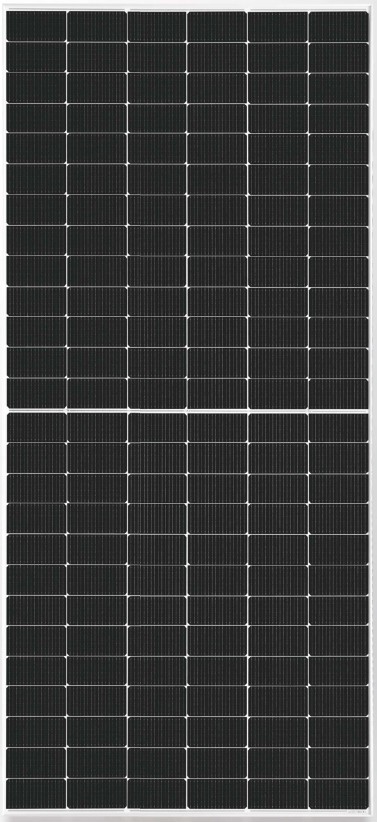
SYMN156TBD

N-TYPE DOUBLE GLASS BIFACIAL MODULE



645W
Maximum Power Output

23.25%
Maximum Module Efficiency

±3%
Power Tolerance

Lower LCOE

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

Lower Temperature Coefficient

lower temperature coefficient and higer power generation under high-temperature conditions.

Mechanical Load Enhanced

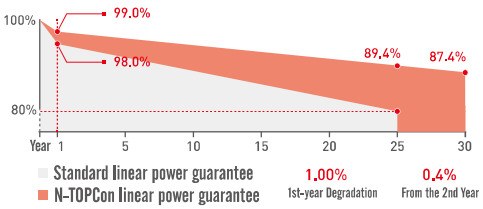
Certified to withstand:5400 Pafront side max static test load and 2400 Parear side max static test load.

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.



12 Years Product Material & Workmanship

30 Years Linear Performance Warranty

Limited Power Warranty only covers the front side of Bifacial module

TÜVRheinland®
Precisely Right.

The TUV certificate holder is Sany Silicon Energy (Zhuzhou) Co., Ltd.
Made in China

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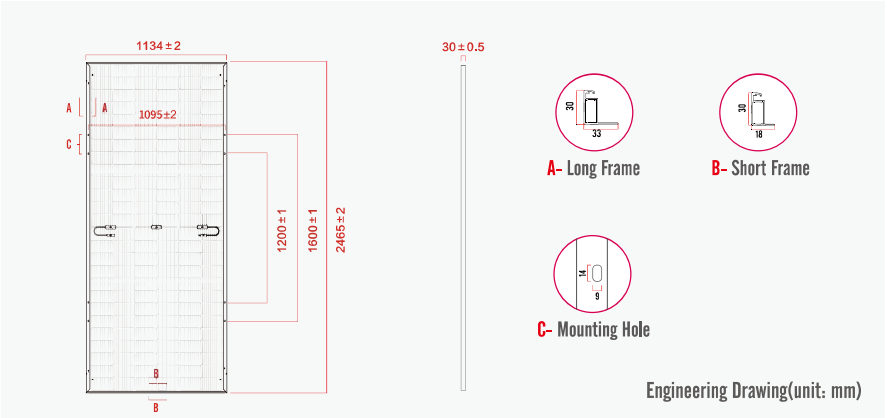
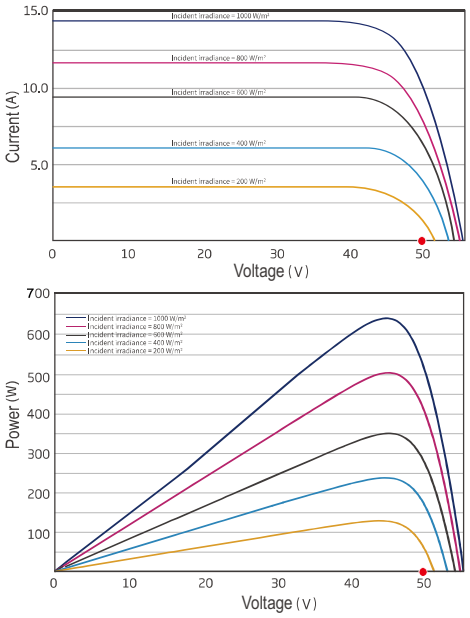


Characteristic Curves (SYMN156TBD645)



MECHANICAL PROPERTIES			
Cell Size	182.2mm*91.875mm	Front Glass/Back Glass	Heat-strengthened Glass 2mm/2mm
Number of Cells	156 (2*78)	Frame	Anodized Aluminium Alloy
Module Dimension	2465mm×1134mm×30mm	Junction Box	IP68
Weight	33.2kg	Connector	QC4.10-cds from QC Solar PV-XT101.2 from Suzhou Xtong
Length of Cable	TUV 1×4.0mm² (+): 410mm· (-):290mm (Or Customized Length)		
Fire rating(According to UL 790)		Class A	

SPECIFICATIONS	STC*				
Testing Condition Front Side	SYMN156TBD625	SYMN156TBD630	SYMN156TBD635	SYMN156TBD640	SYMN156TBD645
(Pmax) (W) Peak Power(Pmax)(W)	625	630	635	640	645
MPP Voltage(Vmp)(V)	47.89	48.05	48.22	48.37	48.53
MPP Current(Imp)(A)	13.05	13.11	13.17	13.23	13.29
Open Circuit Voltage(Voc)(V)	56.75	56.97	57.14	57.32	57.51
Short Circuit Current(Isc)(A)	13.69	13.75	13.81	13.87	13.93
Module Efficiency(%)	22.36%	22.54%	22.72%	22.90%	23.07%

The above data is for reference only, the actual data is subject to the actual test, the power test tolerance ±3%

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

Bifacial output-rearside power gain (10%)

Maximum Power - Pmax [Wp]	688	693	699	704	710
Maximum Power Voltage - Vmp [V]	47.89	48.05	48.22	48.37	48.53
Maximum Power Current - Imp [A]	14.36	14.42	14.49	14.55	14.62
Open-circuit Voltage - Voc [V]	56.75	56.97	57.14	57.32	57.51
Short-circuit Current - Isc [A]	15.06	15.13	15.19	15.26	15.32

The bifacial gain is the additional gain from the back side of PV. It depends on the mounting method, orientation, tilt angle of the PV module and the albedo of the ground.

Specifications (BNPI)

Maximum Power - Pmax [Wp]	688	693	699	704	710
Open-circuit Voltage - Voc [V]	56.75	56.97	57.14	57.32	57.51
Short-circuit Current - Isc [A]	15.06	15.13	15.19	15.26	15.32

BNPI: Irradiance: front 1000W/㎡, rear 135W/㎡,Cell Temperature 25℃, AM=1.5

The above data is for reference only, the actual data is subject to the actual test, the power test tolerance ±3%

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	36 pcs
Maximum Series Fuse Rating (A)	30	Temperature Coefficient of Isc	+0.045%/°C	Pallet/Container	16 pallets
Power Sorting (W)	0~+4.99 W	Nominal Operating Cell Temperature (NOCT)	45±2°C	Pcs/Container	576 pcs
Bifaciality	φPmax= 80%±5%, φIsc= 80%±5%, φVoc= 99%±1%		Module(T98)max: 70℃		

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

SANY® SANY SILICON ENERGY

Sany Silicon Energy (Zhuzhou) Co., Ltd.
Qingxia Road, Shifeng District, Zhuzhou City,
Hunan Province, China
Sany Silicon Energy (Shuozhou) Co., Ltd.
Pinglu District, Shuozhou City, Shanxi Province, China
Telephone：0731-84031888
www.sanygroup.com

Specifications in this manual are subject to change without notice

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