

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



25-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

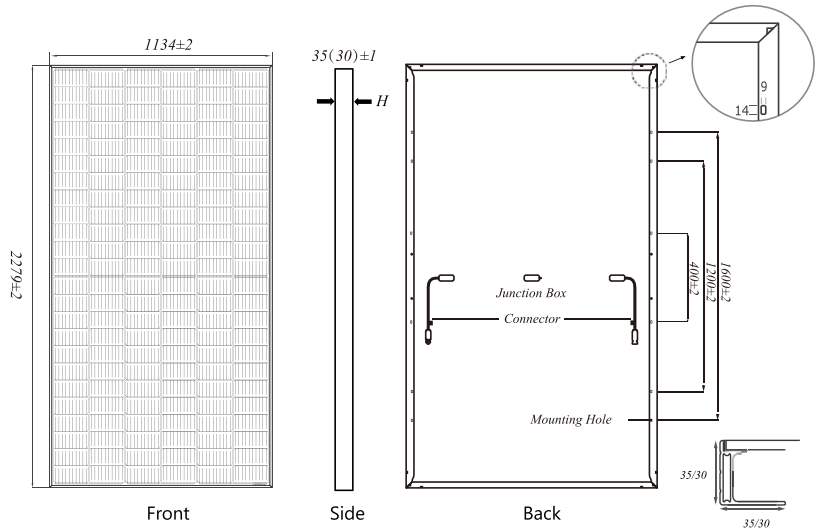


525-545W

STM525-545/144-S3B

Full Black Half-Cut Cell High Efficiency PV Module

Weight	Dimension(LxWxT)
28.6kg±3%	2279x1134x35(30)mm
Cells Type	Packaging(pcs/40HQ container)
Mono 182-10BB 31/620pcs 37/740pcs	



Remark: customized frame color and cable length available upon request

MECHANICAL SPECIFICATION

Cell	Mono
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 StaticLoad,Front	5400Pa(112lb/ft ²)
Maximum StaticLoad,Back	2400Pa(50lb/ft ²)
Safety Class	Class II

ELECTRICAL CHARACTERISTICS

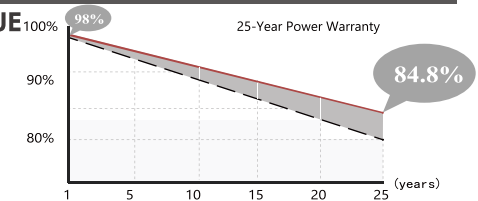
STC:AM1.5 1000W/m² 25 C NOCT:AM1.5 800W/m² 20 C 1m/s Test uncertainty for Pmax ±3%

Module Type	STM525/144-S3B		STM530/144-S3B		STM535/144-S3B		STM540/144-S3B		STM545/144-S3B	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	525	395.5	530	399.2	535	403.0	540	406.8	545	410.5
Open Circuit Voltage(Voc/V)	49.15	45.98	49.30	46.12	49.45	46.26	49.60	46.40	49.75	46.54
Short Circuit Current(Isc/A)	13.65	11.02	13.72	11.07	13.79	11.13	13.86	11.19	13.93	11.24
Voltage at Maximum Power(Vmp/V)	41.15	37.87	41.31	38.03	41.47	38.20	41.64	38.36	41.80	38.52
Current at Maximum Power(Imp/A)	12.76	10.44	12.83	10.50	12.90	10.55	12.97	10.60	13.04	10.66
Module Efficiency(%)	20.31		20.51		20.70		20.89		21.09	

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(STM525-545/144-S3B)

