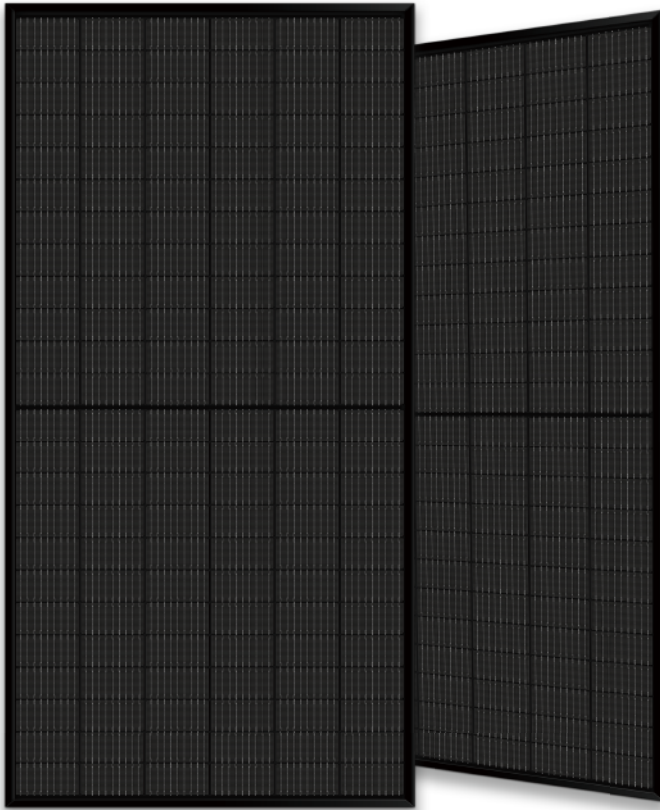


# 182 Full Black Bifacial Solar Module



### High Efficiency

Higher module conversion efficiency benefit from half cell structure (low resistance characteristic).



### Multi busbar technology

Better light utilization and current collection capabilities, effectively improving product power output and reliability.



### Longer service life

Excellent double-sided warranty promises a 30-year power warranty of 0.45% linear power attenuation.



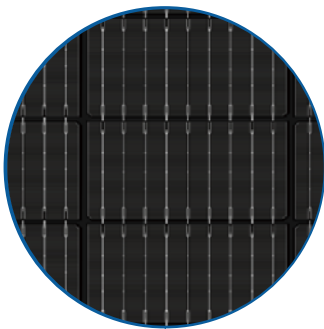
### Severe Weather Resilience

Certified to withstand: Wind load (2400 pascal) and snow load (5400 pascal).



### Double-sided power generation

The double-sided power generation gain increases with the light received on the back side, up to 25%, which significantly reduces the LCOE.

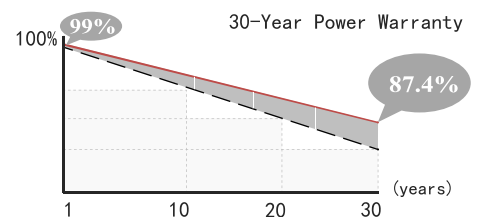


• Double-sided cell technology

12-year Warranty for Materials and Processing



30-year Warranty for Extra Linear Power Output

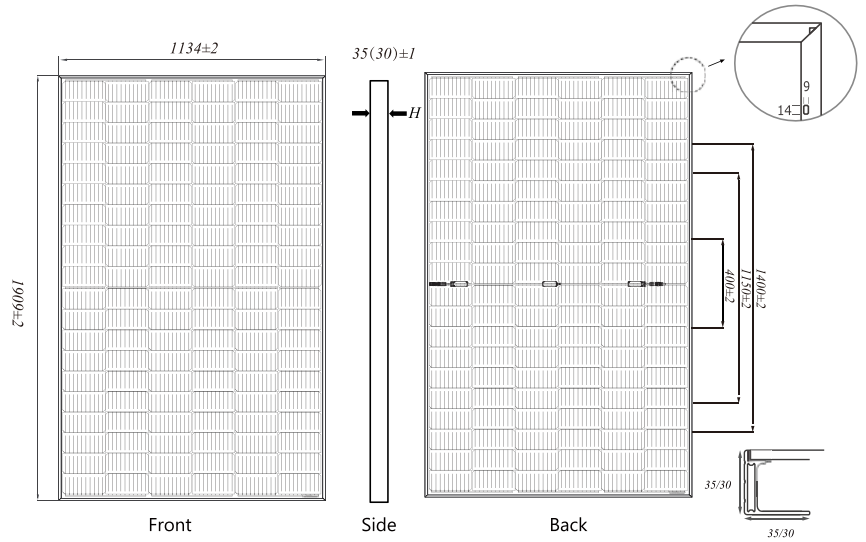


# 435-450W

## STM435-450/120-S3SB

Full Black Half-Cut Cell High Efficiency Bifacial PV Module

<b>Weight</b>	<b>Dimension(LxWxT)</b>
24.0kg±3%	1909x1134x35(30)mm
<b>Cells Type</b>	<b>Packaging(pcs/40HQ container)</b>
Mono 182-10BB 31/744pcs	37/888pcs



Remark: customized frame color and cable length available upon request

### MECHANICAL SPECIFICATION

Cell	Mono
No.of cells	120(6x20)
Cable Length	300mm(+)/300mm(-)
Cable Cross Section Size	4mm <sup>2</sup> (IEC)
Junction Box	IP68,3 diodes
Connector	MC4 Compatible

### OPERATING PARAMETERS

Maximum System Voltage	1500VDC
Operating Temperature	-40℃ ~ +85℃
Maximum Series Fuse	25A
Maximum StaticLoad,Front	5400Pa(112lb/ft <sup>2</sup> )
Maximum StaticLoad,Back	2400Pa(50lb/ft <sup>2</sup> )
Safety Class	Class II

### ELECTRICAL CHARACTERISTICS

STC:AM1.5 1000W/m<sup>2</sup> 25℃ NOCT:AM1.5 800W/m<sup>2</sup> 20℃ 1m/s Test uncertainty for Pmax ±3%

Module Type	STM435/120-S3SB		STM440/120-S3SB		STM445/120-S3SB		STM450/120-S3SB	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	435	327.7	440	331.5	445	335.2	450	339
Open Circuit Voltage(Voc/V)	40.80	38.17	40.95	38.31	41.10	38.45	41.25	38.59
Short Circuit Current(Isc/A)	13.34	10.77	13.41	10.82	13.52	10.91	13.62	10.99
Voltage at Maximum Power(Vmp/V)	33.76	32.11	33.91	32.30	34.06	32.41	34.21	32.53
Current at Maximum Power(Imp/A)	12.89	10.21	12.98	10.26	13.07	10.34	13.16	10.42
Module Efficiency(%)	20.09		20.33		20.56		20.79	

### POWER OUTPUT OF THE FRONT AND REAR SIDE

(REFERENCEDSPECIFICALLY TO 450WP FRONT)

Power Gain (%)	5%	10%	15%	20%	25%
Maximum Power(Pmax/W)	572	600	627	654	681
Pmax Gain(%)	22.07%	23.16%	24.20%	25.24%	25.28%

### TEMPERATURE RATINGS

Norminal Operating Cell Temperature(NOCT)	45±2℃
Temperature Coefficient of Isc	+0.048%/℃
Temperature Coefficient of Voc	-0.280%/℃
Temperature Coefficient of Pmax	-0.350%/℃

### I-V CURVE(STM435-455/120-S3SB)

