

SYMN144TBD series

N-TYPE DOUBLE GLASS MONO-FACIAL MODULE

580^W
Maximum Power Output

22.5%
Maximum Module Efficiency

80%
Bifaciality

0~+3%
Power Output Tolerance



Lower LCOE
N-TOPCon bifacial technology: lower degradation,higher bifaciality ,≥ 30 years life and lower BOS cost.



Better Temperature Coefficient
lower temperature coefficient and higher power generation under high -temperature conditions.



PID Resistance
Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



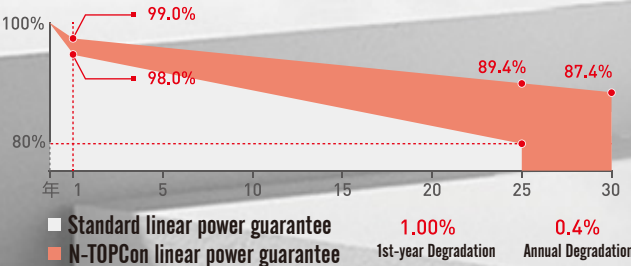
ZERO LID (Light Induced Degradation)
N-type solar cell has no LID naturally which can increase power generation.



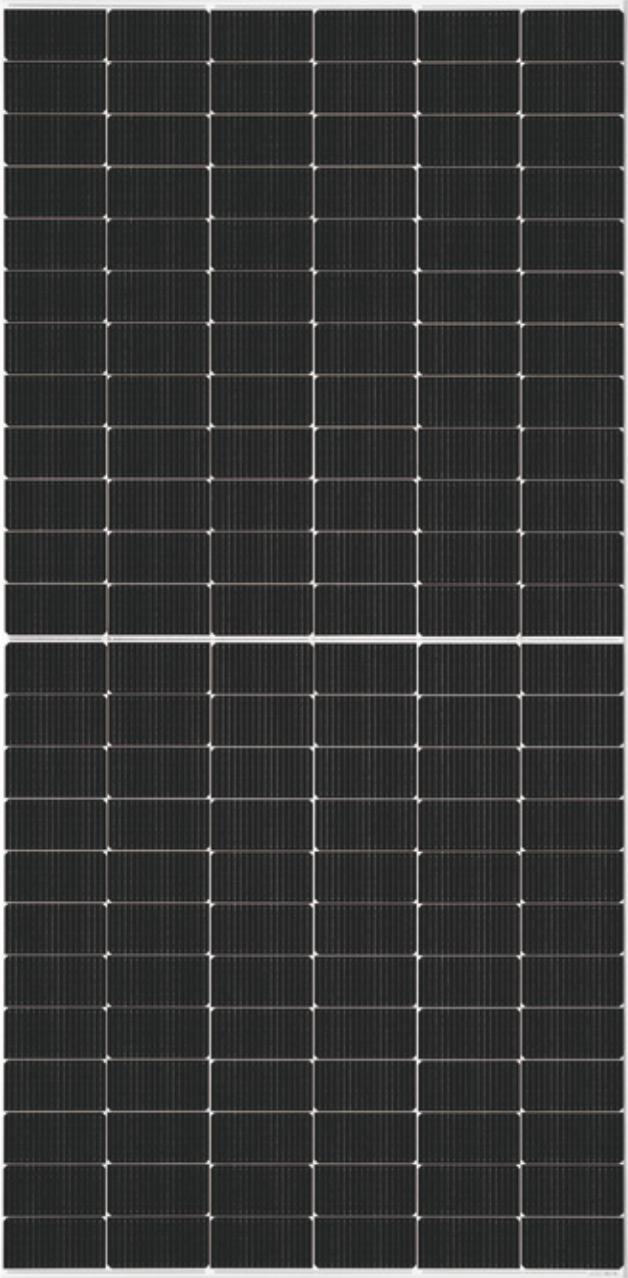
Better Low Light Performance
Higher power output even under low-light environments like on cloudy or foggy days.



Enhanced Mechanical Load
Heavy snow load up to 5400Pa, wind load up to 2400Pa.

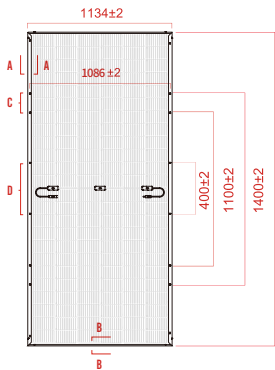


12 Years Product Material & Workmanship 30 Years Linear Performance Warranty



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Engineering Drawing(unit: mm)



A- Long Frame



B- Short Frame

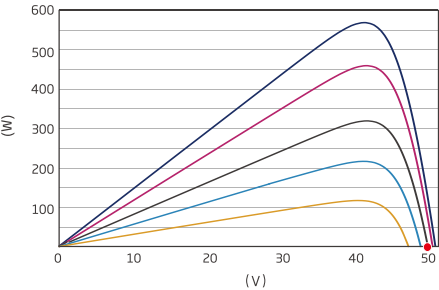
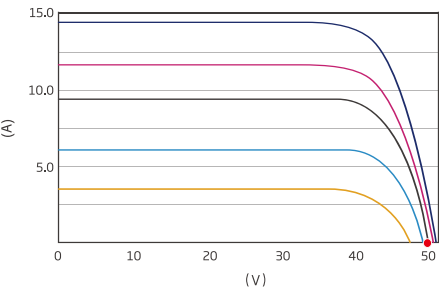


C- Mounting Hole



D- Mounting Hole

Characteristic Curves (SYMN144TBD-570W)



Mechanical Properties

Cell Size	182.00mm*91.00mm	Front Glass/Back Glass	Heat-strengthened glass 2mm/2mm
Number of Cells	144 (2*72)	Frame	Anodized Aluminium Alloy
Module Dimension	2278mm*1134mm*30mm (89.68x44.65x1.18inch)	Junction Box	IP68(3 Diodes)
Weight	32.1kg(70.77 lbs)	Connector	MC4 Compatible Connector
Length of Cable	TUV 1×4.0mm ² (+): 410mm (-):290mm (Or Customized Length)		

SPECIFICATIONS	STC*						NOCT*					
	Front Side						Front Side					
(Pmax) (W) Peak Power(Pmax)(W)	555	560	565	570	575	580	417	421	425	429	432	436
MPP Voltage(Vmp)(V)	41.84	41.99	42.14	42.29	42.44	42.59	39.26	39.39	39.52	39.65	39.78	39.87
MPP Current(Imp)(A)	13.29	13.35	13.41	13.48	13.55	13.62	10.64	10.69	10.75	10.81	10.87	10.94
Open Circuit Voltage(Voc)(V)	50.47	50.67	50.87	51.07	51.27	51.47	47.94	48.13	48.32	48.51	48.70	48.89
Short Circuit Current(Isc)(A)	14.07	14.13	14.19	14.25	14.31	14.37	11.37	11.41	11.46	11.50	11.55	11.60
Module Efficiency(%)	21.5%	21.7%	21.9%	22.1%	22.3%	22.5%	*STC: Irradiance 1000 W/m ² , Cell Temperature 25°C, AM1.5 *NOCT: Irradiance 800 W/m ² , Ambient Temperature 20°C, Wind Speed 1 m/s					

BIFACIAL OUTPUT-REAR SIDE POWER GAIN

5%	Maximum Power (Pmax)	583	588	593	599	604	609
	Module Efficiency STC (%)	22.6%	22.8%	23.0%	23.2%	23.4%	23.6%
10%	Maximum Power (Pmax)	611	616	622	627	633	638
	Module Efficiency STC (%)	23.6%	23.8%	24.1%	24.3%	24.5%	24.7%
20%	Maximum Power (Pmax)	666	672	678	684	690	696
	Module Efficiency STC (%)	25.8%	26.0%	26.2%	26.5%	26.7%	26.9%
30%	Maximum Power (Pmax)	722	728	735	741	748	754
	Module Efficiency STC (%)	27.9%	28.2%	28.4%	28.7%	28.9%	29.2%

Operating Properties		Temperature Coefficient		Packaging Configuration	
Operating Temperature (C)	-40℃~+85℃	Temperature Coefficient of Pmax	-0.30%/℃	Packing Type	40'HQ Container
Maximum System Voltage (V)	1500V (IEC)	Temperature Coefficient of Voc	-0.25%/℃	Pcs/Pallet	36 pcs
Maximum Series Fuse Rating (A)	30	Temperature Coefficient of Isc	+0.046%/℃	Pallet/Container	Pal20 trayslet/container
Power Tolerance (W)	0~+5W	Nominal Operating Cell Temperature (NOCT)	45±2℃	Pcs/Container	720 pcs
Bifaciality*	80%				

*Bifaciality=Pmaxrear (STC) /Pmaxfront (STC) , Bifaciality tolerance:±5%.

