

TOPCon 182 Full Black 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



IEC61215, IEC61730, IEC61701, IEC62716, IEC62804

ISO 9001:2015: ISO Quality Management System

ISO 14001: 2015: ISO Environment Management System

ISO 45001: 2018: ISO Occupational Health and Safety Management Systems

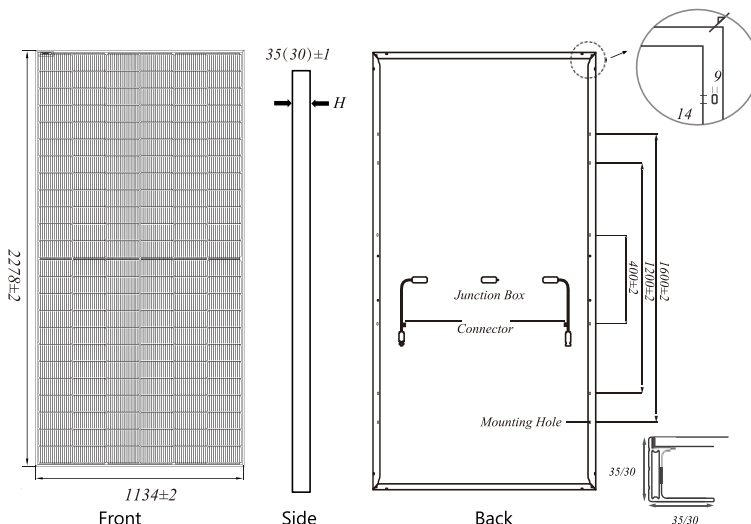


560-580W

STM560-580/144-S5B

Full Black 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

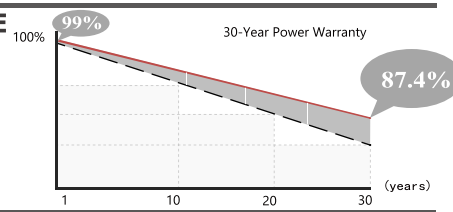
STC: AM1.5 1000W/m² 25 °C NOCT: AM1.5 800W/m² 20 °C 1m/s Test uncertainty for Pmax ±3%

Module Type	STM560/144-S5B		STM565/144-S5B		STM570/144-S5B		STM575/144-S5B		STM580/144-S5B	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	560	421	565	425	570	429	575	433	580	436
Open Circuit Voltage(Voc/V)	50.67	48.11	50.60	48.05	50.74	48.15	50.88	48.29	51.02	48.42
Short Circuit Current(Isc/A)	14.13	11.43	14.23	11.51	14.31	11.55	14.39	11.62	14.47	11.68
Voltage at Maximum Power(Vmp/V)	41.92	39.31	41.92	39.46	42.07	39.59	42.22	39.68	42.37	39.75
Current at Maximum Power(Impp/A)	13.35	10.71	13.48	10.76	13.55	10.85	13.62	10.92	13.69	10.98
Module Efficiency(%)	21.68		21.87		22.06		22.25		22.44	

TEMPERATURE RATINGS

Norminal 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(STM560-580/144-S5B)

