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 higer 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)

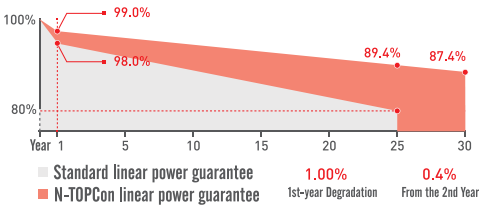
N-type modules with Tunnel Oxide Passivating Contacts (TOPcon) technology offer zero LID degradation.

Better Low Light Performance

Higher power output even under low-light weather such as cloudy and 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 Material & Workmanship Warranty

30 Years Linear Performance Warranty

TÜVRheinland® Precisely Right.

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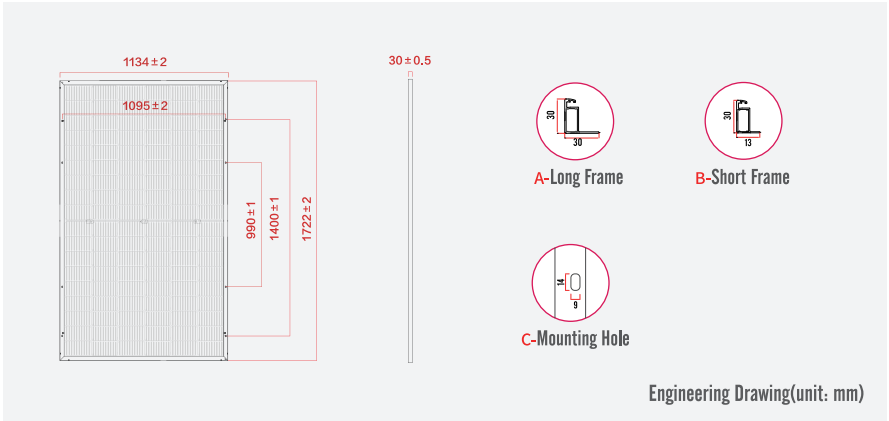
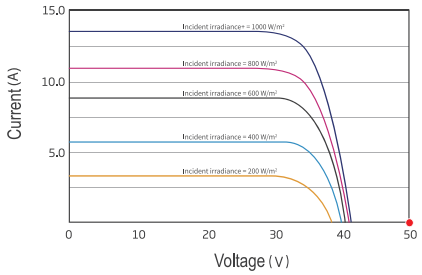
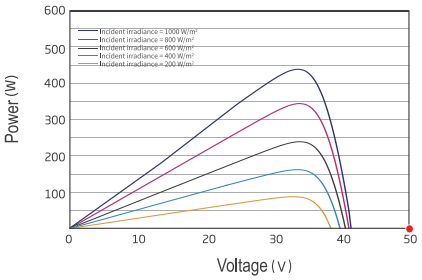


Engineering Drawing(unit: mm)

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 1×4.0mm² (+): 300mm,(-):200mm(Or Customized Length)		

SPECIFICATIONS(FRONT)	STC*					
Maximum Power (Pmax/W)	415	420	425	430	435	440
Peak Power Voltage (Vmp/V)	32.72	32.92	33.12	33.32	33.52	33.72
Peak Power 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-REARSIDE 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	-40°C~+85°C	Temperature Coefficient of Pmax	-0.29%/°C	Packing Type	40'HQ Container	17.5m Flatbed Traile
Maximum System Voltage	DC1500V(IEC)	Temperature Coefficient of Voc	-0.25%/°C	Pcs/Pallet	37 pcs	37 pcs
Maximum Series Fuse Rating	30A	Temperature Coefficient of Isc	+0.045%/°C	Pallet/Container	26 pallets	36 pallets
Pmax Tolerance	0~+5W	Nominal Operating Cell Temperature (NOCT)	45±2°C	Pcs/Container	962 pcs	1332 pcs
Bifaciality	80±5%					

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

SANY® SANY SILICON ENERGY

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