

TOPCon 182 Bifacial Solar Module

480-500W

STM-480-500/120-S5S

Higher power output **23.1%** up to

PID Resistance



Low-light Performance



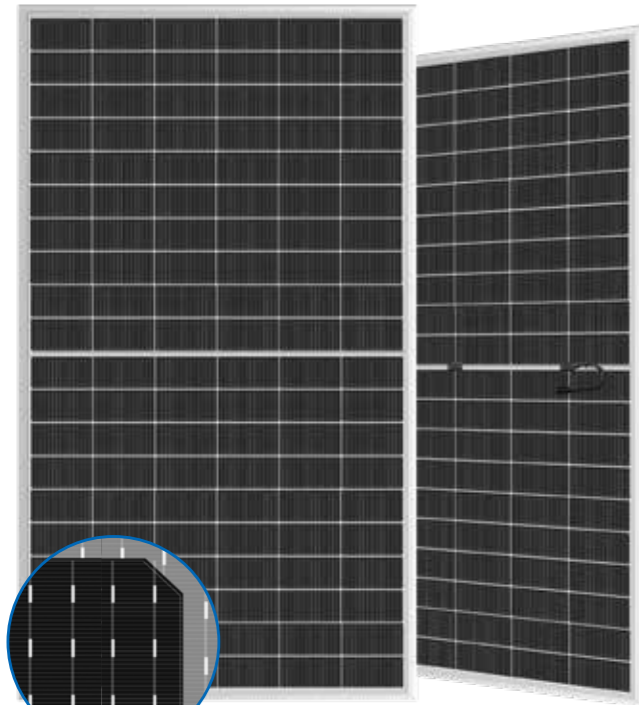
Severe Weather Resilience



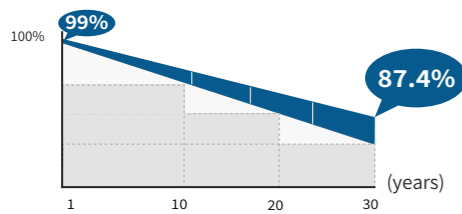
Durability Against Extreme Environmental Conditions



Double-sided power generation



Double-sided cell technology



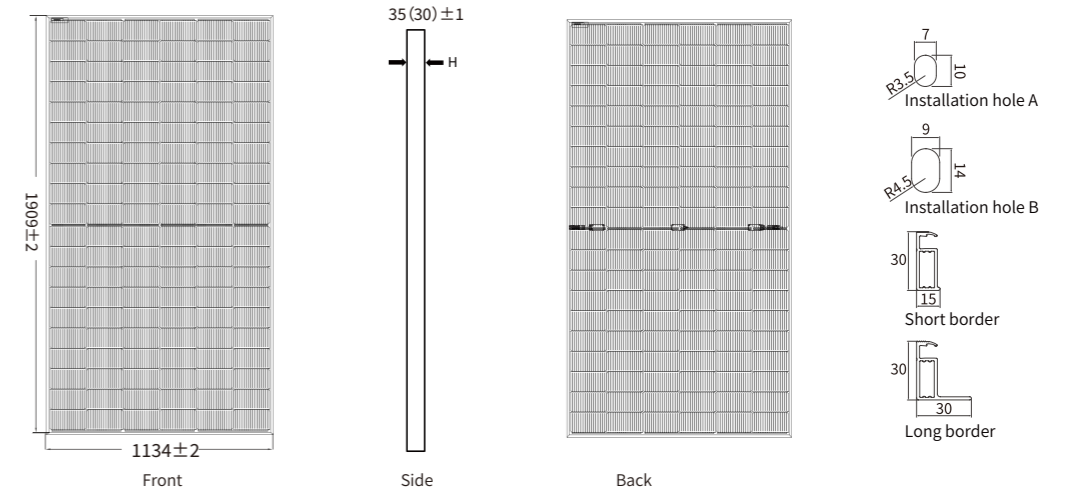
ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
GB/T 29490-2013

12
YEARS

12-year Warranty for Materials and Processing

30
YEARS

30-year Warranty for Extra Linear Power Output



Remark: customized frame color and cable length available upon request

Packaging(pcs/40HQ container)	17.5 meter semi hanging	Dimensions	Weight
31/744pcs 37/888pcs	31/1426pcs 37/1480pcs	1909x1134x35(30)mm	26.6kg±3%

MECHANICAL SPECIFICATION		OPERATING PARAMETERS	
Cell	N-type mono-crystalline	Maximum System Voltage	1500VDC
No.of cells	120(6x20)	Operating Temperature	-40°C~+85°C
Cable Length	300mm(+)/300mm(-)	Maximum Series Fuse	25A
Cable Cross Section Size	4mm ² (IEC)	Maximum StaticLoad,Front	5400Pa(112lb/ft ²)
Junction Box	IP68,3 diodes	Maximum StaticLoad,Back	2400Pa(50lb/ft ²)
Connector	MC4 Compatible	Safety Class	Class II
STC:AM1.5 1000W/m ² 25°C NOCT:AM1.5 800W/m ² 20°C 1m/s		Test Uncertainty for Pmax ±3%	

Module Type	STM-480/120-S5S		STM-485/120-S5S		STM-490/120-S5S		STM-495/120-S5S		STM-500/120-S5S	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition										
Maximum Power(Pmax/W)	480	361	485	365	490	368	495	372	500	376
Open Circuit Voltage(Voc/V)	42.71	40.56	42.88	40.72	43.05	40.88	43.22	41.04	43.39	41.20
Short Circuit Current(Isc/A)	14.31	11.55	14.39	11.61	14.47	11.68	14.55	11.74	14.63	11.81
Voltage at Maximum Power(Vmp/V)	35.38	33.27	35.55	33.43	35.72	33.59	35.89	33.75	36.06	33.90
Current at Maximum Power(Impp/A)	13.57	10.84	13.65	10.90	13.73	10.96	13.81	11.02	13.89	11.09
Module Efficiency(%)	22.20		22.40		22.60		22.90		23.10	

TEMPERATURE RATINGS		POWER OUTPUT OF THE FRONT AND REAR SIDE					
Norminal Operating Cell Temperature(NOCT)	45±2°C	(REFERENCEDSPECIFICALLY TO 480WP FRONT)					
Temperature Coefficient of Isc	+0.045%/°C	Power Gain (%)	5%	10%	15%	20%	25%
Temperature Coefficient of Voc	-0.275%/°C	Maximum Power(Pmax/W)	504	533	563	594	625
Temperature Coefficient of Pmax	-0.350%/°C	Pmax Gain(%)	23.30%	24.60%	26.00%	27.40%	28.90%

I-V CURVE(STM-480-500/120-S5S)

