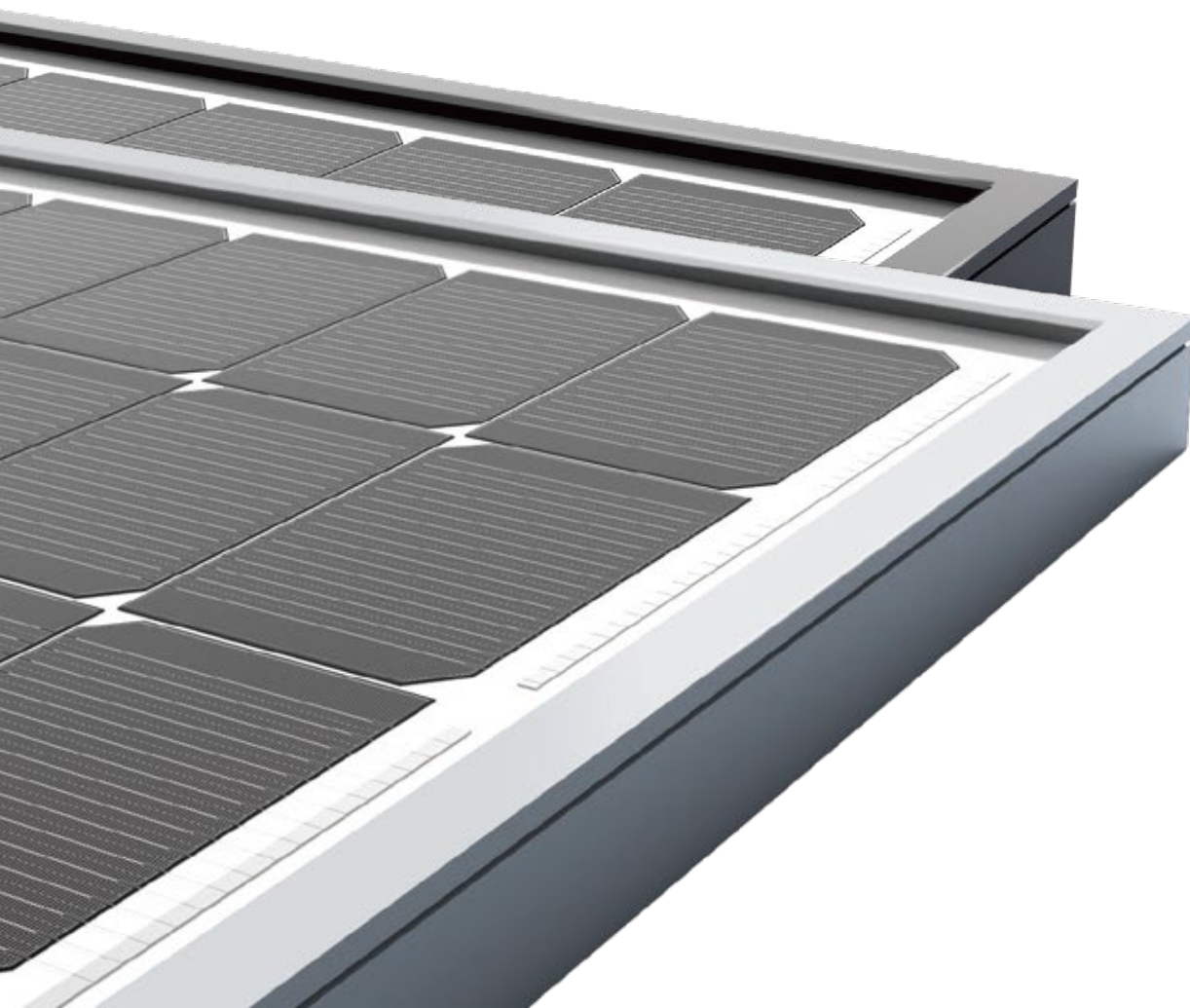
### V-Curve (SAS430MN-108B)





# 460~480W

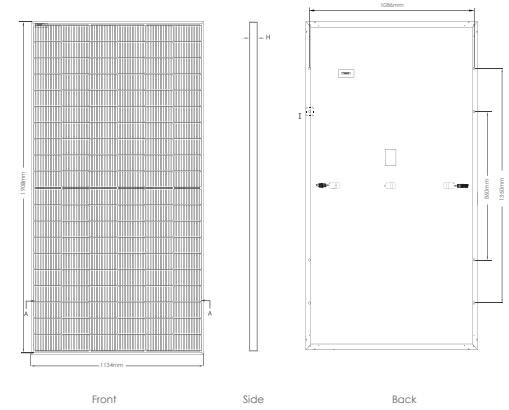
- N-TOPCon Cell Technology
- Excellent Durability
- Low Power Degradation
- Excellent Low Irradiance Performance
- Excellent An-PID, Low LID Performance
- Higher Power Output



### Mechanical Parameters

Cell Orientation	120 (2x60)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	24.2kg±3%
Dimension	1908×1134×35mm
Packaging	31 pcs per pallet 744pcs per 40'ft Container 155pcs per 20'ft Container

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Rating	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa

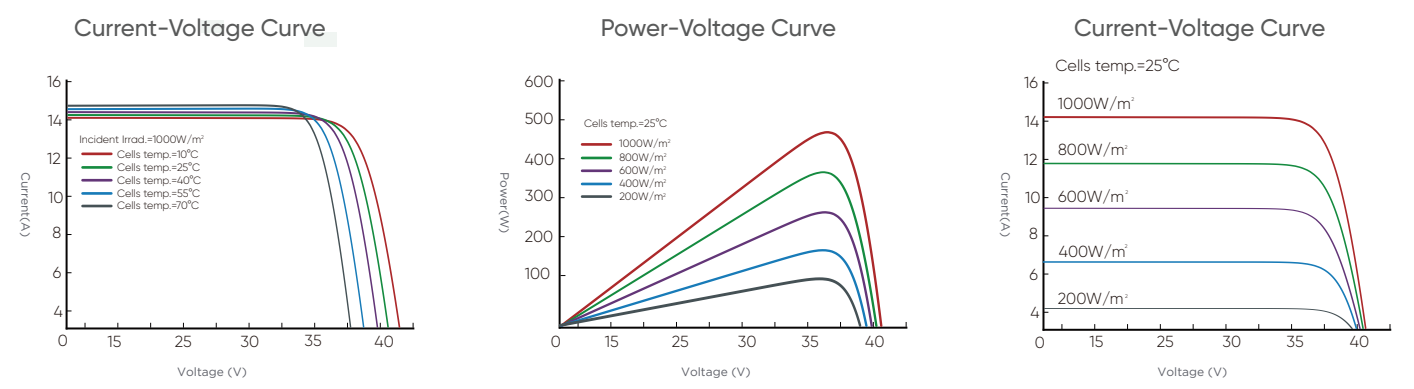


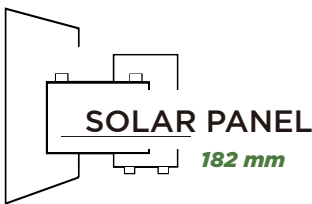
### Electrical Characteristics

Model Number	SAS460MN-120H		SAS465MN-120H		SAS470MN-120H		SAS475MN-120H		SAS480MN-120H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition										
Maximum Power (Pmax/W)	460	346	465	350	470	353	475	357	480	361
Open Circuit Voltage (Voc/V)	42.05	39.94	42.22	40.10	42.38	40.25	42.54	40.41	42.71	40.57
Short Circuit Current (Isc/A)	13.99	11.29	14.07	11.36	14.15	11.42	14.23	11.49	14.31	11.55
Voltage at Maximum Power (Vmp/V)	34.73	33.60	34.90	32.77	35.06	32.94	35.22	33.10	35.39	33.27
Current at Maximum Power (Imp/A)	13.25	10.61	13.33	10.67	13.41	10.73	13.48	10.77	13.57	10.85
Module Efficiency(%)	21.26		21.50		21.73		21.96		22.19	
Temperature Coefficient of Isc										0.045%/°C
Temperature Coefficient of Voc										-0.25%/°C
Temperature Coefficient of Pmax										-0.290%/°C

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

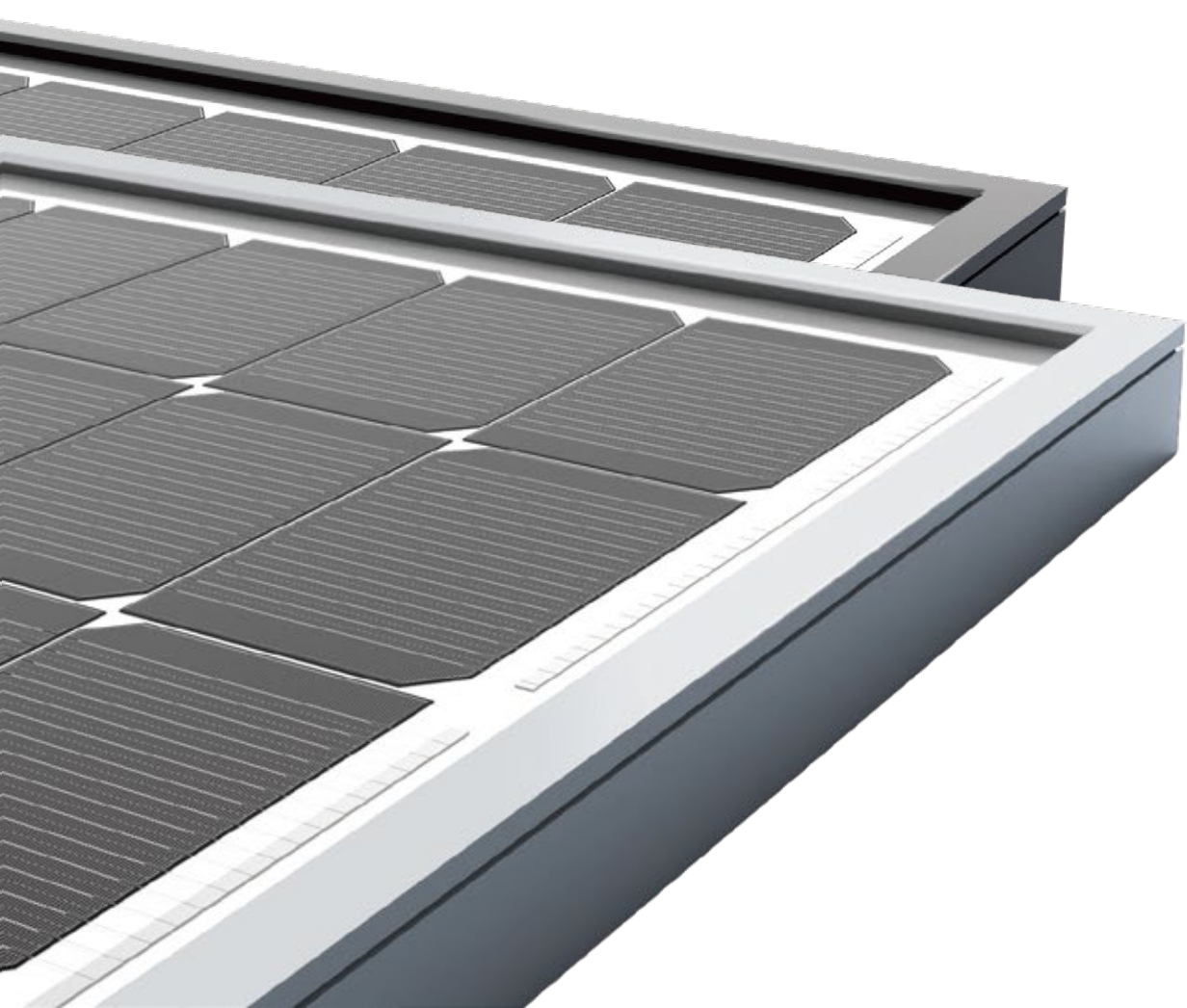
### V-Curve (120H-182M-470W)



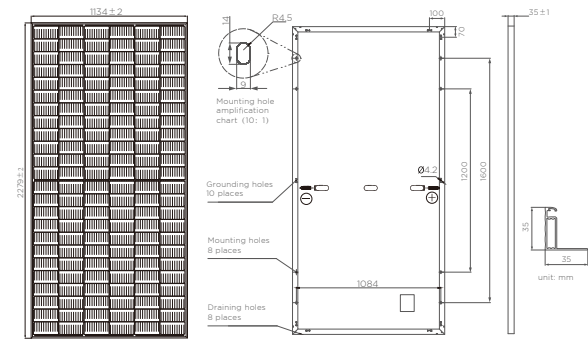


# 560~580W

- N-TOPCon Cell Technology
- Excellent Durability
- Low Power Degradation
- Excellent Low Irradiance Performance
- Excellent An-PID, Low LID Performance
- Higher Power Output



### Mechanical Parameters



<b>Cell Orientation</b>	144 (2×72)
<b>Junction Box</b>	IP68, three diodes
<b>Output Cable</b>	4mm <sup>2</sup> , 300mm in length, length can be customized
<b>Glass</b>	Single glass 3.2mm coated tempered glass
<b>Frame</b>	Anodized aluminum alloy frame
<b>Weight:</b>	28.6kg±3%
<b>Dimension</b>	2279x1134x35mm
<b>Packaging</b>	31pcs per pallet 620pcs per 40'ft Container 155pcs per 20'ft Container

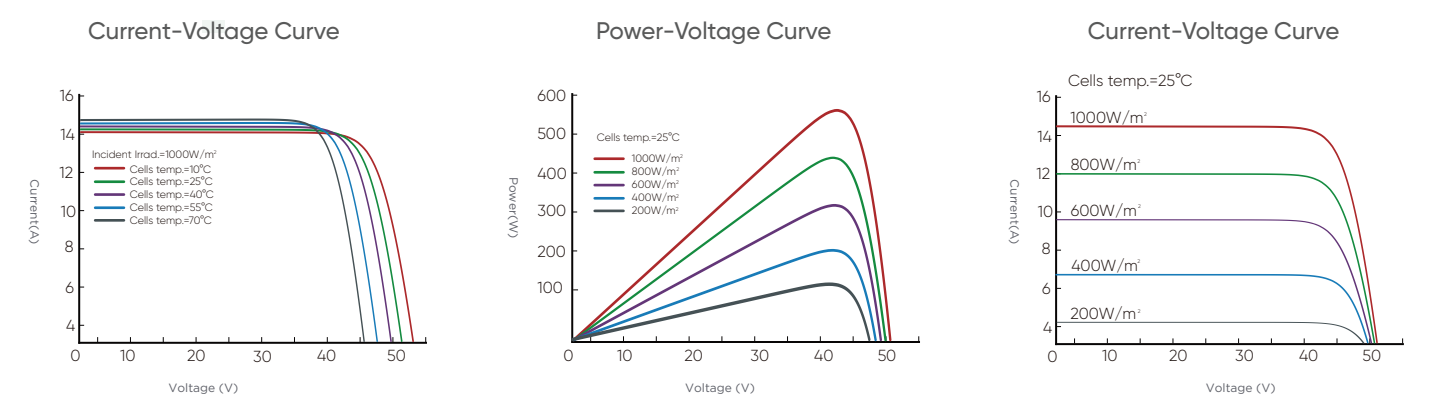
<b>Operational Temperature</b>	-40°C~+85°C
<b>Power Output Tolerance</b>	0~+5W
<b>Voc &amp; Isc Tolerance</b>	±3%
<b>Max. System Voltage</b>	DC1500V(IEC/UL)
<b>Max. Series Fuse Rating</b>	25A
<b>NOCT</b>	45±2°C
<b>Safety Class</b>	II
<b>Fire Rating</b>	UL type 1 or 2
<b>Max. Static Load(Front)</b>	5400Pa
<b>Max. Static Load(Back)</b>	2400Pa

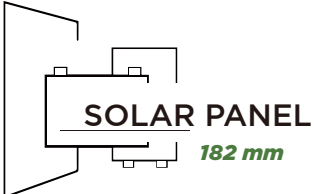
### Electrical Characteristics

Model Number	SAS560MN-144H		SAS565MN-144H		SAS570MN-144H		SAS575MN-144H		SAS580MN-144H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
<b>Testing Condition</b>										
<b>Maximum Power (Pmax/W)</b>	560	421	565	425	570	429	575	432	580	436
<b>Open Circuit Voltage (Voc/V)</b>	50.67	48.13	50.87	48.32	51.07	48.51	51.27	48.70	51.47	48.89
<b>Short Circuit Current (Isc/A)</b>	14.13	11.41	14.19	11.46	14.25	11.50	14.31	11.55	14.37	11.60
<b>Voltage at Maximum Power (Vmp/V)</b>	41.96	39.39	42.15	39.52	42.30	39.65	42.45	39.78	42.60	39.87
<b>Current at Maximum Power (Imp/A)</b>	13.35	10.89	13.41	10.75	13.48	10.81	13.55	10.87	13.62	10.94
<b>Module Efficiency(%)</b>	21.68		21.87		22.07		22.26		22.45	
<b>Temperature Coefficient of Isc</b>	+0.045%/°C									
<b>Temperature Coefficient of Voc</b>	-0.250%/°C									
<b>Temperature Coefficient of Pmax</b>	-0.290%/°C									

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

### V-Curve (SAS570MN-144H)





# 390~410W All Black

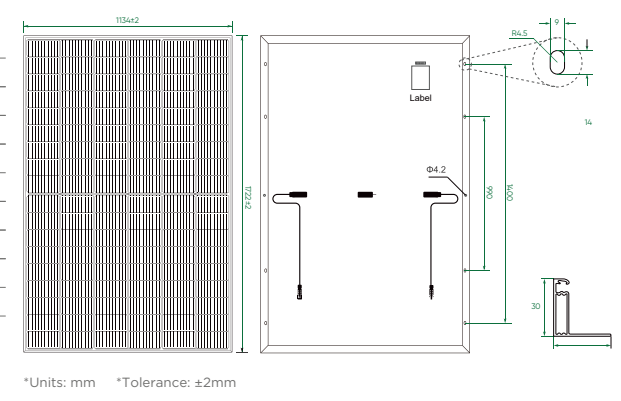
- P** Higher Module Conversion Efficiency
- Excellent Durability**
- Low Power Degradation**
- Excellent Low Irradiance Performance**
- PID** Excellent An-PID, Low LID Performance
- HOT** Reduced Hot Spot Risk



### Mechanical Parameters

Cell Orientation	108 (2x54)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass
Temperament	3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	20.5kg±3%
Dimension	1722×1134×30mm
Packing	36pcs per pallet
	936pcs per 40'ft Container
Packing	216pcs per 20'ft Container

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Rating	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa

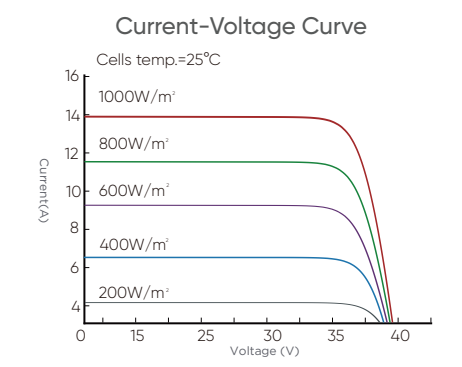
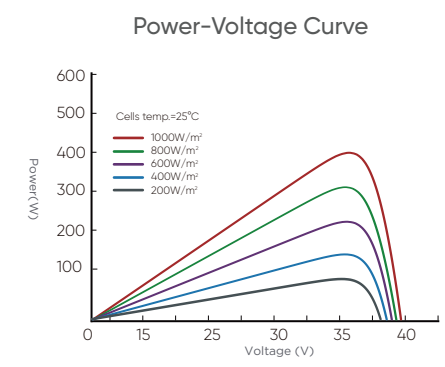
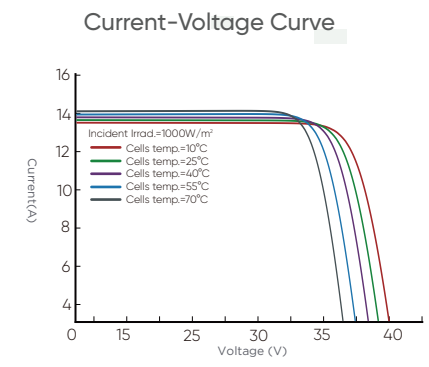


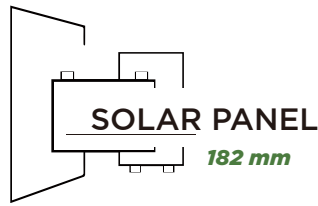
### Electrical Characteristics

Model Number	SAS390M-108HB		SAS395MN-108HB		SAS400M-108HB		SAS405M-108HB		SAS410M-108HB	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	390	294	395	298	400	302	405	306	410	310
Open Circuit Voltage (Voc/V)	36.85	34.62	36.98	34.75	37.07	34.88	37.23	35.12	37.32	35.23
Short Circuit Current (Isc/A)	13.61	10.89	13.70	10.96	13.79	11.03	13.87	11.10	13.95	11.16
Voltage at Maximum Power (Vmp/V)	30.64	28.87	30.84	29.08	31.01	29.26	31.21	29.47	31.45	29.72
Current at Maximum Power (Imp/A)	12.73	10.18	12.81	10.25	12.90	10.32	12.98	10.38	13.04	10.43
Module Efficiency(%)	19.98		20.23		20.49		20.74		21.00	
Temperature Coefficient of Isc	+0.045%/°C									
Temperature Coefficient of Voc	-0.250%/°C									
Temperature Coefficient of Pmax	-0.290%/°C									

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

### Curve (SAS400M-108HB)

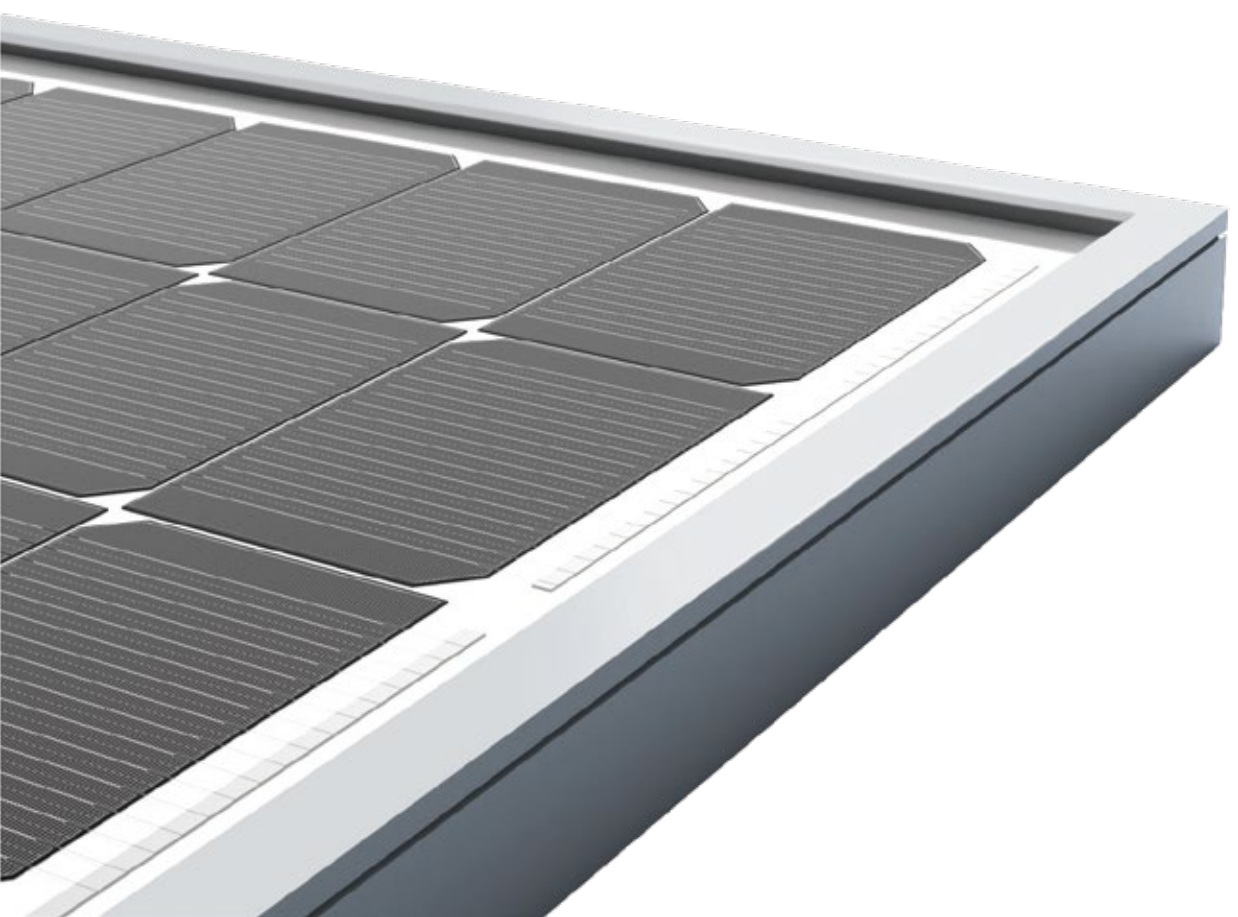




# 390~415W

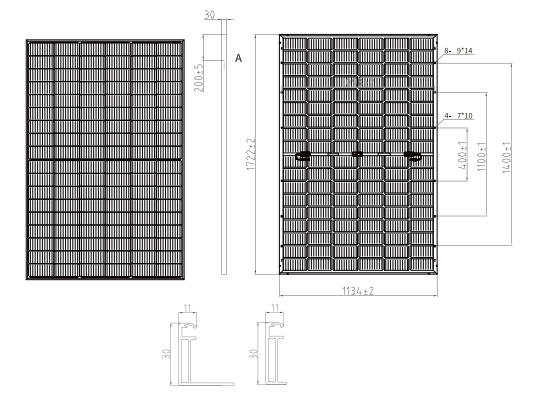
## Bifacial Double Glass

- Higher Module Conversion Efficiency
- Excellent Durability
- Low Power Degradation
- Excellent Low Irradiance Performance
- Excellent An-PID, Low LID Performance
- Reduced Hot Spot Risk



### Mechanical Parameters

Cell Orientation	108 (2x54)	Operational Temperature	-40°C~+85°C
Junction Box	IP68, three diodes	Power Output Tolerance	0~+5W
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized	Voc & Isc Tolerance	±3%
Glass	Single glass 3.2mm coated tempered glass	Max. System Voltage	DC1500V(IEC/UL)
Frame	Anodized aluminum alloy frame	Max. Series Fuse Rating	25A
Weight	24.5kg±3%	NOCT	45±2°C
Dimension	1722×1134×30mm	Safety Class	II
Packaging	36pcs per pallet 936pcs per 40'ft Container 216pcs per 20'ft Container	Fire Rating	UL type 1 or 2
		Max. Static Load(Front)	5400Pa
		Max. Static Load(Back)	2400Pa



### Electrical Characteristics

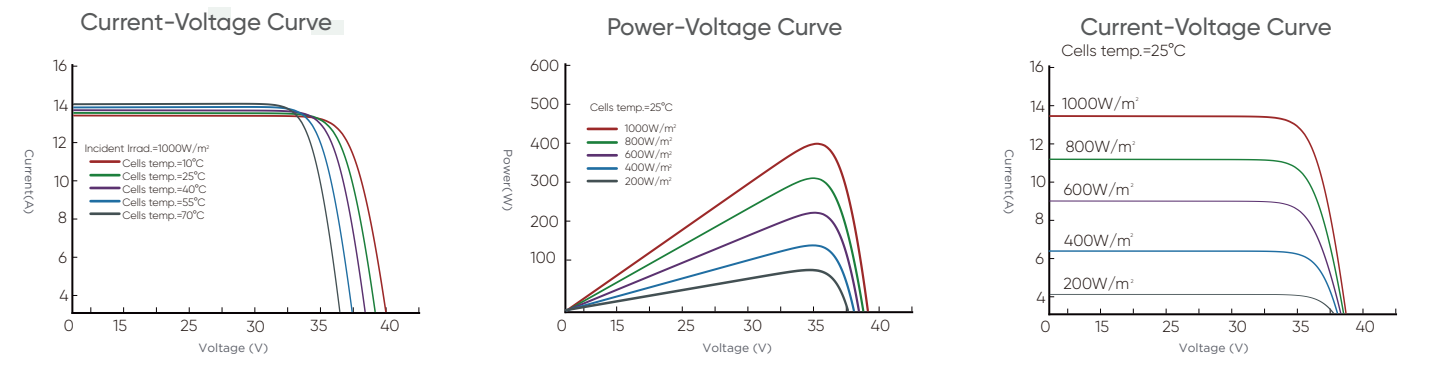
Model Number	SAS390MB-108HG		SAS395MB-108HG		SAS400MB-108HG		SAS405MB-108HG		SAS410MB-108HG		SAS415MB-108HG	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition												
Maximum Power (Pmax/W)	390	293	395	296	400	300	405	304	410	308	415	311
Open Circuit Voltage (Voc/V)	36.50	33.58	36.75	33.81	37.00	34.02	37.25	34.24	37.50	34.47	37.75	34.69
Short Circuit Current (Isc/A)	13.61	10.89	13.69	10.95	13.78	11.02	13.86	11.09	13.94	11.15	14.02	11.22
Voltage at Maximum Power (Vmp/V)	30.64	28.72	30.85	28.91	31.05	29.09	31.24	29.27	31.44	29.48	31.64	29.63
Current at Maximum Power (Imp/A)	12.93	10.18	12.81	10.25	12.89	10.31	12.97	10.38	13.04	10.43	13.13	10.50
Module Efficiency(%)	19.97		20.23		20.48		20.74		21.00		21.25	
Temperature Coefficient of Isc												+0.045%/°C
Temperature Coefficient of Voc												-0.261%/°C
Temperature Coefficient of Pmax												-0.331%/°C

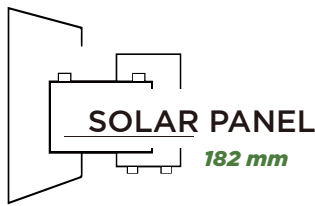
\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

### ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER RANGES(REFERENCE TO 10% SOLAR ILLUMINANCE RATIO)

TYPE	SAS390MB-108HG	SAS395MB-108HG	SAS400MB-108HG	SAS405MB-108HG	SAS410MB-108HG	SAS550MB-144HG
Maximum Power (Pmax)	409	414	420	425	430	435
Module Efficiency (%)	20.9	21.2	21.5	21.7	22.0	22.3
Maximum Power (Pmax)	448	454	460	465	471	477
Module Efficiency (%)	22.9	23.2	23.5	23.8	24.1	24.4
Maximum Power (Pmax)	487	493	500	506	512	518
Maximum Power (Pmax)	24.9	25.2	25.6	25.9	26.2	26.5

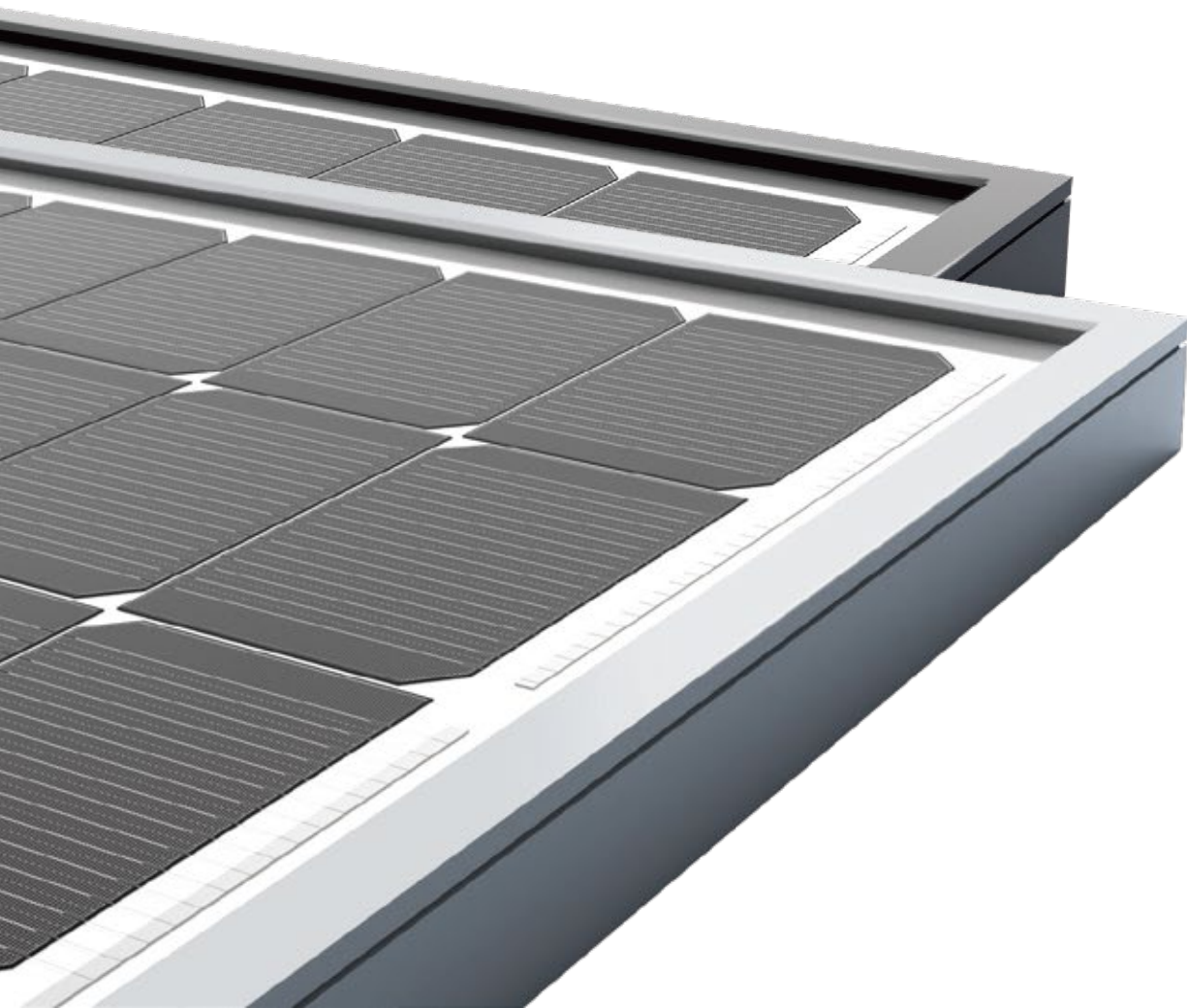
### V-Curve ( SAS400MB-108HG )





# 395~420W

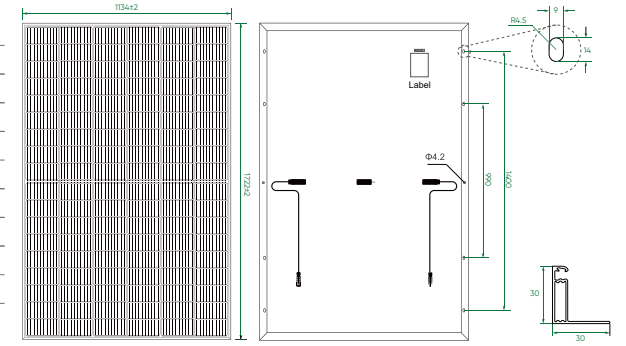
- P** Higher Module Conversion Efficiency
- Low Power Degradation**
- PID** Excellent An-PID, Low LID Performance
- Excellent Durability**
- Excellent Low Irradiance Performance**
- HOT** Reduced Hot Spot Risk



### Mechanical Parameters

Cell Orientation	108 (2x54)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	20.5kg±3%
Dimension	1722×1134×30mm
Packaging	36pcs per pallet 936pcs per 40'ft Container 216pcs per 20'ft Container

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Rating	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa



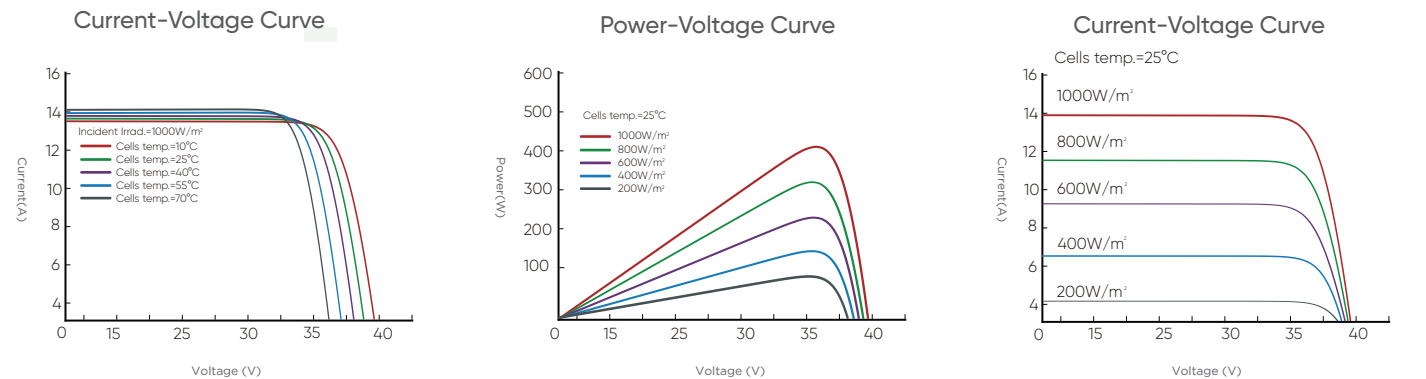
\*Units: mm \*Tolerance: ±2mm

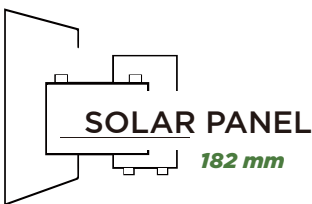
### Electrical Characteristics

Model Number	SAS395M-108H		SAS400M-108H		SAS405M-108H		SAS410M-108H		SAS415M-108H		SAS420M-108H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	395	298	400	302	405	306	410	310	415	314	420	318
Open Circuit Voltage (Voc/V)	36.98	34.75	37.07	34.88	37.19	35.12	37.32	35.23	37.45	35.37	37.58	35.50
Short Circuit Current (Isc/A)	13.70	10.96	13.79	11.03	13.87	11.10	13.95	11.16	14.02	11.22	14.10	11.29
Voltage at Maximum Power (Vmp/V)	30.84	29.08	31.02	29.26	31.23	29.47	31.45	29.72	31.64	29.89	31.82	30.09
Current at Maximum Power (Imp/A)	12.81	10.25	12.90	10.32	12.97	10.38	13.04	10.43	13.12	10.50	13.20	10.57
Module Efficiency(%)	20.23		20.48		20.74		21.00		21.25		21.51	
Temperature Coefficient of Isc												+0.045%/°C
Temperature Coefficient of Voc												-0.250%/°C
Temperature Coefficient of Pmax												-0.290%/°C

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/S  
 \* Test uncertainty for Pmax: ±3%

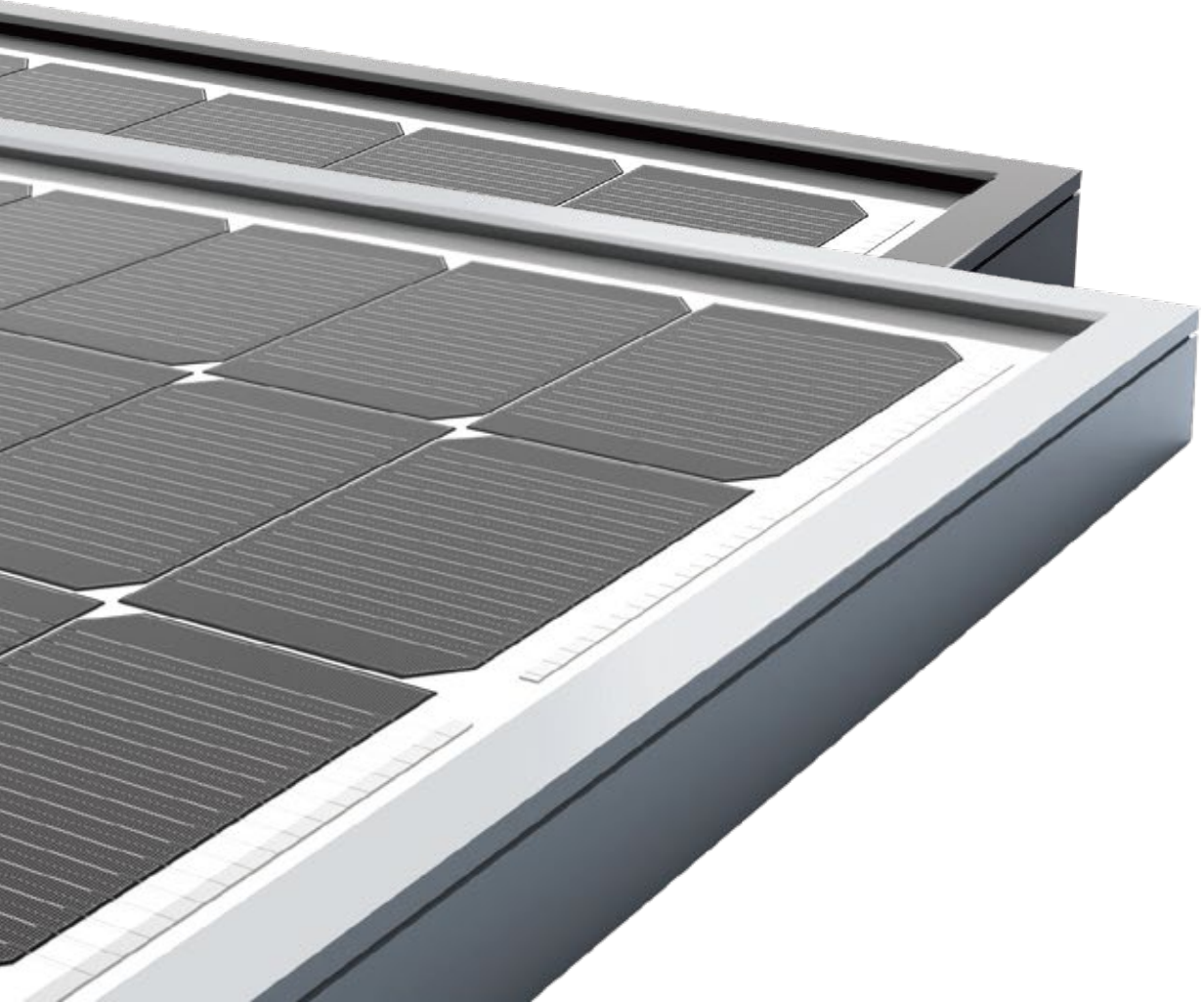
### Curve (SAS410M-108H)





# 435~460W

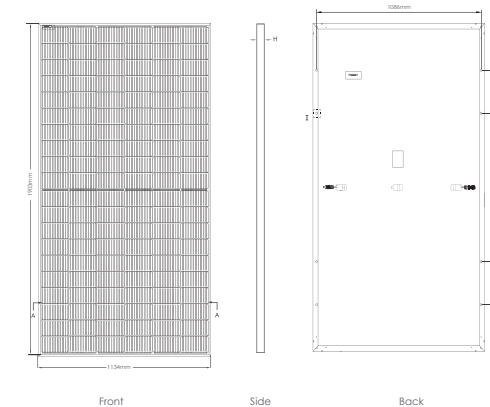
- P** Higher Module Conversion Efficiency
- Low Power Degradation**
- PID** Excellent An-PID, Low LID Performance
- Excellent Durability**
- Excellent Low Irradiance Performance**
- HOT** Reduced Hot Spot Risk



### Mechanical Parameters

Cell Orientation	120(2x60)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	24.2kg±3%
Dimension	1908×1134×35 mm
Packaging	31 pcs per pallet 744pcs per 40'ft Container 155pcs per 20'ft Container

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Rating	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa

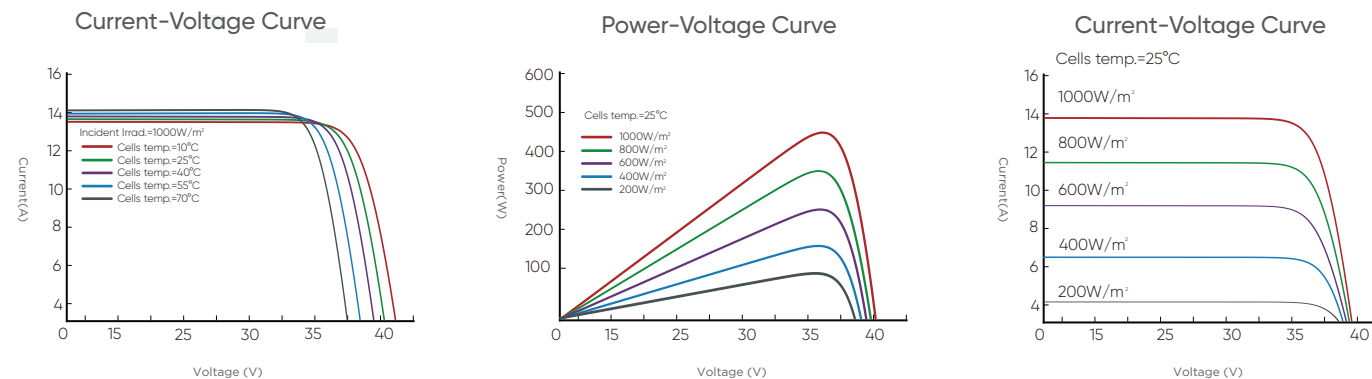


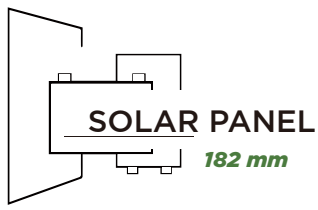
### Electrical Characteristics

Model Number	SAS435M-120H		SAS440M-120H		SAS445M-120H		SAS450M-120H		SAS415M-120H		SAS420M-120H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	435	326	440	329	445	332	450	335	455	338	460	341
Open Circuit Voltage (Voc/V)	40.94	38.64	41.05	38.75	41.17	38.86	41.28	38.96	41.40	39.06	41.51	39.16
Short Circuit Current (Isc/A)	13.61	10.99	13.69	11.06	13.77	11.12	13.85	11.19	13.93	11.25	14.01	11.32
Voltage at Maximum Power (Vmp/V)	33.84	31.48	33.95	31.60	34.07	31.71	34.18	31.83	34.30	31.95	34.41	32.05
Current at Maximum Power (Imp/A)	12.93	10.34	13.01	10.40	13.09	10.46	13.17	10.52	13.25	10.58	13.33	10.64
Module Efficiency(%)	20.16		20.39		20.63		20.86		21.09		21.32	
Temperature Coefficient of Isc												+0.045%/°C
Temperature Coefficient of Voc												-0.250%/°C
Temperature Coefficient of Pmax												-0.290%/°C

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

### V-Curve (SAS445-120H)





# Hi Pro

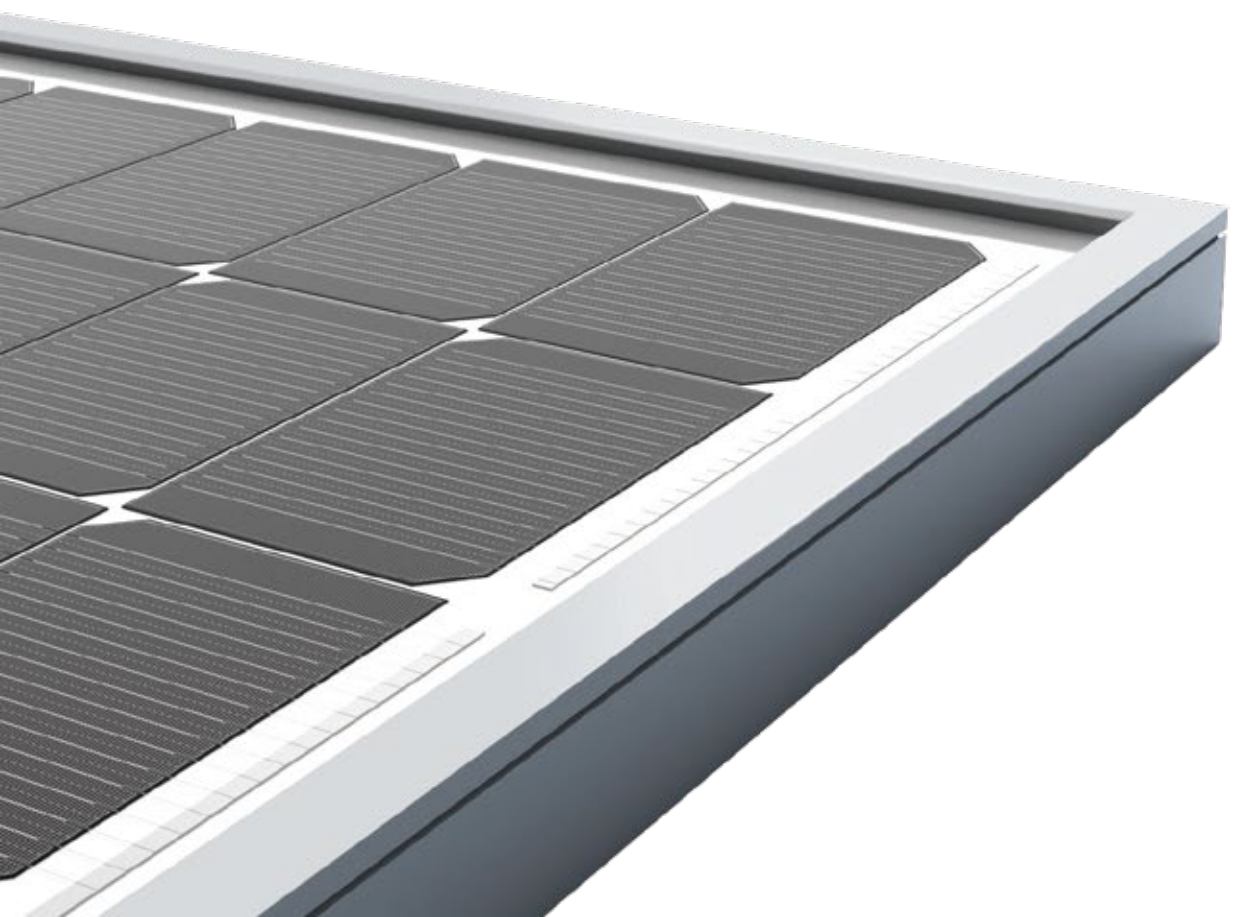
# 4



# 435~460W

## Bifacial Double Glass

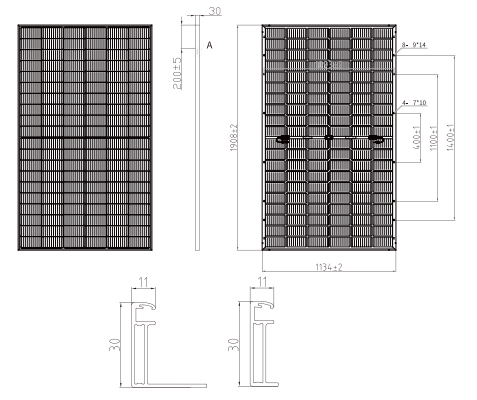
- P** Higher Module Conversion Efficiency
- Excellent Durability**
- Low Power Degradation**
- Excellent Low Irradiance Performance**
- PID** Excellent An-PID, Low LID Performance
- HOT** Reduced Hot Spot Risk



### Mechanical Parameters

Cell Orientation	120 (2x60)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	26.9kg±3%
Dimension	1908×1134×30mm
Packaging	36pcs per pallet 864pcs per 40'ft Container 180pcs per 20'ft Container

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Rating	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa



### Electrical Characteristics

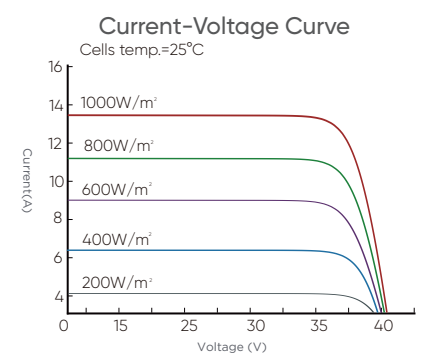
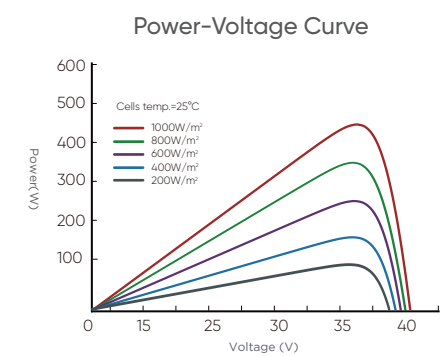
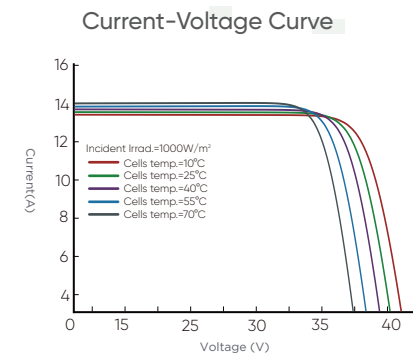
Model Number	SAS435MB-120HG		SAS440MB-120HG		SAS445MB-120HG		SAS450MB-120HG		SAS455MB-120HG		SAS465MB-120HG	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	435	326	440	330	445	334	450	338	455	341	460	345
Open Circuit Voltage (Voc/V)	40.82	37.46	40.99	37.66	41.16	37.84	41.33	38.05	41.50	38.25	41.67	38.45
Short Circuit Current (Isc/A)	13.61	10.89	13.69	10.95	13.78	11.02	13.86	11.09	13.94	11.15	14.02	11.22
Voltage at Maximum Power (Vmp/V)	34.18	32.09	34.35	32.20	34.53	32.37	34.70	32.53	34.87	32.69	35.04	32.84
Current at Maximum Power (Imp/A)	12.71	10.17	12.81	10.25	12.89	10.31	12.97	10.38	13.05	10.44	13.13	10.50
Module Efficiency(%)	20.10		20.34		20.57		20.80		21.03		21.26	
Temperature Coefficient of Isc												+0.045%/°C
Temperature Coefficient of Voc												-0.261%/°C
Temperature Coefficient of Pmax												-0.331%/°C

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

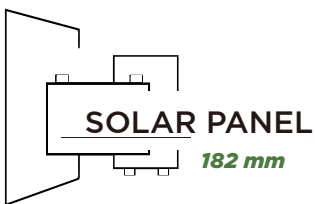
### ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER RANGES(REFERENCE TO 10% SOLAR ILLUMINANCE RATIO)

TYPE	SAS435MB-120HG	SAS440MB-120HG	SAS445MB-120HG	SAS450MB-120HG	SAS455MB-120HG	SAS460MB-120HG
Maximum Power (Pmax)	456	462	467	472	477	483
Module Efficiency (%)	21.1	21.3	21.5	21.8	22.0	22.3
Maximum Power (Pmax)	500	506	511	517	523	529
Module Efficiency (%)	23.1	23.3	23.6	23.9	24.1	24.4
Maximum Power (Pmax)	543	550	556	562	568	575
Maximum Power (Pmax)	25.1	25.4	25.7	25.9	26.2	26.5

### V-Curve ( SAS450MB-108HG )







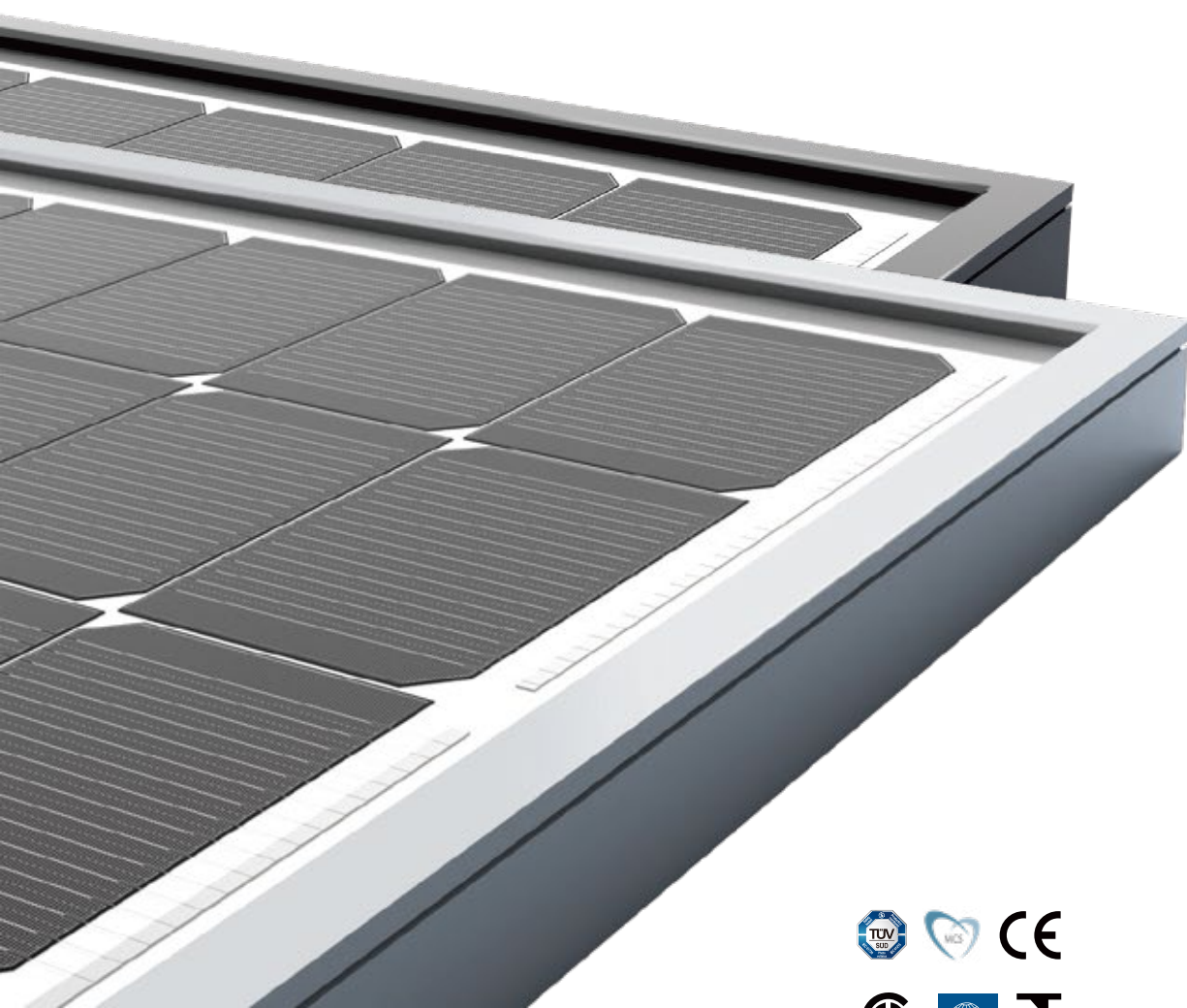
Hi Pro

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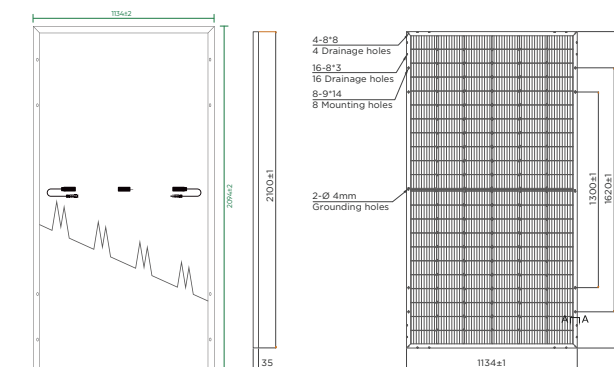
480~505W

- P** Higher Module Conversion Efficiency
- Excellent Durability**
- Low Power Degradation**
- Excellent Low Irradiance Performance**
- PID** Excellent An-PID, Low LID Performance
- HOT** Reduced Hot Spot Risk



Mechanical Parameters

<b>Cell Orientation</b>	132 (2x66)	<b>Operational Temperature</b>	-40°C~+85°C
<b>Junction Box</b>	IP68, three diodes	<b>Power Output Tolerance</b>	0~+5W
<b>Output Cable</b>	4mm <sup>2</sup> , 300mm in length, length can be customized	<b>Voc &amp; Isc Tolerance</b>	±3%
<b>Glass</b>	Single glass 3.2mm coated tempered glass	<b>Max. System Voltage</b>	DC1500V(IEC/UL)
<b>Frame</b>	Anodized aluminum alloy frame	<b>Max. Series Fuse Ratin</b>	25A
<b>Weight:</b>	26.3kg±3%	<b>NOCT</b>	45±2°C
<b>Dimension</b>	2094x1134x35mm	<b>Safety Class</b>	II
<b>Packaging</b>	31pcs per pallet 682pcs per 40'ft Container 155pcs per 20'ft Container	<b>Fire Rating</b>	UL type 1 or 2
		<b>Max. Static Load(Front)</b>	5400Pa
		<b>Max. Static Load(Back)</b>	2400Pa



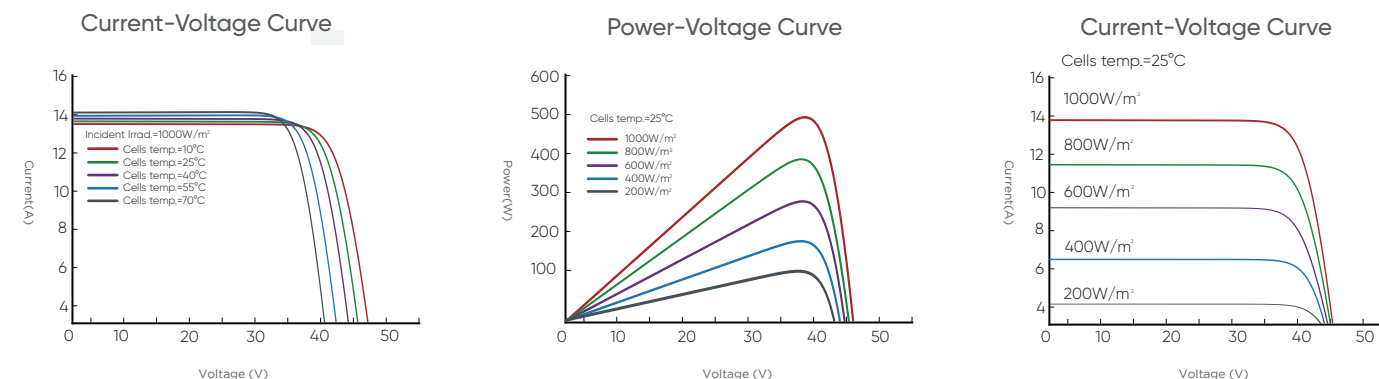
\*Units: mm \*Tolerance: ±2mm

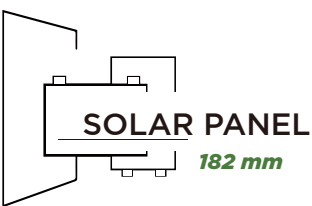
Electrical Characteristics

Model Number	SAS480M-132H		SAS485M-132H		SAS490M-132H		SAS495M-132H		SAS500M-132H		SAS505M-132H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	480	363	485	367	490	370	495	374	500	378	505	382
Open Circuit Voltage (Voc/V)	45.07	42.15	45.20	42.30	45.33	42.43	45.46	42.58	45.59	42.72	45.72	42.86
Short Circuit Current (Isc/A)	13.65	10.99	13.72	11.06	13.79	11.13	13.86	11.20	13.93	11.27	14.00	11.34
Voltage at Maximum Power (Vmp/V)	37.62	35.54	37.80	35.67	37.99	35.76	38.17	35.84	38.35	35.93	38.53	36.02
Current at Maximum Power (Imp/A)	12.76	10.21	12.83	10.28	12.90	10.36	12.97	10.44	13.04	10.52	13.11	10.60
Module Efficiency(%)	20.21		20.42		20.64		20.85		21.06		21.27	
Temperature Coefficient of Isc												+0.045%/°C
Temperature Coefficient of Voc												-0.250%/°C
Temperature Coefficient of Pmax												-0.290%/°C

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/S  
 \*Test uncertainty for Pmax: ±3%

V-Curve (SAS495M-132H)





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480~505W

Bifacial Double Glass



Higher Module Conversion Efficiency



Excellent Durability



Low Power Degradation



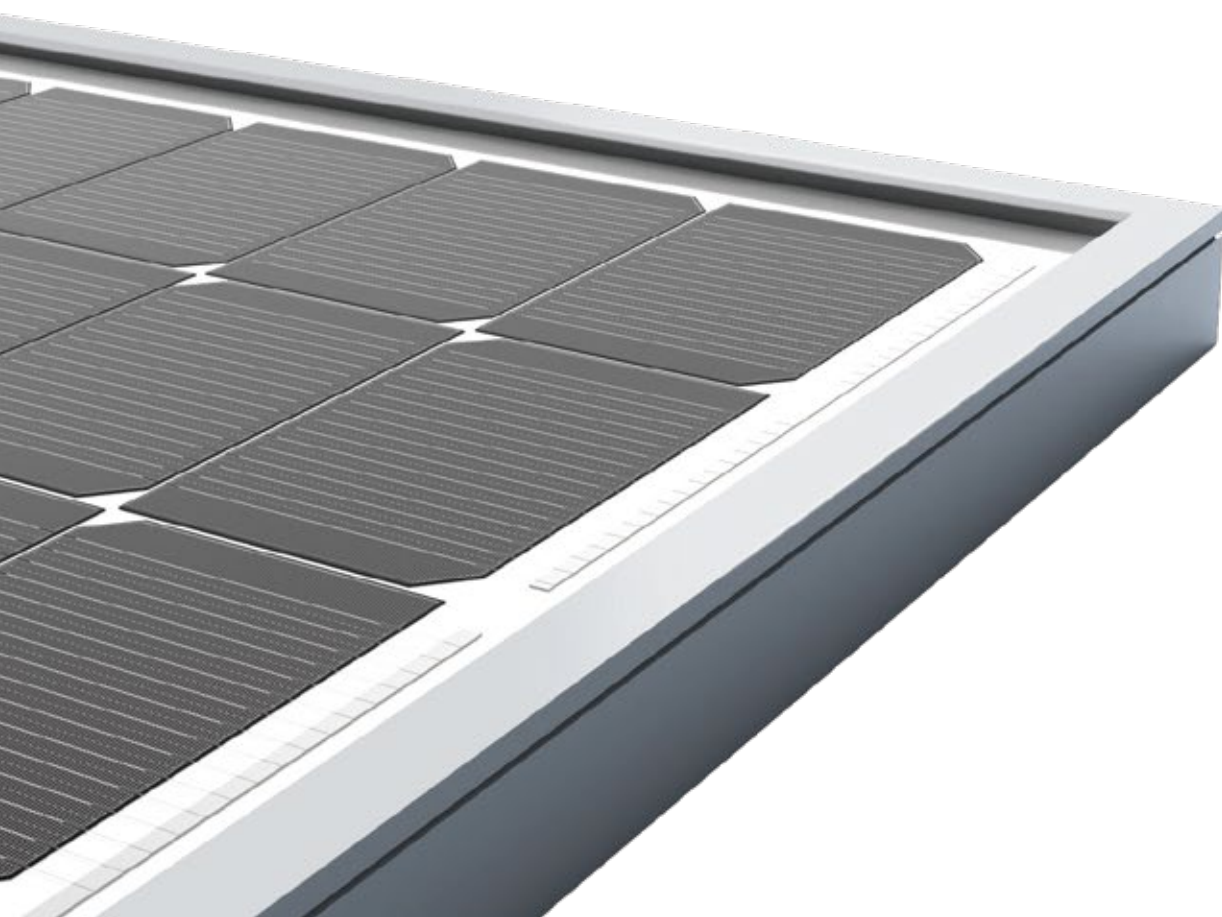
Excellent Low Irradiance Performance



Excellent An-PID, Low LID Performance



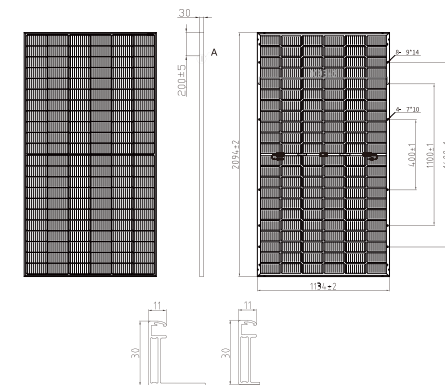
Reduced Hot Spot Risk



Mechanical Parameters

Cell Orientation	132 (2x66)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	29 kg±3%
Dimension	2094×1134×30mm
Packaging	36pcs per pallet 792pcs per 40'ft Container 180pcs per 20'ft Container

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Rating	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa



Electrical Characteristics

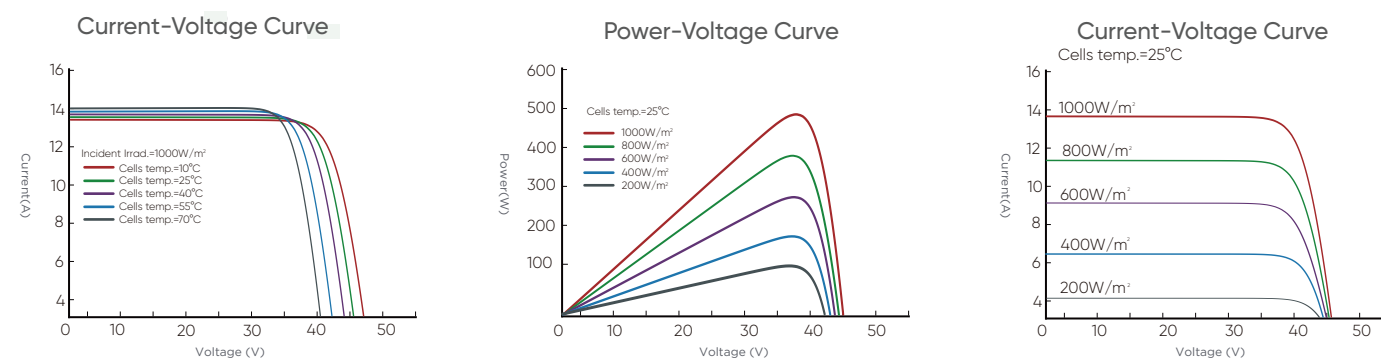
Model Number	SAS480MB-132HG		SAS485MB-132HG		SAS490MB-132HG		SAS495MB-132HG		SAS500MB-132HG		SAS505MB-132HG	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	480	360	485	364	490	368	495	371	500	375	505	379
Open Circuit Voltage (Voc/V)	44.94	41.39	45.10	41.58	45.25	41.76	45.40	41.94	45.55	42.12	45.70	42.30
Short Circuit Current (Isc/A)	13.59	10.87	13.67	10.94	13.75	11.00	13.83	11.06	13.91	11.13	13.99	11.19
Voltage at Maximum Power (Vmp/V)	37.77	35.41	37.93	35.55	38.08	35.69	38.23	35.81	38.38	35.97	38.53	36.11
Current at Maximum Power (Imp/A)	12.71	10.17	12.79	10.23	12.87	10.30	12.96	10.37	13.03	10.42	13.11	10.49
Module Efficiency(%)	20.21		20.42		20.64		20.85		21.06		21.27	
Temperature Coefficient of Isc	+0.045%/°C											
Temperature Coefficient of Voc	-0.261%/°C											
Temperature Coefficient of Pmax	-0.331%/°C											

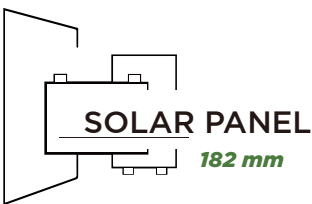
\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER RANGES(REFERENCE TO 10% SOLAR ILLUMINANCE RATIO)

TYPE	SAS480MB-132HG	SAS485MB-132HG	SAS490MB-132HG	SAS495MB-132HG	SAS500MB-132HG	SAS505MB-132HG
Maximum Power (Pmax)	504	509	514	519	525	530
Module Efficiency (%)	21.2	21.4	21.5	21.8	22.1	22.3
Maximum Power (Pmax)	552	557	563	569	575	580
Module Efficiency (%)	23.2	23.4	23.7	23.9	24.2	24.4
Maximum Power (Pmax)	600	606	612	618	625	631
Maximum Power (Pmax)	25.2	25.5	25.7	26.0	26.3	26.5

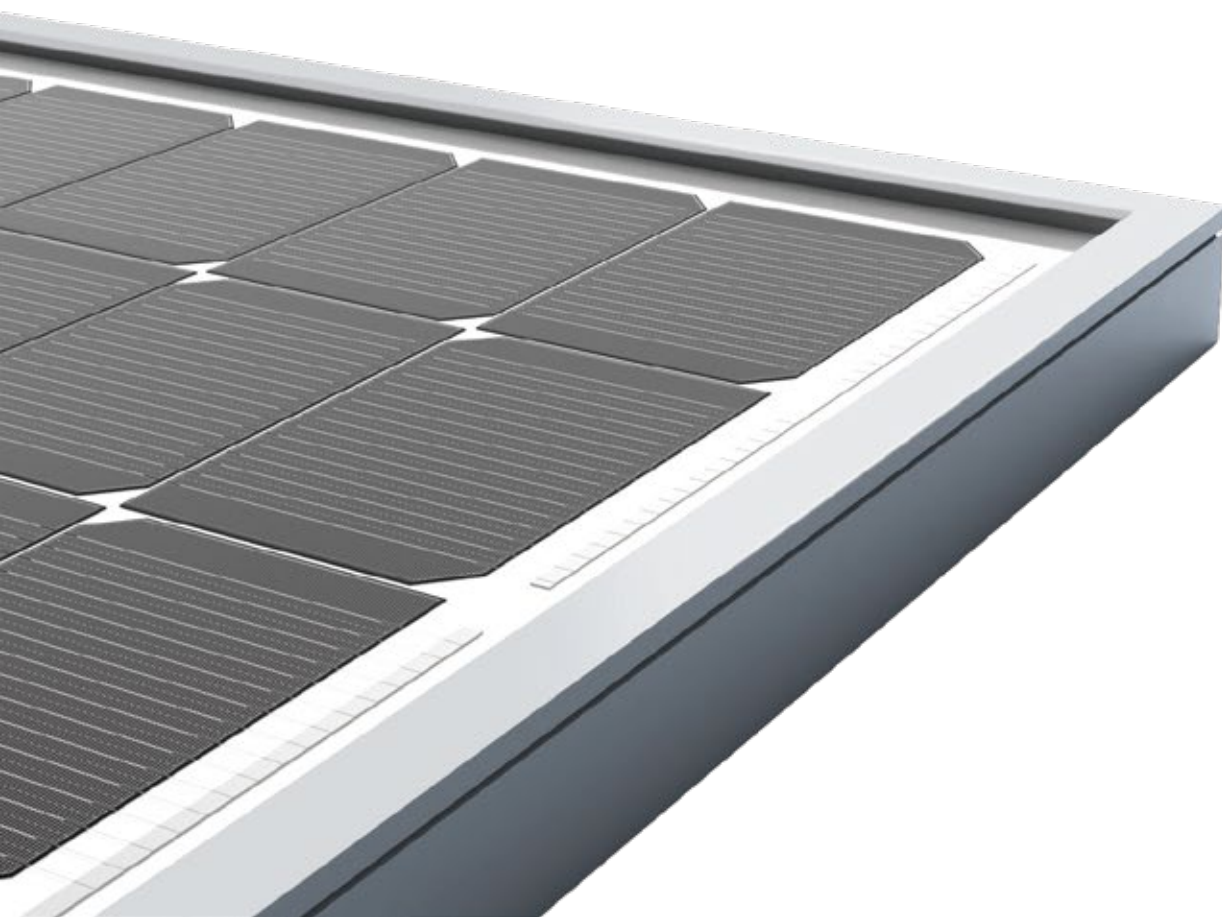
V-Curve (SAS495MB-132HG)





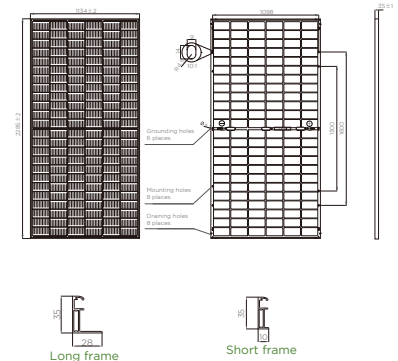
# 525~550W Bifacial Double Glass

- P** Higher Module Conversion Efficiency
- Excellent Durability**
- Low Power Degradation**
- Excellent Low Irradiance Performance**
- PID** Excellent An-PID, Low LID Performance
- HOT** Reduced Hot Spot Risk



### Mechanical Parameters

Cell Orientation	144 (6x24)	Operational Temperature	-40°C~+85°C
Junction Box	IP68, three diodes	Power Output Tolerance	0~+5W
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized	Voc & Isc Tolerance	±3%
Glass	Dual glass 2.0mm coated tempered glass	Max. System Voltage	DC1500V(IEC/UL)
Frame	Anodized aluminum alloy frame	Max. Series Fuse Rating	30A
Weight:	31.6kg±3%	NOCT	45±2°C
Dimension	2285x1134x35mm	Safety Class	II
Packaging	36pcs per pallet 720pcs per 40'ft Container 180pcs per 20'ft Container	Fire Rating	UL type 3
		Bifaciality	Glazing 70±5%
		Max. Static Load(Front)	5400Pa
		Max. Static Load(Back)	2400Pa



### Electrical Characteristics

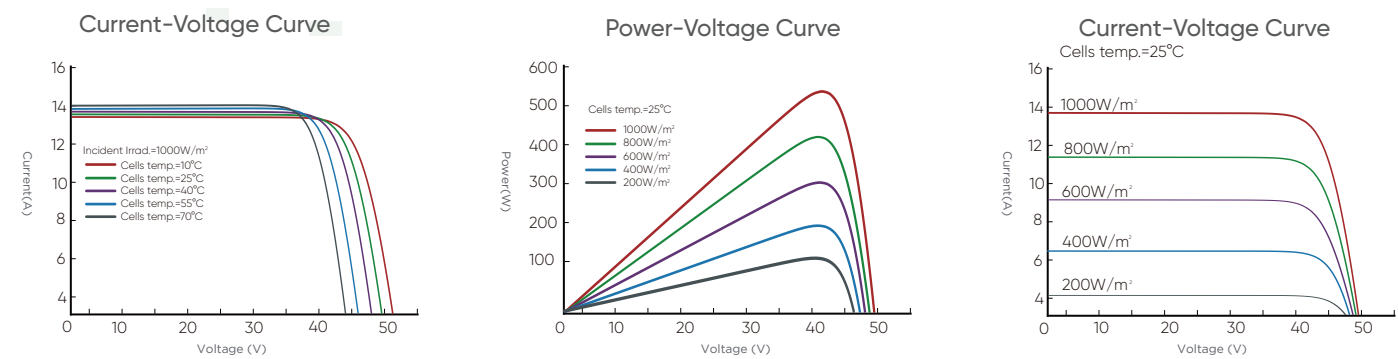
Model Number	SAS525MB-144HG		SAS530MB-144HG		SAS535MB-144HG		SAS540MB-144HG		SAS545MB-144HG		SAS550MB-144HG	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	525	394	530	398	535	401	540	405	545	409	550	413
Open Circuit Voltage (Voc/V)	49.17	45.04	49.32	45.27	49.46	45.46	49.60	45.66	49.76	45.85	49.92	46.04
Short Circuit Current (Isc/A)	13.66	10.93	13.72	10.98	13.79	11.03	13.86	11.09	13.93	11.14	14.00	11.20
Voltage at Maximum Power (Vmp/V)	41.15	38.57	41.32	38.73	41.48	38.88	41.64	39.03	41.80	39.18	41.96	39.33
Current at Maximum Power (Imp/A)	12.76	10.21	12.83	10.26	12.90	10.32	12.97	10.38	13.04	10.43	13.11	10.49
Module Efficiency(%)	20.31		20.51		20.70		20.89		21.09		21.28	
Temperature Coefficient of Isc												+0.045%/°C
Temperature Coefficient of Voc												-0.261%/°C
Temperature Coefficient of Pmax												-0.331%/°C

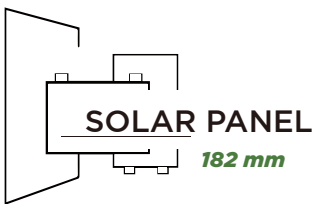
\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

### ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER RANGES(REFERENCE TO 10% SOLAR ILLUMINANCE RATIO)

TYPE	SAS525MB-144HG	SAS530MB-144HG	SAS535MB-144HG	SAS540MB-144HG	SAS545MB-144HG	SAS550MB-144HG
Maximum Power (Pmax)	551	556	561	567	572	577
Module Efficiency (%)	21.2	21.4	21.6	21.8	22.0	22.2
Maximum Power (Pmax)	603	609	615	521	626	632
Module Efficiency (%)	23.3	23.5	23.7	23.9	24.1	24.2
Maximum Power (Pmax)	656	662	668	675	681	687
Maximum Power (Pmax)	25.3	25.5	25.8	26.0	26.2	26.5

### V-Curve ( SAS540MB-144HG )





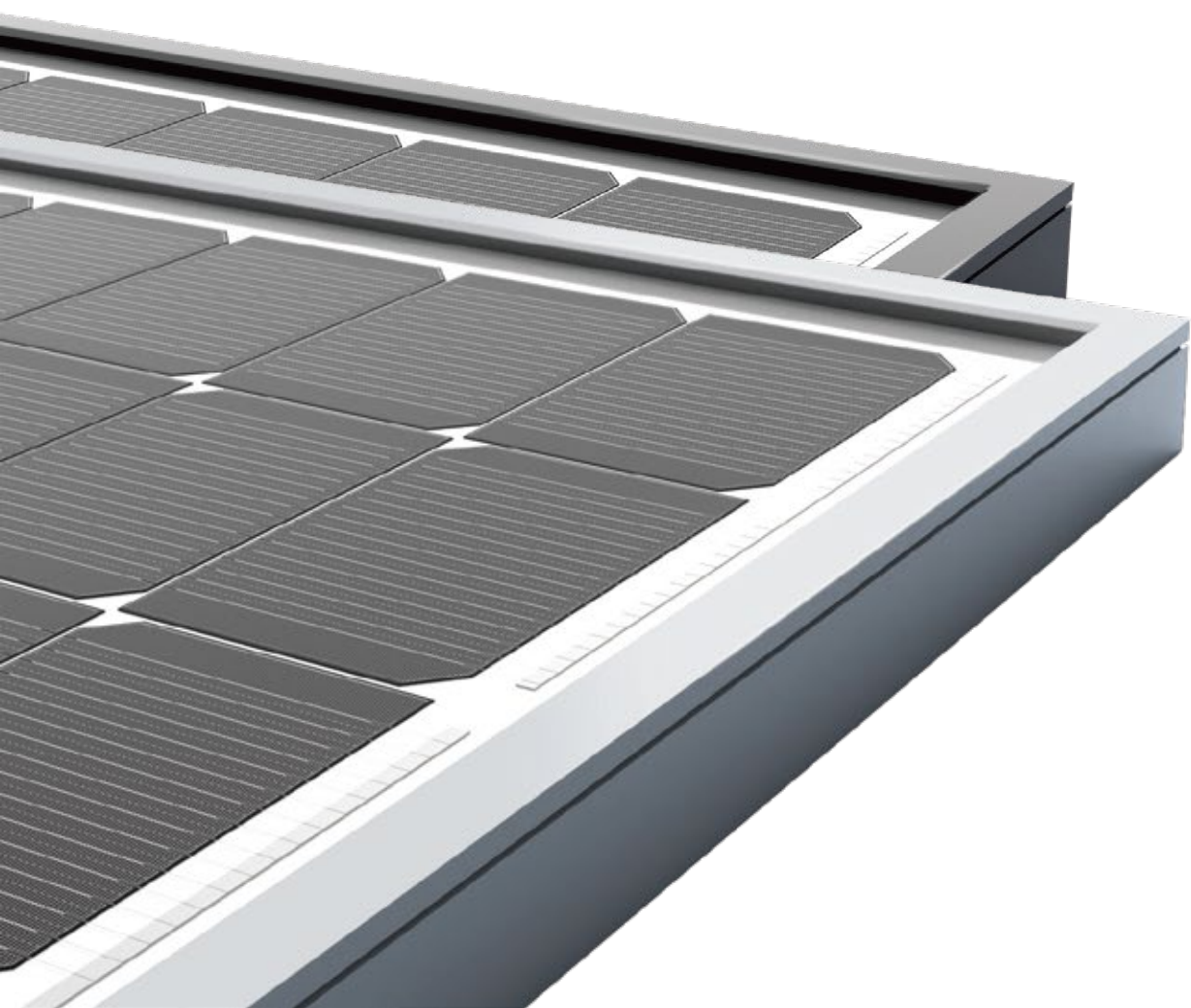
Hi Pro

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530~555W

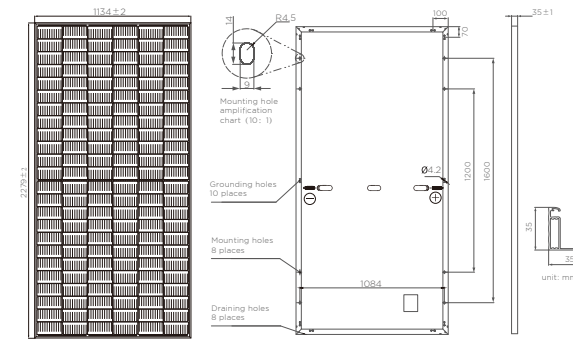
- P** Higher Module Conversion Efficiency
- Excellent Durability**
- Low Power Degradation**
- Excellent Low Irradiance Performance**
- PID** Excellent An-PID, Low LID Performance
- HOT** Reduced Hot Spot Risk



Mechanical Parameters

Cell Orientation	144 (2x72)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight:	28.6kg±3%
Dimension	2279x1134x35mm
Packaging	31pcs per pallet 620pcs per 40'ft Container 155pcs per 20'ft Container

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Ratin	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa



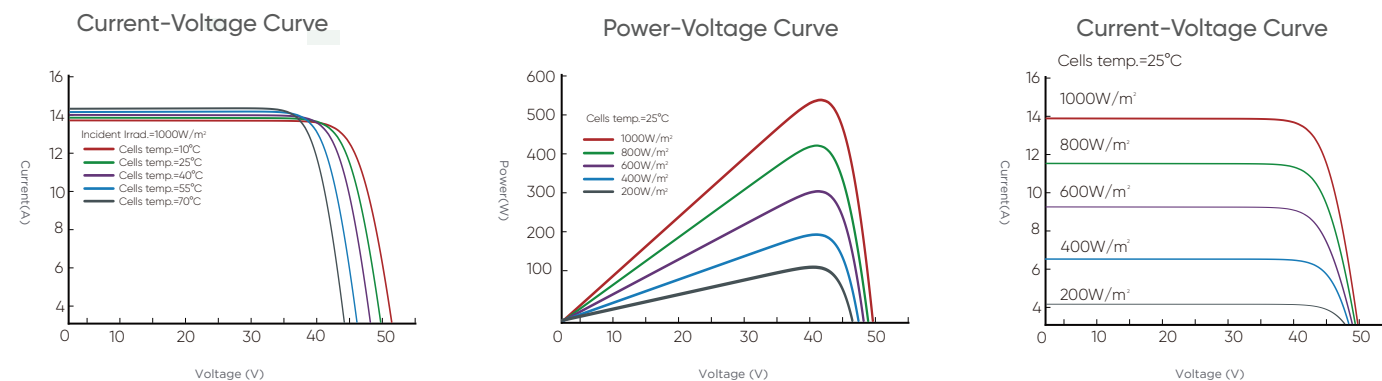
\*Units: mm \*Tolerance: ±2mm

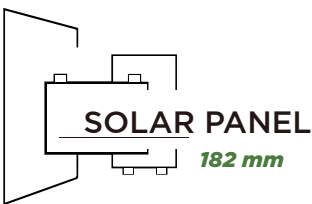
Electrical Characteristics

Model Number	SAS530M-144H		SAS535M-144H		SAS540M-144H		SAS545M-144H		SAS550M-144H		SAS555M-144H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	530	401	535	405	540	408	545	412	550	416	555	420
Open Circuit Voltage (Voc/V)	49.26	46.18	49.40	46.31	49.53	46.43	49.70	46.55	49.80	46.68	49.94	46.85
Short Circuit Current (Isc/A)	13.69	11.01	13.77	11.05	13.85	11.09	13.93	11.13	14.01	11.17	14.09	11.21
Voltage at Maximum Power (Vmp/V)	40.74	38.57	40.88	38.78	41.01	38.99	41.15	39.20	41.28	39.43	41.42	39.66
Current at Maximum Power (Imp/A)	13.01	10.39	13.09	10.43	13.17	10.47	13.25	10.51	13.33	10.55	13.41	10.59
Module Efficiency(%)	20.51		20.70		20.89		21.09		21.28		21.48	
Temperature Coefficient of Isc												+0.045%/°C
Temperature Coefficient of Voc												-0.250%/°C
Temperature Coefficient of Pmax												-0.290%/°C

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \*Test uncertainty for Pmax: ±3%

V-Curve (SAS545M-144H)





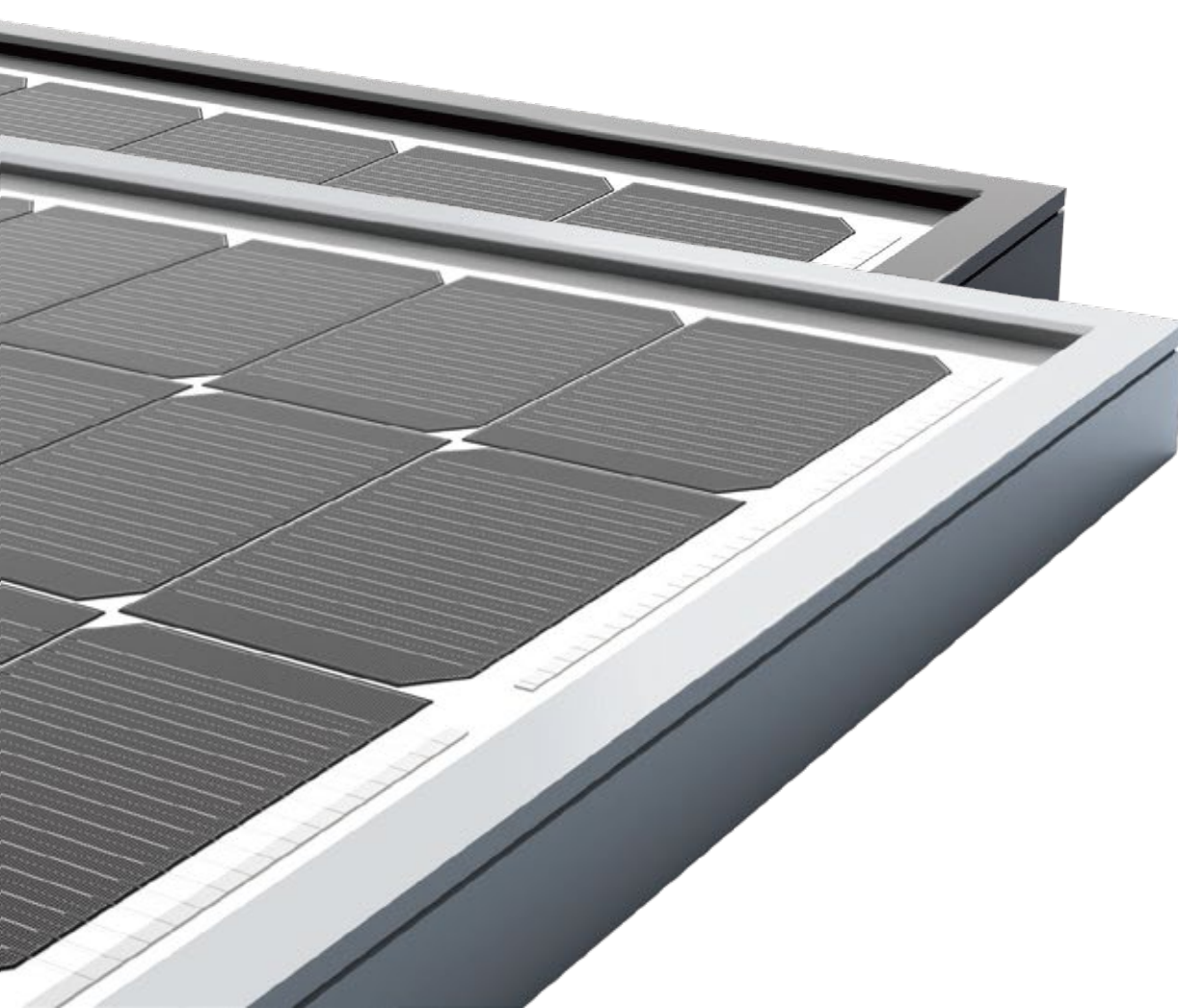
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585~605W

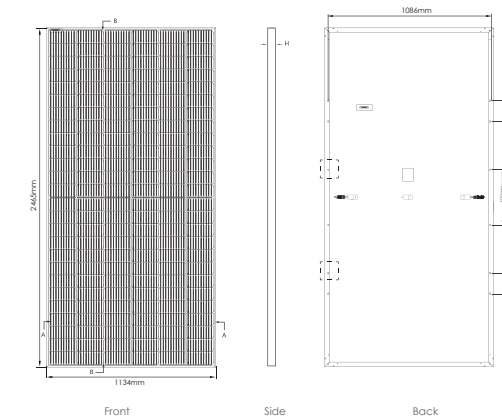
- P** Higher Module Conversion Efficiency
- Excellent Durability**
- Low Power Degradation**
- Excellent Low Irradiance Performance**
- PID** Excellent An-PID, Low LID Performance
- HOT** Reduced Hot Spot Risk



Mechanical Parameters

Cell Orientation	156 (2x78)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight:	30.5kg±3%
Dimension	2465×1134×35mm
Packaging	31 pcs per pallet 558 pcs per 40'ft Container 155 pcs per 20'ft Container

Operational Temperature	-40°C-+85°C
Power Output Tolerance	0-+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Rating	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa

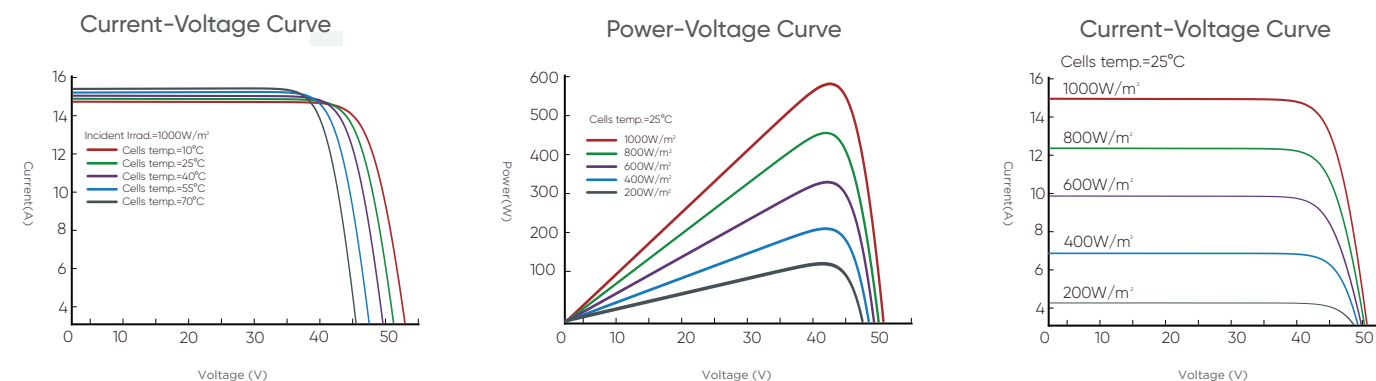


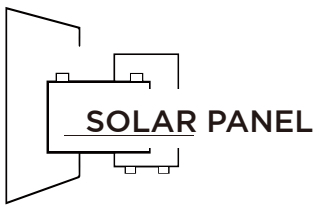
Electrical Characteristics

Model Number	SAS585MN-156H		SAS590MN-156H		SAS595MN-156H		SAS600MN-156H		SAS605MN-156H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition										
Maximum Power (Pmax/W)	585	435	590	449	595	453	600	457	605	461
Open Circuit Voltage (Voc/V)	51.28	49.35	51.41	49.44	51.54	49.45	51.67	49.50	51.80	49.56
Short Circuit Current (Isc/A)	14.39	11.35	14.46	11.39	14.53	11.43	14.60	11.47	14.67	11.51
Voltage at Maximum Power (Vmp/V)	43.34	41.47	43.49	41.69	43.64	41.91	43.79	42.13	43.94	42.35
Current at Maximum Power (Imp/A)	13.50	10.73	13.57	10.77	13.64	10.81	13.71	10.85	13.78	10.89
Module Efficiency(%)	20.93		21.11		21.29		21.47		21.65	
Temperature Coefficient of Isc										
Temperature Coefficient of Voc										
Temperature Coefficient of Pmax										

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

V-Curve (132H-182M-595W)





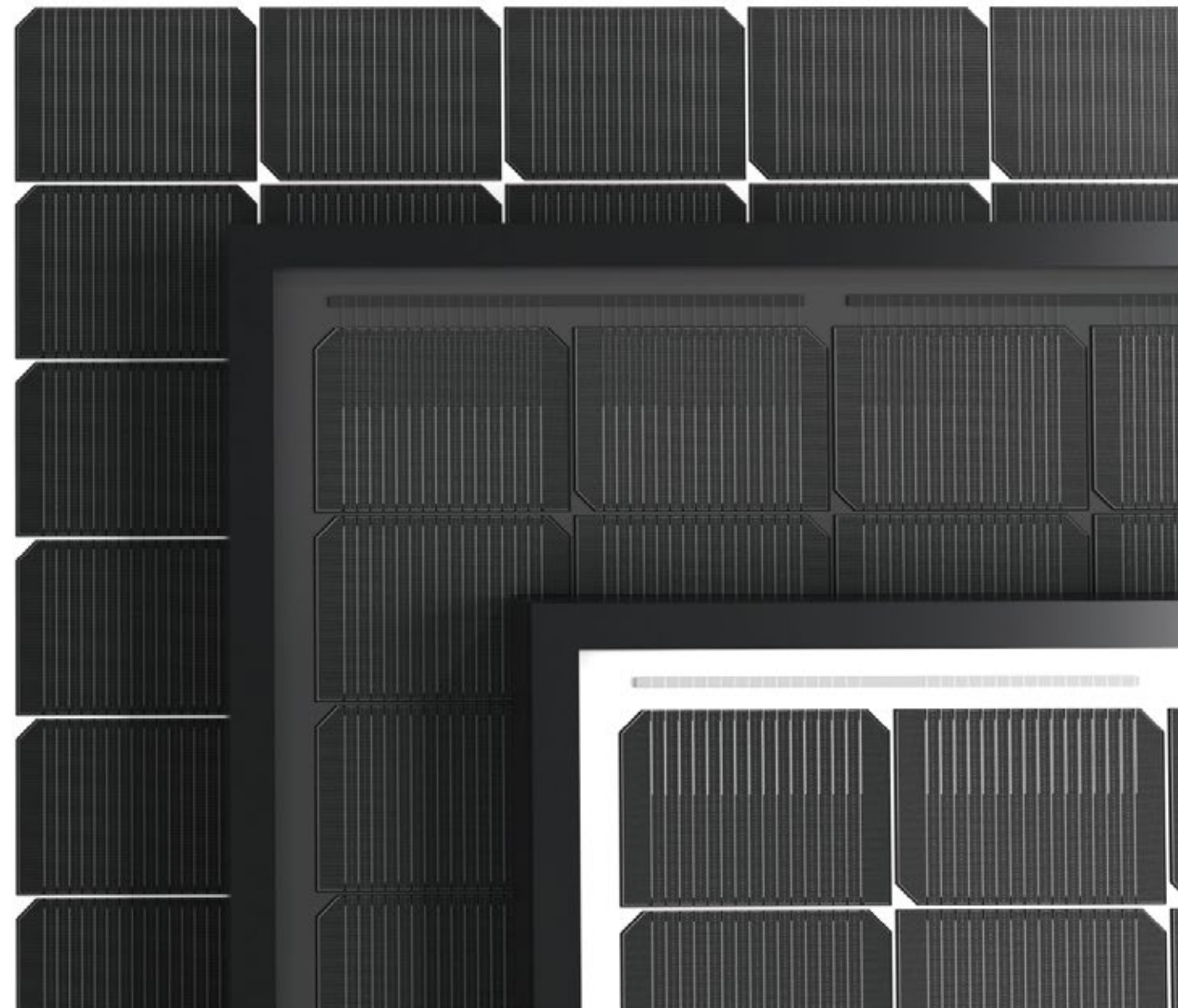
# SOLAR PANEL

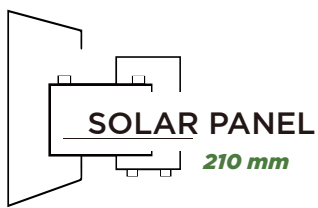
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M12 Series  
Solar Panels

210mm Series

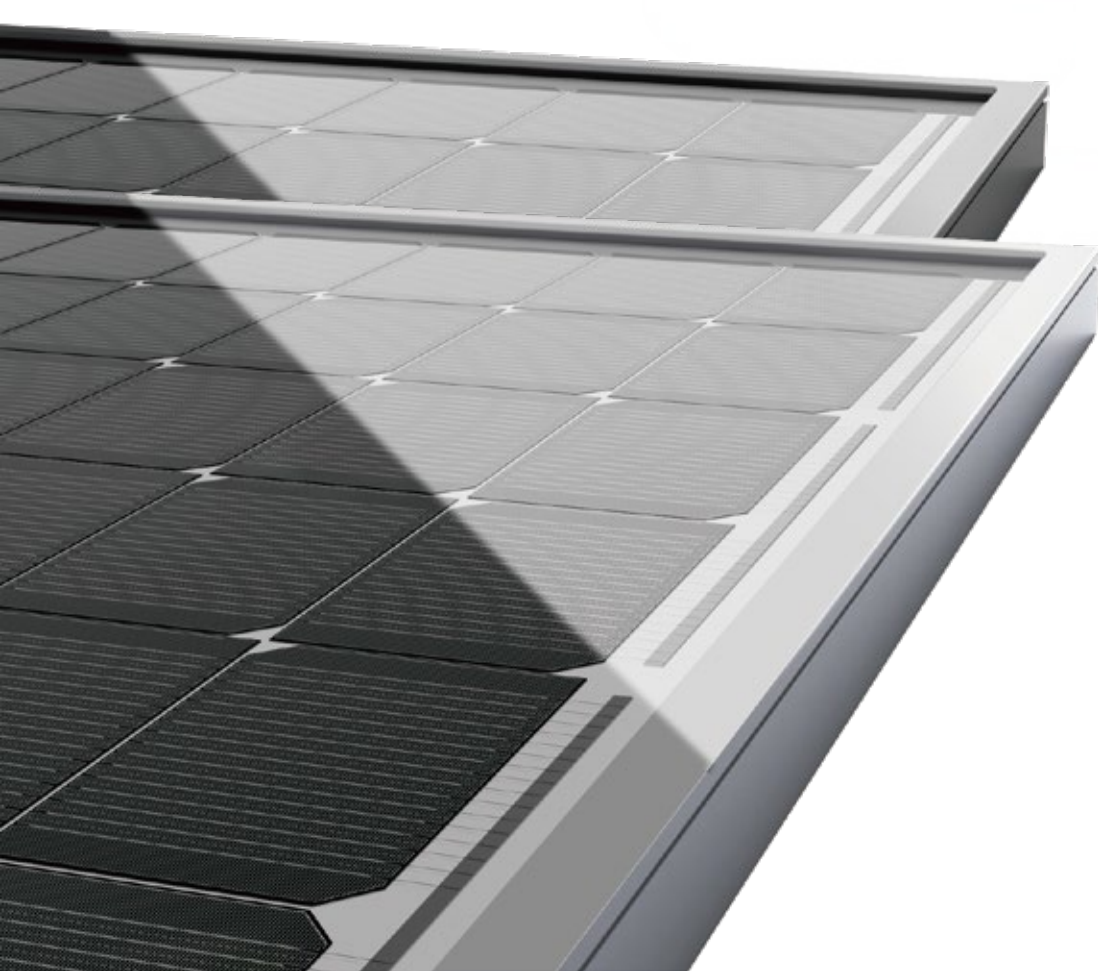
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# 530~555W

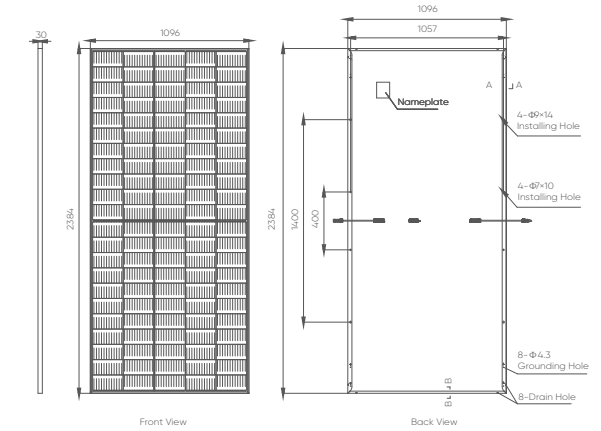
- P** Higher Module Conversion Efficiency
- Low Power Degradation**
- PID** Excellent An-PID, Low LID Performance
- Excellent Durability**
- Excellent Low Irradiance Performance**
- HOT** Reduced Hot Spot Risk



### Mechanical Parameters

Cell Orientation	110 (2x55)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	28.3kg±3%
Dimension	2384x1096x30mm
Packaging	36pcs per pallet 720pcs per 40'ft Container 180pcs per 20'ft Container

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Rating	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa



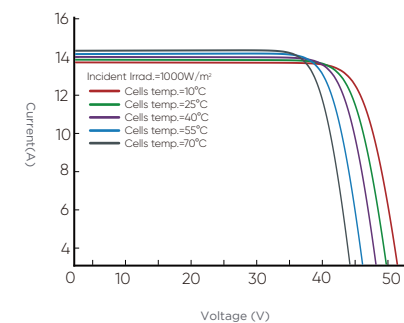
### Electrical Characteristics

Model Number	SAS530M-110H		SAS535M-110H		SAS540M-110H		SAS545M-110H		SAS550M-110H		SAS555M-110H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	530	398	535	402	540	406	545	410	550	414	555	417
Open Circuit Voltage (Voc/V)	37.30	35.00	37.50	35.20	37.70	35.40	37.90	35.60	38.10	35.80	38.30	36.00
Short Circuit Current (Isc/A)	18.11	14.62	18.16	14.66	18.21	14.70	18.26	14.74	18.31	14.78	18.36	14.82
Voltage at Maximum Power (Vmp/V)	30.80	28.90	31.00	29.10	31.20	29.30	31.40	29.50	31.60	29.70	31.80	29.90
Current at Maximum Power (Imp/A)	17.21	13.76	17.26	13.80	17.31	13.84	17.36	13.88	17.41	13.93	17.46	13.97
Module Efficiency(%)	20.48		20.67		20.86		21.05		21.24		21.43	
Temperature Coefficient of Isc	+0.050%/°C											
Temperature Coefficient of Voc	-0.290%/°C											
Temperature Coefficient of Pmax	-0.340%/°C											

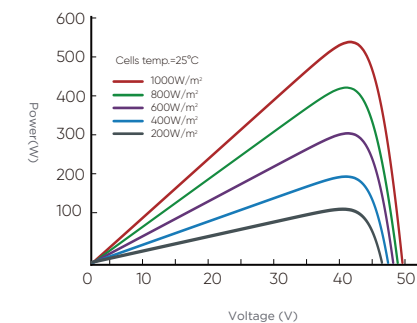
\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

### V-Curve (SAS545M-110H)

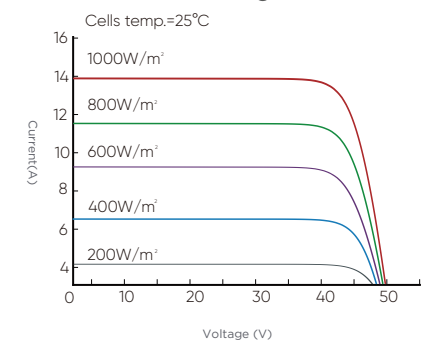
Current-Voltage Curve

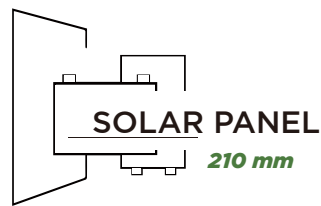


Power-Voltage Curve



Current-Voltage Curve





# Hi Pro

# 5



# 585~605W



Higher Module Conversion Efficiency



Excellent Durability



Low Power Degradation



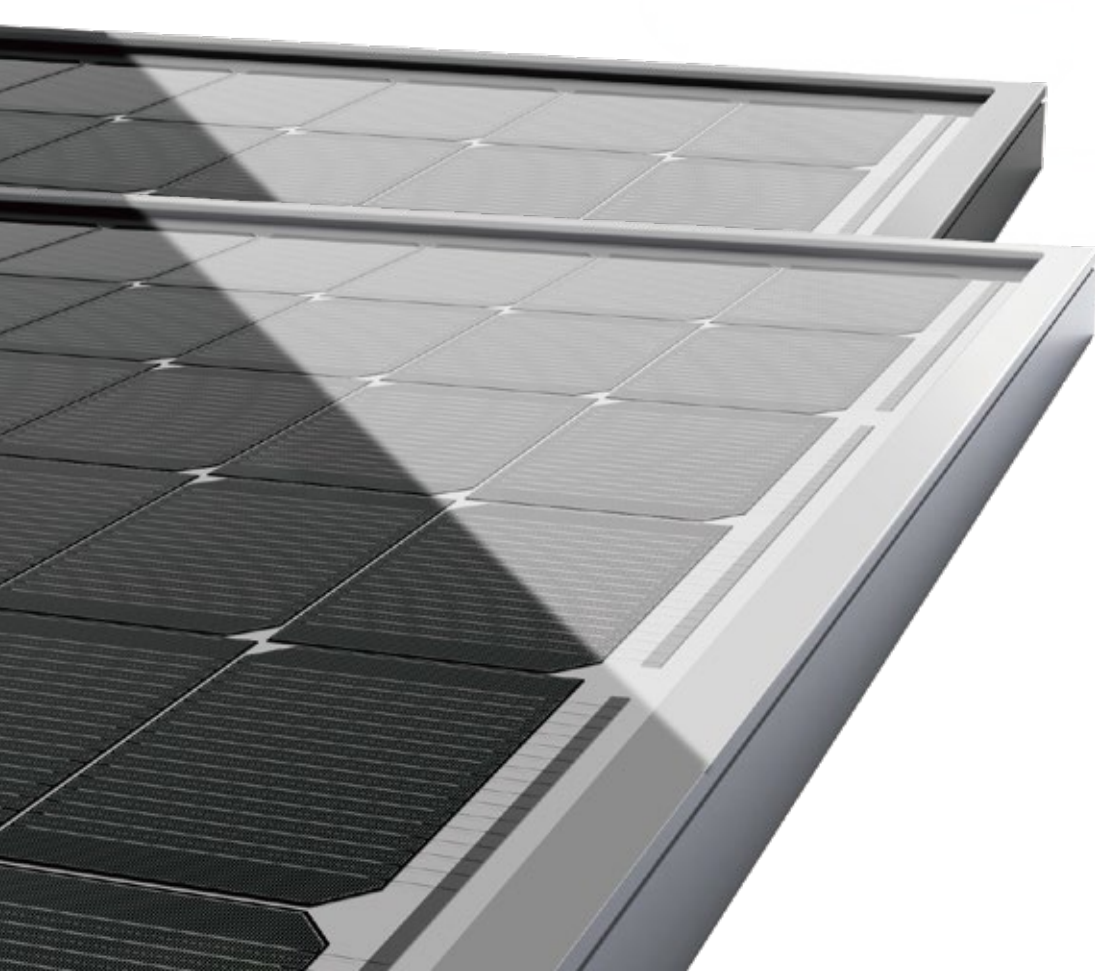
Excellent Low Irradiance Performance



Excellent An-PID, Low LID Performance



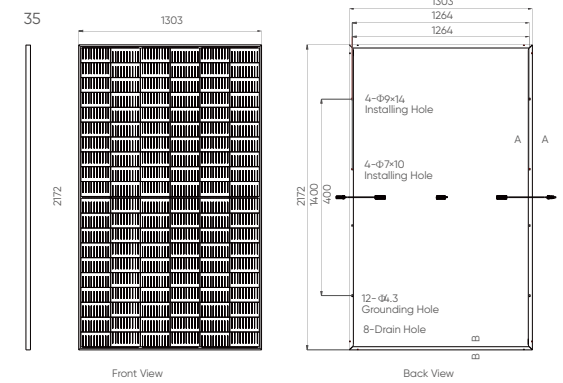
Reduced Hot Spot Risk



### Mechanical Parameters

Cell Orientation	120 (2x60)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , 300mm in length, length can be customized
Glass	Single glass 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight:	30.5kg±3%
Dimension	2172 ×1303×35mm
Packaging	31 pcs per pallet 558 pcs per 40'ft Container 155pcs per 20'ft Container

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~+5W
Voc & Isc Tolerance	±3%
Max. System Voltage	DC1500V(IEC/UL)
Max. Series Fuse Ratin	25A
NOCT	45±2°C
Safety Class	II
Fire Rating	UL type 1 or 2
Max. Static Load(Front)	5400Pa
Max. Static Load(Back)	2400Pa



### Electrical Characteristics

Model Number	SAS585MN-120H		SAS590MN-120H		SAS595MN-120H		SAS600MN-120H		SAS605MN-120H		
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
Maximum Power (Pmax/W)	585	440	590	444	595	447	600	451	605	455	
Open Circuit Voltage (Voc/V)	40.90	38.40	41.10	38.60	41.30	38.80	41.50	39.00	41.70	39.20	
Short Circuit Current (Isc/A)	18.23	14.71	18.27	14.75	18.31	14.78	18.35	14.81	18.39	14.84	
Voltage at Maximum Power (Vmp/V)	33.80	31.80	34.00	31.90	34.20	32.10	34.40	32.30	34.60	32.50	
Current at Maximum Power (Imp/A)	17.31	13.85	17.36	13.89	17.40	13.92	17.45	13.96	17.49	13.99	
Module Efficiency(%)	20.67		20.85		21.02		21.20		21.38		
Temperature Coefficient of Isc											+0.045%/°C
Temperature Coefficient of Voc											-0.250%/°C
Temperature Coefficient of Pmax											-0.290%/°C

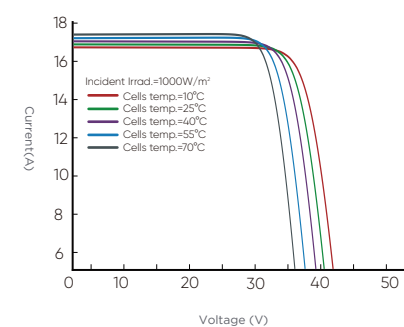
\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5

\* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/S

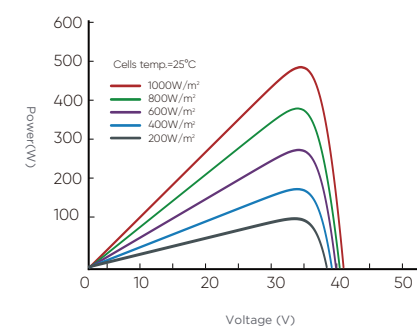
\* Test uncertainty for Pmax: ±3%

### V-Curve (SAS595M-120H)

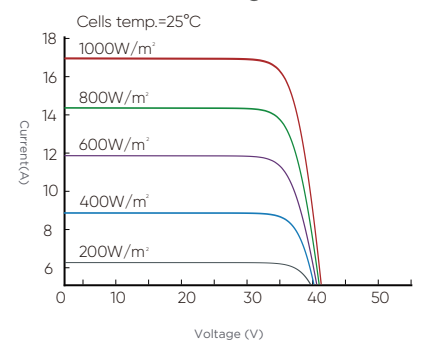
Current-Voltage Curve



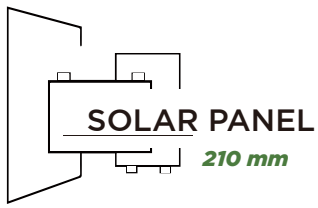
Power-Voltage Curve



Current-Voltage Curve





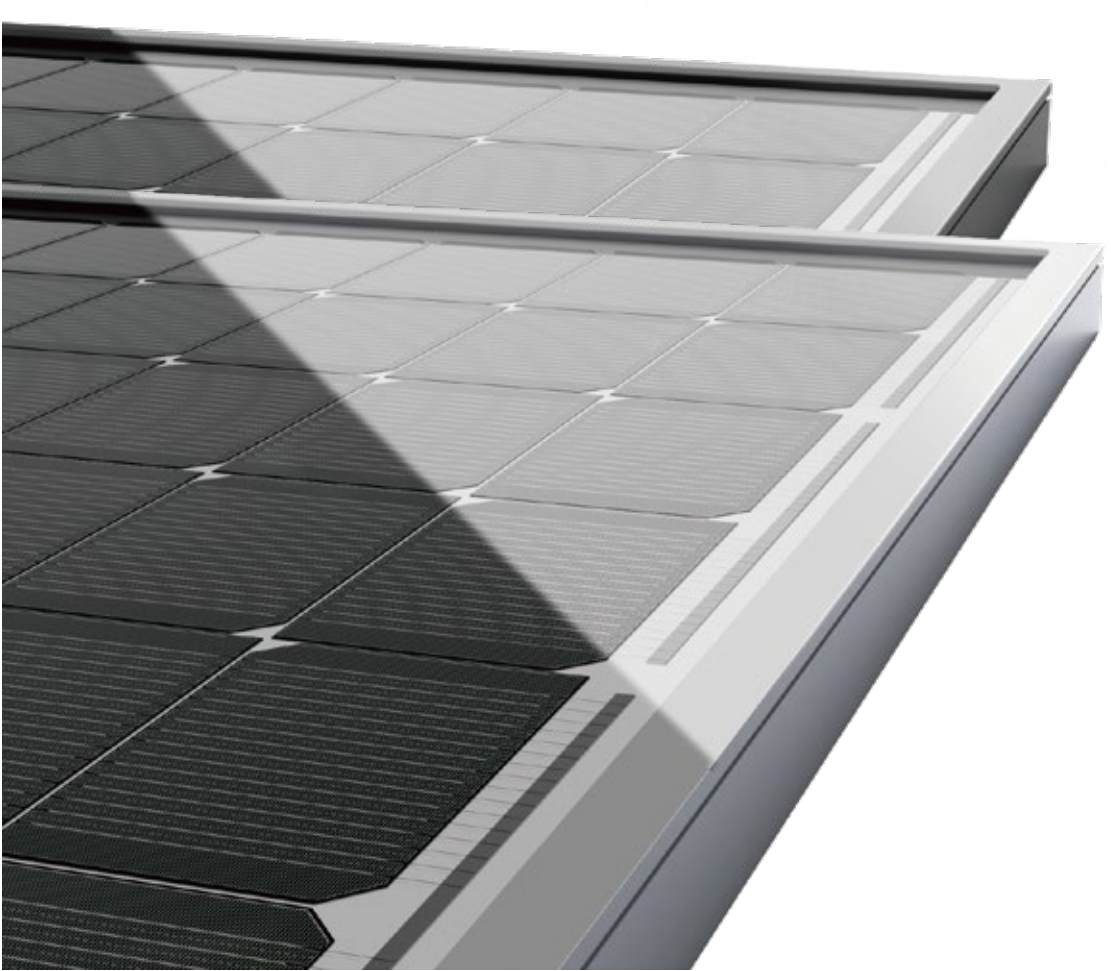


# Hi Neo 5

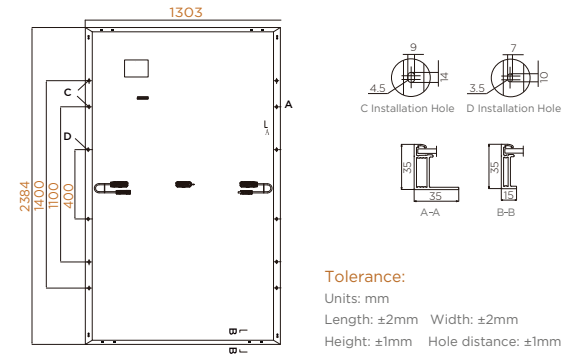


# 675~700W

- N-TOPCon Cell Technology
- Excellent Durability
- Low Power Degradation
- Excellent Low Irradiance Performance
- Excellent An-PID, Low LID Performance
- Higher Power Output



### Mechanical Parameters



<b>Cell Orientation</b>	132 (2x66)
<b>Junction Box</b>	IP68, three diodes
<b>Output Cable</b>	4mm <sup>2</sup> , 300mm in length, length can be customized
<b>Glass</b>	Single glass 3.2mm coated tempered glass
<b>Frame</b>	Anodized aluminum alloy frame
<b>Weight:</b>	33.6kg ± 3%
<b>Dimension</b>	2384×1303×35 mm
<b>Packaging</b>	31 pcs per pallet 558pcs per 40'ft Container

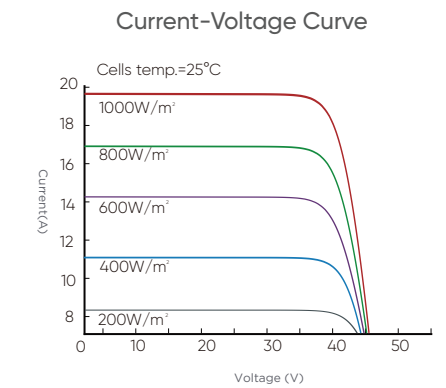
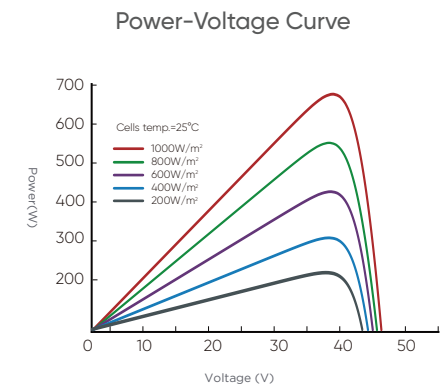
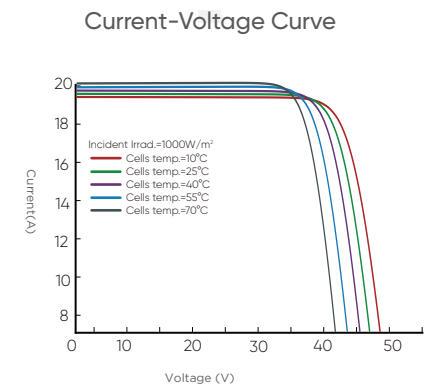
<b>Operational Temperature</b>	-40°C~+85°C
<b>Power Output Tolerance</b>	0~+4.99W
<b>Voc &amp; Isc Tolerance</b>	±3%
<b>Max. System Voltage</b>	DC1500V(IEC/UL)
<b>Max. Series Fuse Ratin</b>	30A
<b>NOCT</b>	45±2°C
<b>Safety Class</b>	II
<b>Fire Rating</b>	UL type 1 or 2
<b>Max. Static Load(Front)</b>	5400Pa
<b>Max. Static Load(Back)</b>	2400Pa

### Electrical Characteristics

Model Number	SAS675M-132H		SAS680M-132H		SAS685M-132H		SAS690M-132H		SAS695M-132H		SAS700M-132H	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
<b>Maximum Power (Pmax/W)</b>	675	512	680	516	685	520	690	524	695	528	700	532
<b>Open Circuit Voltage (Voc/V)</b>	46.3	43.6	46.5	43.8	46.7	44	46.9	44.2	47.1	44.4	47.3	44.6
<b>Short Circuit Current (Isc/A)</b>	18.67	15.06	18.72	15.11	18.77	15.16	18.82	15.21	18.87	15.26	18.92	15.31
<b>Voltage at Maximum Power (Vmp/V)</b>	38.4	35.8	38.6	36	38.8	36.2	39	36.4	39.2	36.6	39.4	36.8
<b>Current at Maximum Power (Imp/A)</b>	17.59	14.3	17.63	14.34	17.67	14.38	17.71	14.42	17.75	14.46	17.79	14.50
<b>Module Efficiency(%)</b>	21.8		22		22.2		22.4		22.6		22.8	
<b>Temperature Coefficient of Isc</b>												+0.040%/°C
<b>Temperature Coefficient of Voc</b>												-0.250%/°C
<b>Temperature Coefficient of Pmax</b>												-0.340%/°C

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5  
 \* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s  
 \* Test uncertainty for Pmax: ±3%

### V-Curve (SAS690MN-132H)





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