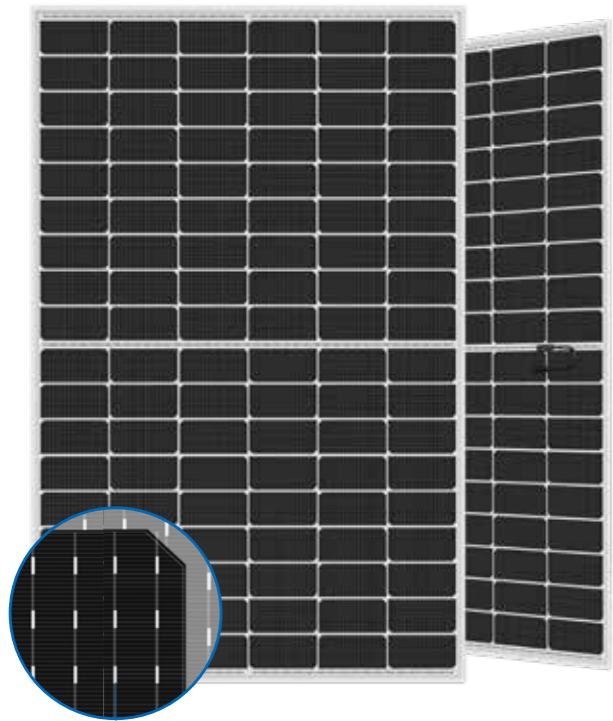


# TOPCon 182 Bifacial Solar Module

## 440-460W

STM-440-460/108-S5S

Higher power output **23.6%** up to



Double-sided cell technology

PID Resistance



Low-light Performance



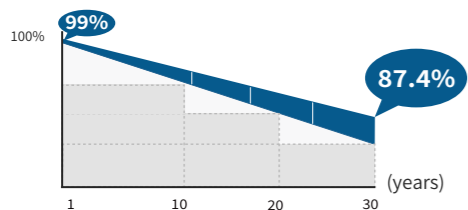
Severe Weather Resilience



Durability Against Extreme Environmental Conditions



Double-sided power generation



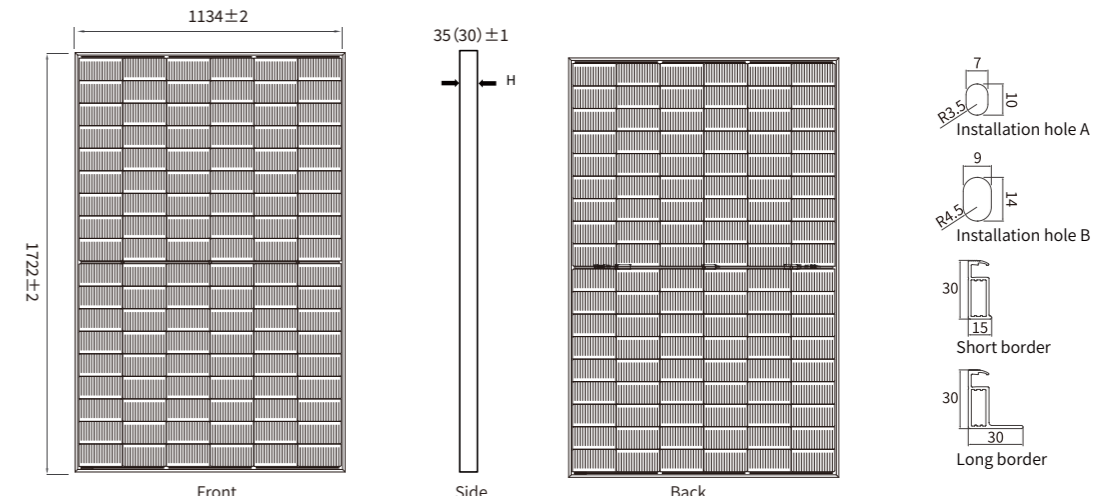
ISO 9001:2015  
ISO 14001:2015  
ISO 45001:2018  
GB/T 29490-2013

**12**  
YEARS

12-year Warranty for Materials and Processing

**30**  
YEARS

30-year Warranty for Extra Linear Power Output



Remark: customized frame color and cable length available upon request

Packaging(pcs/40HQ container)	17.5 meter semi hanging	Dimensions	Weight
31/806pcs 37/962pcs	31/1426pcs 37/1480pcs	1722x1134x35(30)mm	24.6kg±3%

MECHANICAL SPECIFICATION				OPERATING PARAMETERS			
Cell	N-type mono-crystalline			Maximum System Voltage	1500VDC		
No.of cells	108(6x18)			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-440/108-S5S		STM-445/108-S5S		STM-450/108-S5S		STM-455/108-S5S		STM-460/108-S5S	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	440	331	445	334	450	339	455	343	460	346
Open Circuit Voltage(Voc/V)	38.98	36.99	39.11	37.14	39.24	37.24	39.37	37.36	39.50	37.49
Short Circuit Current(Isc/A)	14.41	11.63	14.49	11.72	14.57	11.76	14.65	11.83	14.73	11.89
Voltage at Maximum Power(Vmp/V)	32.69	30.28	32.87	30.52	33.05	30.70	33.23	30.84	33.41	30.97
Current at Maximum Power(Imp/A)	13.46	10.93	13.54	10.96	13.62	11.04	13.70	11.11	13.78	11.17
Module Efficiency(%)	22.5		22.8		23.0		23.3		23.6	

TEMPERATURE RATINGS		POWER OUTPUT OF THE FRONT AND REAR SIDE					
Normal Operating Cell Temperature(NOCT)	45±2°C	(REFERENCEDSPECIFICALLY TO 440WP 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)	462	484	506	528	550
Temperature Coefficient of Pmax	-0.350%/°C	Pmax Gain(%)	23.60%	24.80%	25.90%	27.00%	28.10%

### I-V CURVE(STM-440-460/108-S5S)

