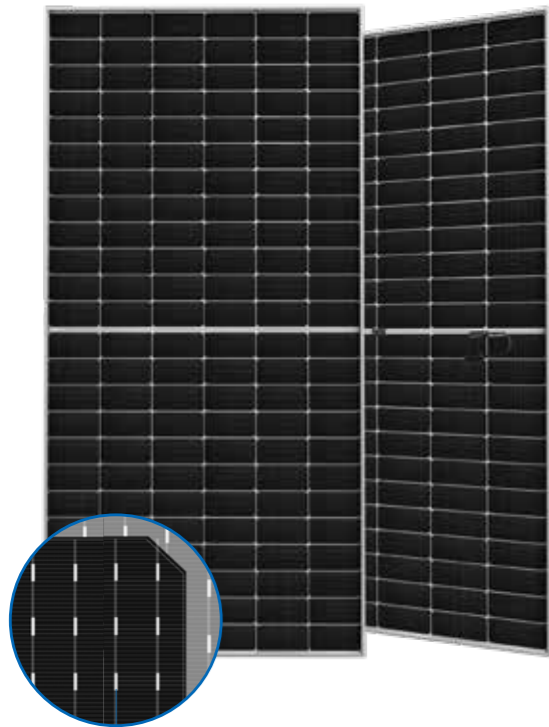


# TOPCon 182 Bifacial Solar Module

## 580-600W

STM-580-600/144-S5S

Higher power output **23.2%** up to



Double-sided cell technology

PID Resistance



Low-light Performance



Severe Weather Resilience



Durability Against Extreme Environmental Conditions



Double-sided power generation

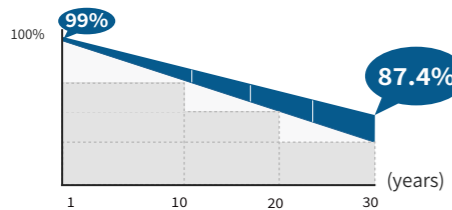


**12**  
YEARS

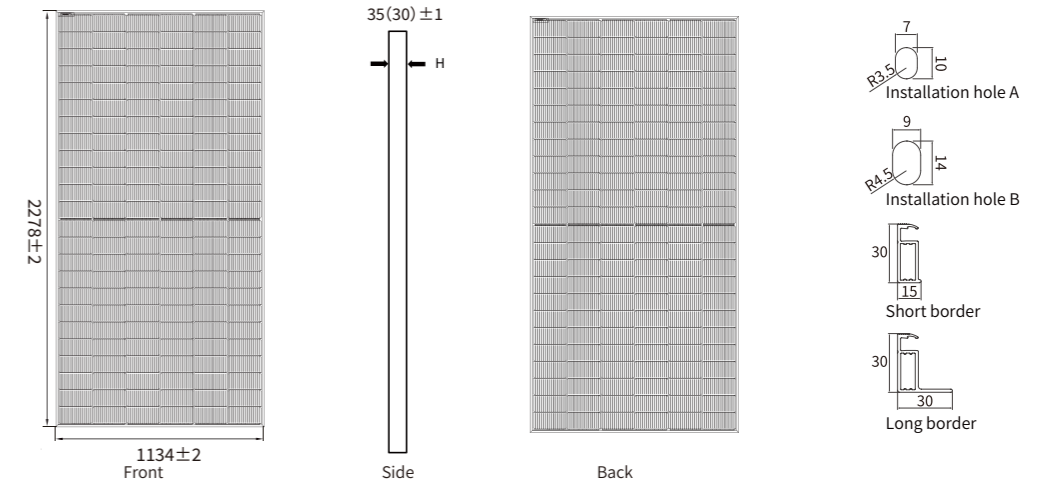
12-year Warranty for Materials and Processing

**30**  
YEARS

30-year Warranty for Extra Linear Power Output



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



Remark: customized frame color and cable length available upon request

Packaging(pcs/40HQ container)	17.5 meter semi hanging	Dimensions	Weight
31/620pcs 37/740pcs	31/930pcs 37/1036pcs	2278x1134x35(30)mm	32.6kg±3%

MECHANICAL SPECIFICATION		OPERATING PARAMETERS	
Cell	N-type mono-crystalline	Maximum System Voltage	1500VDC
No.of cells	144(6x24)	Operating Temperature	-40°C~+85°C
Cable Length	300mm(+)/300mm(-)	Maximum Series Fuse	25A
Cable Cross Section Size	4mm <sup>2</sup> (IEC)	Maximum StaticLoad,Front	5400Pa(112lb/ft <sup>2</sup> )
Junction Box	IP68,3 diodes	Maximum StaticLoad,Back	2400Pa(50lb/ft <sup>2</sup> )
Connector	MC4 Compatible	Safety Class	Class II
STC:AM1.5 1000W/m <sup>2</sup> 25°C	NOCT:AM1.5 800W/m <sup>2</sup> 20°C 1m/s	Test Uncertainty for Pmax	±3%

Module Type	STM-580/144-S5S		STM-585/144-S5S		STM-590/144-S5S		STM-595/144-S5S		STM-600/144-S5S	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	580	436	585	440	590	444	595	448	600	451
Open Circuit Voltage(Voc/V)	51.02	48.42	51.16	48.55	51.30	48.69	51.44	48.82	51.58	48.95
Short Circuit Current(Isc/A)	14.47	11.68	14.55	11.74	14.63	11.81	14.71	11.87	14.79	11.94
Voltage at Maximum Power(Vmp/V)	42.37	39.75	42.52	39.87	42.67	39.99	42.82	40.11	42.97	40.23
Current at Maximum Power(Imp/A)	13.69	10.98	13.76	11.04	13.83	11.10	13.90	11.16	13.97	11.22
Module Efficiency(%)	22.50		22.60		22.80		23.00		23.20	

TEMPERATURE RATINGS		POWER OUTPUT OF THE FRONT AND REAR SIDE					
Normal Operating Cell Temperature(NOCT)	45±2°C	(REFERENCEDSPECIFICALLY TO 580WP 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)	609	638	667	696	725
Temperature Coefficient of Pmax	-0.350%/°C	Pmax Gain(%)	23.60%	24.70%	25.80%	26.90%	28.10%

### I-V CURVE(STM-580-600/144-S5S)

