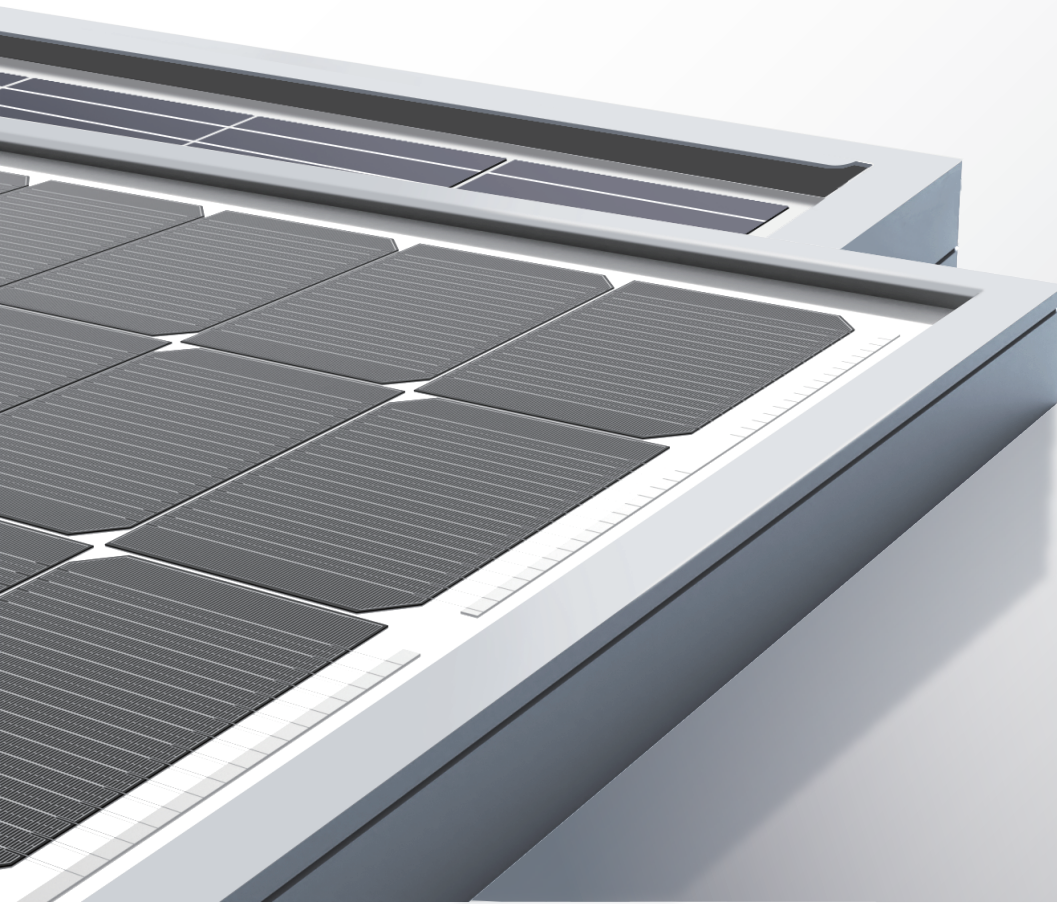


N  
182mm

# 680~700W

182mm Cells Mono  
N-type TOPCon with the 16BB& Half-cut  
Technology



*Bifacial Double Glass*



N-TOPCon Cell Technology



Low Power Degradation



Excellent An-PID, Low LID Performance



Excellent Durability



Excellent Low Irradiance Performance



Reduced Hot Spot Risk

## Complete System and Product Certifications

\*IEC 61215, IEC 61730, UL 61730

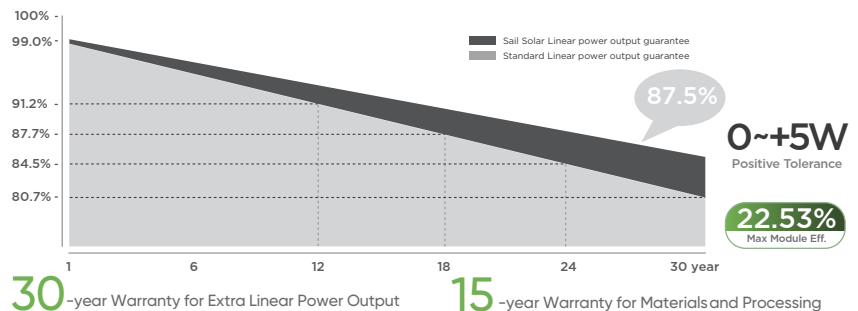
\*ISO 9001:2008: ISO Quality Management System

\*ISO 14001: 2004: ISO Environment Management System

\*OHSAS 18001: 2007 Occupational Health and Safety

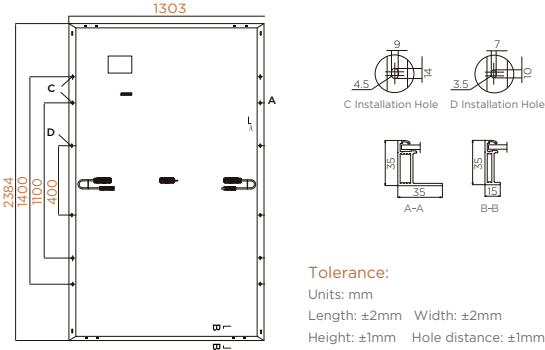
\*Specifications subject to technical changes and tests. Sail Solar reserves the right of interpretation.

## Quality Guarantee



# 680~700W

## Mechanical Parameters



<b>Cell Orientation</b>	132 (2×66)
<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>	Double 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	SAS680MN-132HBID		SAS685MN-132HBID		SAS690MN-132HBID		SAS695MN-132HBID		SAS700MN-132HBID	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition										
Maximum Power (Pmax/W)	680	516	685	520	690	524	695	528	700	532
Open Circuit Voltage (Voc/V)	47.83	43.8	48.02	44	48.22	44.2	48.42	44.4	48.61	44.6
Short Circuit Current (Isc/A)	18.18	15.11	18.22	15.16	18.26	15.21	18.30	15.26	18.34	15.31
Voltage at Maximum Power (Vmp/V)	39.56	36	39.78	36.2	40.00	36.4	40.22	36.6	40.44	36.8
Current at Maximum Power (Imp/A)	17.19	14.34	17.22	14.38	17.25	14.42	17.28	14.46	17.31	14.50
Module Efficiency(%)	21.89		22.05		22.21		22.37		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

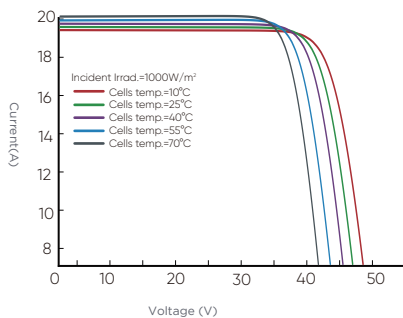
\* Test uncertainty for Pmax: ±3%

## Bifacial Output-Rearside Power Gain

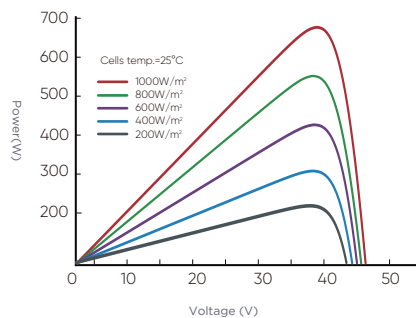
		SAS680MN-132HBID	SAS685MN-132HBID	SAS690MN-132HBID	SAS695MN-132HBID	SAS700MN-132HBID
5%	Maximum Power (Pmax)	714W	719W	725W	730W	735W
	Module Efficiency STC (%)	22.99%	23.15%	23.32%	23.49%	23.66%
15%	Maximum Power (Pmax)	782W	788W	794W	799W	805W
	Module Efficiency STC (%)	25.17%	25.36%	25.54%	25.73%	25.91%
25%	Maximum Power (Pmax)	850W	856W	863W	869W	875W
	Module Efficiency STC (%)	27.37%	27.56%	27.77%	27.97%	28.17%

## V-Curve(SAS690MN-132HBID)

Current-Voltage Curve



Power-Voltage Curve



Current-Voltage Curve

