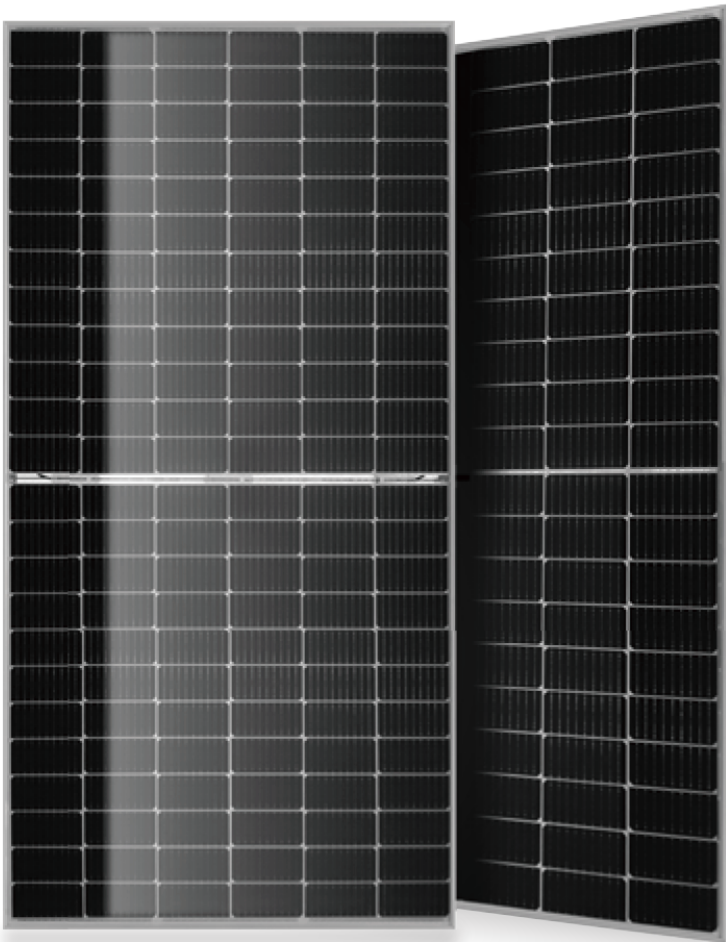


182 Bifacial Solar Module



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.



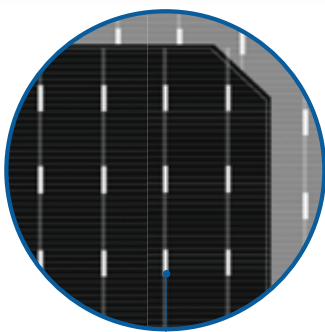
Severe Weather Resilience

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.

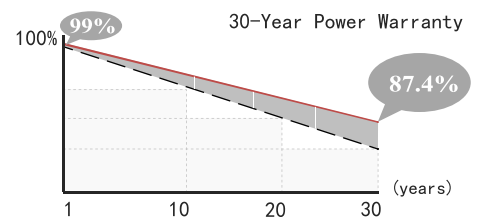


• Double-sided cell technology

12-year Warranty for Materials and Processing



30-year Warranty for Extra Linear Power Output

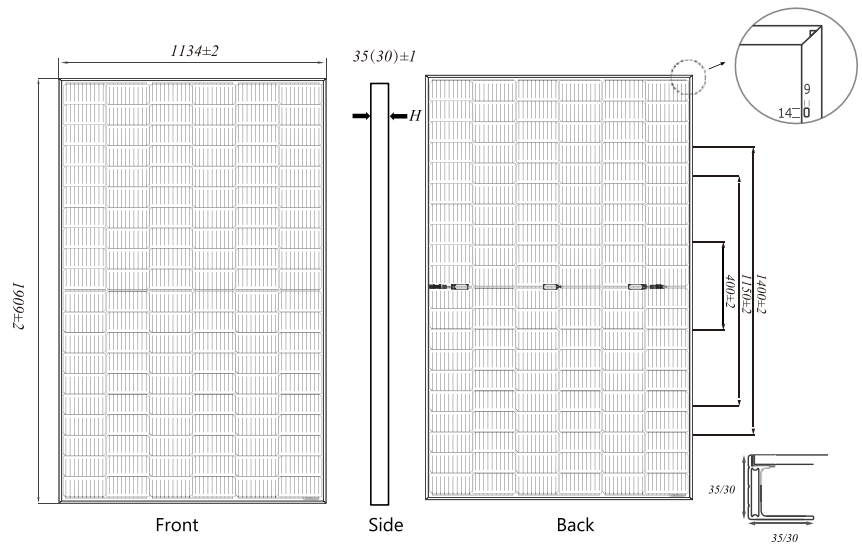


435-450W

STM435-450/120-S3S

Half-Cut Cell High Efficiency Bifacial PV Module

Weight	Dimension(LxWxT)
24.0kg±3%	1909x1134x35(30)mm
Cells Type	Packaging(pcs/40HQ container)
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 ² (IEC)
Junction Box	IP68,3 diodes
Connector	MC4 Compatible

OPERATING PARAMETERS

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

ELECTRICAL CHARACTERISTICS

STC:AM1.5 1000W/m² 25 C NOCT:AM1.5 800W/m² 20 C 1m/s Test uncertainty for Pmax ±3%

Module Type	STM435/120-S3S		STM440/120-S3S		STM445/120-S3S		STM450/120-S3S	
	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

(REFERENCED SPECIFICALLY 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 C
Temperature Coefficient of Isc	+0.048%/ C
Temperature Coefficient of Voc	-0.280%/ C
Temperature Coefficient of Pmax	-0.350%/ C

I-V CURVE(STM435-455/120-S3S)

