## **SYMN156TBD** series

N-TYPE DOUBLE GLASS MONO-FACIAL MODULE

**625**<sub>w</sub> **Maximum Power Output** 

**22.4**% Maximum Module Efficiency

80% 0~+3% **Power Output Tolerance Bifaciality** 



#### Lower LCOE

N-TOPCon bifacial technology: lower degradation,higher bifaciality ,  $\geq$  30 years life and lower BOS cost.



#### **Better Temperature Coefficient**

lower temperature coefficient and higer power generation under high



#### PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production



#### ZERO LID (Light Induced Degradation)

N-type solar cell has no LID naturally which can increase power generation.



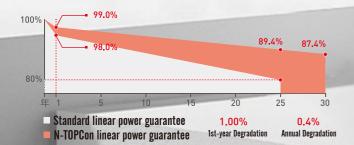
#### **Better Low Light Performance**

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



#### **Enhanced Mechanical Load**

Heavy snow load up to 5400Pa, wind load up to 2400Pa



12 Years Product Material & Workmanship 30 Years Linear Performance Warranty







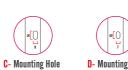
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## Engineering Drawing(unit: mm)

# A- Long Frame



B- Short Frame





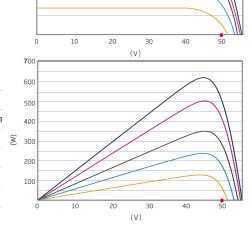


Characteristic Curves (SYMN156TBD-615W)



#### **Mechanical Properties**

Cell Size	182.00mm*91.00mm	Front Glass/Back Glass	Heat-strengthened glass 2mm/2mr		
Number of Cells	156 (2*78)	Frame	Anodized Aluminium Alloy		
Module Dimension	2456mm*1134mm*30mm (97.05x44.65x1.38inch)	Junction Box	IP68(3 Diodes)		
Weight	34.6kg(76.28 lbs)	Connector	MC4 Compatible Connector		
Length of Cable	TUV 1×4.0mm <sup>2</sup> (+): 410mm	n· (-):290mm (Or Customized Length	1)		



27/28

SPECIFICATIONS		stc* Front Side			NOCT* Front Side					
Testing Condition										
(Pmax) (W) Peak Power(Pmax)(W)	605	610	615	620	625	455	459	462	466	470
MPP Voltage(Vmp)(V)	45.42	45.60	45.77	45.93	46.10	42.23	42.35	42.46	42.57	42.68
MPP Current(Imp)(A)	13.32	13.38	13.44	13.50	13.56	10.77	10.83	10.89	10.95	11.01
Open Circuit Voltage(Voc)(V)	55.17	55.31	55.44	55.58	55.72	52.41	52.54	52.66	52.79	52.93
Short Circuit Current(Isc)(A)	13.95	14.03	14.11	14.19	14.27	11.26	11.33	11.39	11.46	11.52
Module Efficiency(%)	21.64%	21.82%	22.00%	22.18%	22.36%	*STC: Irradiance 1000 W/m², Cell Temperature 25°C, AM1.5 *NOCT: Irradiance 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s				

#### BIFACIAL OUTPUT-REARSIDE POWER GAIN

5%	Maximum Power (Pmax)	635	641	646	651	656
	Module Efficiency STC (%)	22.72%	22.91%	23.10%	23.29%	23.48%
10% Modu	Maximum Power (Pmax)	666	671	677	682	688
	Module Efficiency STC (%)	23.80%	24.00%	24.20%	24.40%	24.60%
20% Mai	Maximum Power (Pmax)	762	769	775	781	788
	Module Efficiency STC (%)	25.97%	26.18%	26.40%	26.62%	26.83%
200/	Maximum Power (Pmax)	826	833	839	846	853
	Module Efficiency STC (%)	29.54%	29.78%	30.03%	30.28%	30.52%

Operating Properties		Temperature Coefficient		Packaging Configuration		
Operating Temperature ( C)	-40℃-+85℃	Temperature Coefficient of Pmax	-0.30%/°C	Packing Type	40'HQ Container	
Maximum System Voltage (V)	1500V (IEC)	Temperature Coefficient of Voc	-0.25%/°C	Pcs/Pallet	36 pcs	
Maximum Series Fuse Rating (A)	30 A	Temperature Coefficient of Isc	+0.046%/°C	Pallet/Container	Pal16 trayslet/container	
Power Tolerance (W)	0~+5W	Nominal Operating Cell Temperature (NOCT)	45±2°C	Pcs/Container	576 pcs	
Bifaciality*	80%					

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