

TOPCon 182 Solar Module 585-605W

STM585-605/144-S5

Higher power output **23.4%** up to

PID Resistance



Low-light Performance



Severe Weather Resilience



Durability Against Extreme Environmental Conditions



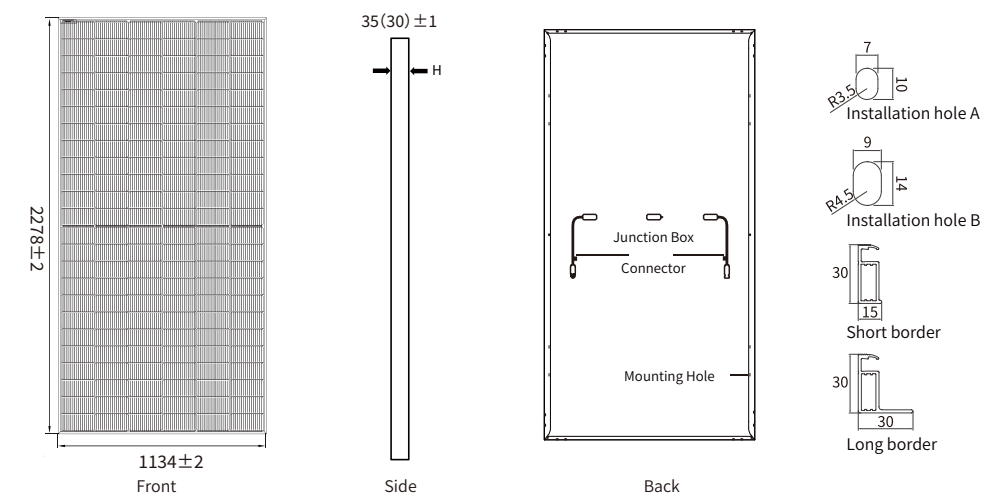
12
YEARS

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	28kg±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	4mm²(IEC)	Maximum StaticLoad,Front	5400Pa(112lb/ft²)
Junction Box	IP68,3 diodes	Maximum StaticLoad,Back	2400Pa(50lb/ft²)
Connector	MC4 Compatible	Safety Class	Class II
STC:AM1.5 1000W/m² 25°C NOCT:AM1.5 800W/m² 20°C 1m/s		Test Uncertainty for Pmax ±3%	

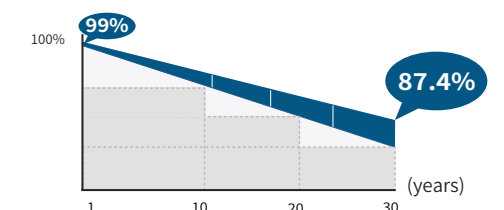
ELECTRICAL CHARACTERISTICS

Module Type	STM-585/144-S5		STM-590/144-S5		STM-595/144-S5		STM-600/144-S5		STM-605/144-S5	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	585	440	590	444	595	448	600	451	605	455
Open Circuit Voltage(Voc/V)	51.16	48.55	51.30	48.69	51.44	48.82	51.58	48.95	51.72	49.08
Short Circuit Current(Isc/A)	14.55	11.74	14.63	11.81	14.71	11.87	14.79	11.94	14.87	12.00
Voltage at Maximum Power(Vmp/V)	42.52	39.87	42.67	39.99	42.82	40.11	42.97	40.23	43.12	40.35
Current at Maximum Power(Imp/A)	13.76	11.04	13.83	11.10	13.90	11.16	13.97	11.22	14.04	11.28
Module Efficiency(%)	22.60		22.80		23.00		23.20		23.40	

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(STM-585-605/144-S5)

