

182 Series 540-555W

Bifacial MBB Mono Half-cell Module

POWER OUTPUT RANGE

540-555W	\odot
MAXIMUM MODULE EFFICIENCY	
21.5%	\odot
POWER WARRANTY	
30 years	\odot

Characteristic



Higher Power Output 1500V system voltage, reduce the BOS cost



Half-cell and MBB Design Half-cell design and multi-busbar technology design, improve themodule efficiency





Excellent PID Resistance Excellent Anti-PID Performance, guarantee less power degradation



Double-sided Power Generation

The power gain of both sides,the back side can increase up to 25% of the total



Best Solution to Harsh Conditions

Pass the mechanical load test, front 5400Pa and back 2400Pa



High Reliability Based On Strict Quantity.Control

Over 100 internal tests including ultraviolet irrtadiation, heat-recycling, damp heat(DH) test, humidity-freeze(HF) test and etc.



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TOENERGY Technical Parameter

🖫 Electrical Data @STC					
Peak power-Pmax(Wp)	540	545	550	555	
Power tolerance(W)		±	3%		
Open circuit voltage - Voc(V)	49.50	49.65	49.80	49.95	
Maximum power voltage - Vmpp(V)	41.65	41.80	41.95	42.10	
Short circuit current - Im(A)	13.85	13.92	13.98	14.06	
Maximum power current - Impp(A)	12.97	13.04	13.12	13.19	
Module efficiency um(%)	20.9	21. 1	21.3	21.5	

Standard testing condition(STC): Irradiance 1000W/m², Temperature 25°C, AM 1.5

Mechanical Data

Cell size	Mono182×182mm
NO.of cells	144 Half Cells (6×24)
Dimension	2278*1134*30mm
Weight	32kgs
Glass	2.0mm high transmission,Anti-reflectioncoating toughened glass 2.0mm Half toughened glass
Frame	Anodized aluminum alloy
Junction box	SeparatedJunction box IP68 3 bypass diodes
Connector	AMPHENOLH4/MC4 connector
Cable	4.0mm ² , 300mm PV CABLE, length can be customized

🗿 Temperature Ratings

Nominal operating cell temperature	45±2°C
Temperature coefficient of Pmax	-0.35%/°C
Temperature coefficients of Voc	-0.27%/°C
Temperature coefficients of Isc	0.048%/°C

🏽 Maximum Ratings

Operating temperature	-40°Cto+85°C
Maximum system voltage	1500v DC (IEC/UL)
Maximum series fuse rating	J 25A
Pass hail test	Diameter 25mm,speed 23m/s

ISO

ISO4500

ISO

ISC

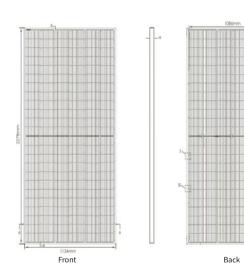
🕼 Warranty

12 Years Workmanship Warranty

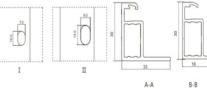
30 Years Performance Warranty

🕌 Packing Data	
Modules per pallet	36 PCS
Modules per 40HQ container	620 PCS
Modules per 13.5m long flatcar	720 PCS
Modules per 17.5m long flatcar	864 PCS

Dimension







Please refer to TOENERGY Solar product warranty for details

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