

580~610M

STM-580-610/120-S4

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 (up to 21.65%) 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



STM-580-610/120-S4

580-610W

Half-Cell High Efficiency PV Module

Weight

30.9kgs±3%

Cells Type

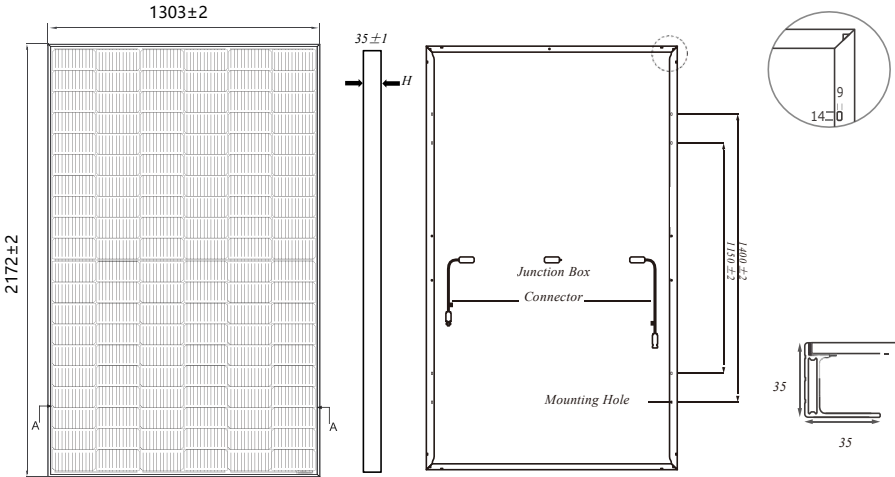
Mono 210×105mm

Dimension (L×W×T)

2172±2mm x1303±2mm x 35±1mm

Packaging

31pcs/pallet, 845pcs/40HQ container

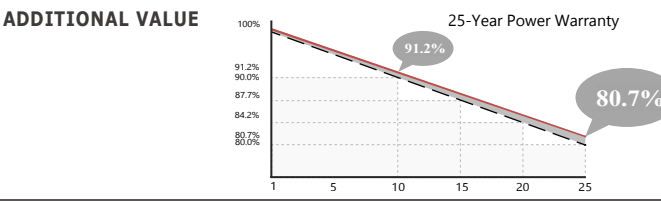


Front Side Back
Remark: customized frame color and cable length available upon request

MECHANICAL SPECIFICATION				OPERATING PARAMETERS			
Cell	Mono			Maximum System Voltage	1500V DC		
No.of cells	120(6x20)			Operating Temperature	-40℃~+85℃		
Cable Length	300mm (+) /300mm (-)			Maximum Series Fuse	30A		
Cable Cross Section Size	4mm ² (IEC)			Maximum StaticLoad,Front	5400Pa(112lb/ft ²)		
Junction Box	IP68 Rated,3diodes			Maximum StaticLoad,Back	2400Pa(50lb/ft ²)		
Connector	MC4 Compatible			Safety Class	Class II		

ELECTRICAL CHALACTERISTICS		STC:AM1.5 1000W/m ² 25℃		NOCT:AM1.5 800W/m ² 20℃ 1m/s		Test uncertainty for Pmax ±3%									
Module Type		STM-580/120-S4		STM-585/120-S4		STM-590/120-S4		STM-595/120-S4		STM-600/120-S4		STM-605/120-S4		STM-610/120-S4	
Testing Condition		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)		580	435.2	585	438.9	590	442.7	595	446.4	600	450.2	605	453.9	610	457.7
Open Circuit Voltage (Voc/V)		40.50	38.00	40.70	38.20	40.90	38.40	41.10	38.60	41.30	38.80	41.50	38.90	41.70	39.10
Short Circuit Current (Isc/A)		18.27	14.76	18.32	14.80	18.37	14.84	18.42	14.88	18.47	14.92	18.52	14.96	18.57	15.30
Voltage at Maximum Power (Vmp/V)		34.10	31.80	34.30	32.00	34.50	32.20	34.70	32.40	34.90	32.60	35.10	32.80	35.30	32.90
Current at Maximum Power (Imp/A)		17.02	13.67	17.06	13.71	17.11	13.74	17.15	13.78	17.20	13.82	17.25	13.86	17.29	13.89
Module Efficiency(%)		20.50%		20.70%		20.80%		21.00%		21.20%		21.40%		21.60%	

TEMPERATURE RATINGS	
Norminal Operating Cell Temperature(NOCT)	45±2℃
Temperature Coefficient of Isc	+0.050%/℃
Temperature Coefficient of Voc	-0.260%/℃
Temperature Coefficient of Pmax	-0.340%/℃



I-V CURVE(STM-580-610/120-S4)

