

TOPCon 182 Solar Module

Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance certified by TUV NORD.



PID Resistance

Excellent Anti-PID performance guarantee limited power degradation for mass production.(Potential Induced Degradation) under the test conditions.



High Efficiency

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



Low-light Performance

Advanced glass and cell surface textured design ensure excellent performance in low-light environment.



Severe Weather Resilience

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



12-year Warranty for
Materials and Processing



30-year Warranty for
Extra Linear Power Output

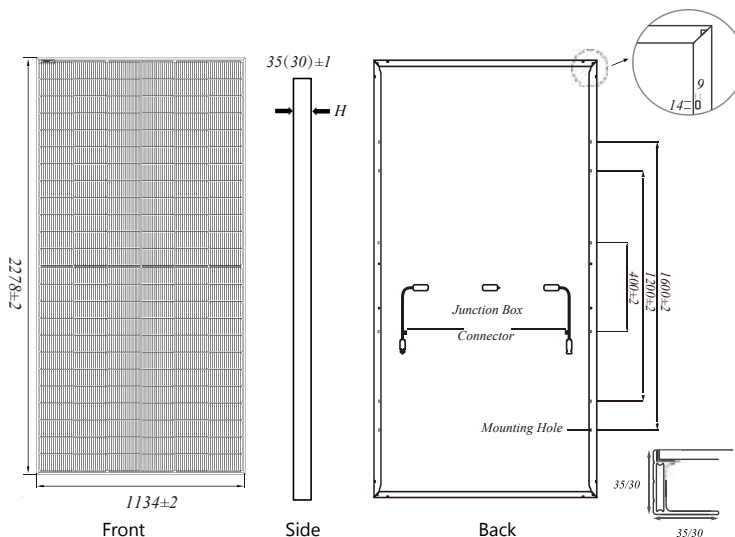


570-585W

STM570-585/144-S5

Half-Cut Cell High Efficiency PV Module

Weight	Dimension(LxWxT)
28.6kg±3%	2278x1134x35(30)mm
Cells Type	Packaging(pcs/40HQ container)
TOPCon 182-16BB	31/620pcs 37/740pcs



Remark: customized frame color and cable length available upon request

MECHANICAL SPECIFICATION

Cell	N-type mono-crystalline
No. of cells	144(6x24)
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

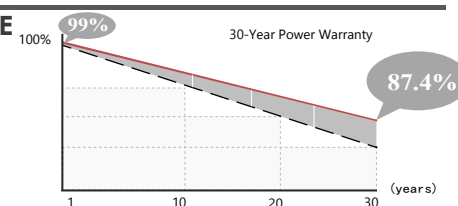
STC: AM1.5 1000W/m² 25 °C NOCT: AM1.5 800W/m² 20 °C 1m/s Test uncertainty for Pmax ±3%

Module Type	STM570/144-S5		STM575/144-S5		STM580/144-S5		STM585/144-S5	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	570	429	575	433	580	436	585	440
Open Circuit Voltage(Voc/V)	50.74	48.15	50.88	48.29	51.02	48.42	51.16	48.55
Short Circuit Current(Isc/A)	14.31	11.55	14.39	11.62	14.47	11.68	14.55	11.74
Voltage at Maximum Power(Vmp/V)	42.07	39.59	42.22	39.68	42.37	39.75	42.52	39.87
Current at Maximum Power(Imp/A)	13.55	10.85	13.62	10.92	13.69	10.98	13.76	11.04
Module Efficiency(%)	22.06		22.25		22.44		22.64	

TEMPERATURE RATINGS

Normal Operating Cell Temperature(NOCT)	45±2 °C
Temperature Coefficient of Isc	+0.045%/°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Pmax	-0.350%/°C

ADDITIONAL VALUE



I-V CURVE(STM570-585/144-S5)

