

SYMN108TBDB

N-TYPE DOUBLE GLASS BIFACIAL MODULE

440W

Maximum Power Output

22.53%

Maximum Module Efficiency

80%

Bifaciality

0~5W

Pmax Tolerance



Lower LCOE

N-TOPCon bifacial technology: lower degradation, higher bifaciality, ≥ 30 year service life and lower BOS



Lower 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.



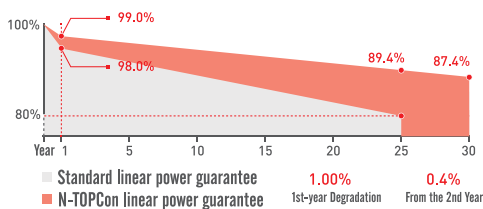
Better Low Light Performance

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



Mechanical Load Enhanced

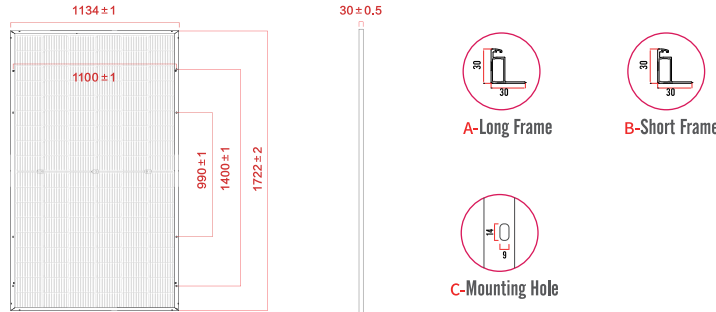
Certified to withstand: 5400 Pa front side max static test load and 2400 Pa rear side max static test load.



12 Years Product Material & Workmanship
30 Years Linear Performance Warranty

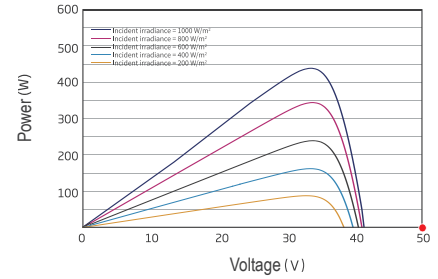
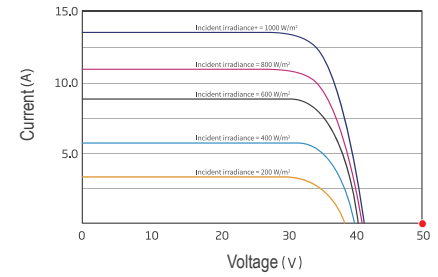
TÜVRheinland®
Precisely Right.





Engineering Drawing(unit: mm)

Characteristic Curves (SYMN108TBDB-440W)



MECHANICAL PROPERTIES			
Cell Size	182mm*183mm series	Front Glass/Back Glass	Heat-strengthened Glass 1.6mm/1.6mm
Number of Cells	108 (2*54)	Frame	Anodized Aluminium Alloy
Module Dimension	1722mm×1134mm×30mm	Junction Box	IP68
Weight	21kg	Connector	MC4 Compatible Connector
Length of Cable	TUV 1×4.0mm ² (+): 410mm; (-):290mm (Or Customized Length)		

SPECIFICATIONS	STC*						
	Front Side						
Testing Condition							
(Pmax) (W) Peak Power(Pmax)(W)	415	420	425	430	435	440	
MPP Voltage(Vmp)(V)	32.72	32.92	33.12	33.32	33.52	33.72	
MPP Current(Imp)(A)	12.69	12.76	12.83	12.90	12.97	13.04	
Open Circuit Voltage(Voc)(V)	38.74	38.94	39.14	39.34	39.54	39.74	
Short Circuit Current(Isc)(A)	13.37	13.43	13.49	13.55	13.61	13.67	
Module Efficiency(%)	21.26%	21.51%	21.76%	22.01%	22.26%	22.52%	

The above data is for reference only, the actual data is subject to the actual test

*STC: Irradiance 1000 W/m², Cell Temperature 25°C, AM1.5

BIFACIAL OUTPUT-REAR SIDE POWER GAIN							
5%	Maximum Power (Pmax)	436	441	446	451	456	462
	Module Efficiency STC (%)	22.33%	22.59%	22.85%	23.11%	23.38%	23.64%
15%	Maximum Power (Pmax)	477	483	489	494	500	506
	Module Efficiency STC (%)	24.45%	24.74%	25.02%	25.31%	25.60%	25.90%
25%	Maximum Power (Pmax)	519	525	531	537	543	550
	Module Efficiency STC (%)	26.58%	26.89%	27.20%	27.51%	27.83%	28.15%

OPERATING PROPERTIES		TEMPERATURE COEFFICIENT		PACKAGING CONFIGURATION	
Operating Temperature (°C)	-40°C~+85°C	Temperature Coefficient of Pmax	-0.29%/°C	Packing Type	40'HQ Container
Maximum System Voltage (V)	DC1500V (IEC)	Temperature Coefficient of Voc	-0.25%/°C	Pcs/Pallet	37 pcs
Maximum Series Fuse Rating (A)	30	Temperature Coefficient of Isc	+0.045%/°C	Pallet/Container	26 pallets
Pmax Tolerance (W)	0~+5W	Nominal Operating Cell Temperature (NOCT)	45±2°C	Pcs/Container	962 pcs
Bifaciality	80±5%				

*Bifaciality=Pmaxrear (STC)/Pmaxfront (STC)

