Bifacial Dual Glass Monocrystalline Module



Dual glass series 182T-156DG

Efficient bifacial Topcon monocrystalline silicon half-piece solar module



625 W

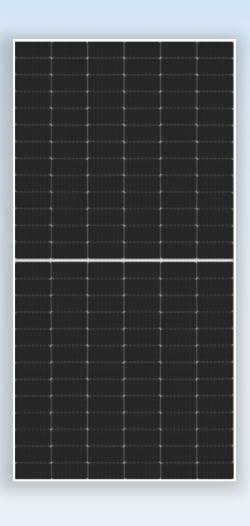
Maximum power output of module



Maximum module efficiency



Power tolerance



Boamax's long-term stable quality is trustworthy

- Automatic production line and leading photovoltaic technology
- EL testing is performed before and after lamination, effectively ensuring the reliability of the components.
- Passed various long-term reliability tests
- Strict international standard management systems are adopted, including ISO 9001, ISO 14001, and ISO 45001.



MBB welding strip design optimizes optical and electrical properties of modules



Additional safety brought by fire rating A



Optimized packaging materials and strict process scheme ensure the PID resistance of modules



The adoption of dual glass POE packaging enables effective resistance to various harsh outdoor environments

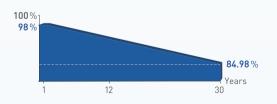


The battery slicing technology greatly reduces the series current and the internal damage of the modules, thus effectively reducing BOS and LCOE



Advanced non-destructive slicing technology, with small battery damage and low impact of cracking

Industry leading linear warranty



materials and process

12-year warranty on 30-year linear warranty

Excellent warranty, with a commitment to a 30-year power warranty and a linear power attenuation of 0.4%







Electrical performance parameters STC

Power output	Pmax(W)	605	610	615	620	625
Operating voltage of maximum power point	Vmp(V)	45.78	45.98	46.18	46.38	46.58
Operating current of maximum power point	Imp(A)	13.22	13.27	13.32	13.37	13.42
Open-circuit voltage	Voc(V)	55.00	55.20	55.40	55.60	55.80
Short-circuit current	Isc(A)	14.06	14.10	14.14	14.18	14.22
Module efficiency	[%]	21.64	21.82	22.00	22.18	22.36
Power tolerance	[W]	***************************************		0~+5		

^{*}STC testing conditions: atmospheric quality AM1.5, irradiance 1000 W/m², cell temperature 25 °C

Electrical performance parameters NMOT

Power output	Pmax (W)	455	459	462	466	470
Operating voltage of maximum power point	Vmp (V)	42.94	42.98	43.02	43.07	43.25
Operating current of maximum power point	Imp (A)	10.59	10.67	10.75	10.82	10.87
Open-circuit voltage	Voc(V)	52.24	52.43	52.62	52.81	53.00
Short-circuit current	Isc (A)	11.31	11.36	11.41	11.46	11.51

^{*}NMOT testing conditions: irradiance 800 W/m 2 ambient temperature 20 °C, wind speed 1 m/s

Electrical performance parameters

Bifacial power gain (taking back irradiation ratio of 10 % as an example)

Power output	Pmax(W)
Operating voltage of naximum power point	Vmp(V)
Operating current of naximum power point	Imp(A)
)pen-circuit voltage	Voc(V)
Short-circuit current	Isc(A)
Module efficiency	[%]
rradiation ratio	sc(A)

661	666	672	677	683
47.39	47.61	47.84	48.07	48.30
13.99	14.03	14.07	14.11	14.15
56.22	56.42	56.62	56.82	57.02
14.49	14.53	14.57	14.61	14.65
23.64	23.83	24.03	24.22	24.42
		10%		

Electrical performance parameters

Cell arrangement	156 pieces [6*26]
Module dimension	2465*1134*35mm
Weight	34.5kg
Front glass	2.0mm, high transparency coated glass
Rear glass	2.0mm, semi-tempered glass
Frame	Aluminum alloy with anode oxide film
Junction box	Protection level IP68
Cable	4mm², with a positive wire length of 300mm and a negative wire length of 300mm
Number of diodes	3
Wind pressure/snow pressure	2400Pa/5400Pa
Connector	PV-H4

Temperature characteristic

Nominal operating temperature of cell	45+2°C
Temperature coefficient (Isc)	+0.05%/°C
Temperature coefficient (Voc)	-0.28%/°C
Temperature coefficient (Pmax)	-0.34%/°C

Packing method

Pieces per box	31 pieces
Loading capacity of 17.5 m flatbed trailer	806 pieces

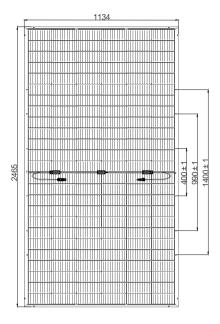
Limit parameters

	-40~+85°C
Operating temperature	-4U~+85°C
Maximum system voltage	1500V DC
Maximum rated current of fuse	30A

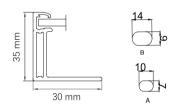
Optional configuration

Connector	Original PV

Module dimension

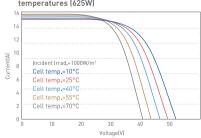


Rear view



Curve chart

Current and voltage curves at different temperatures (625W)



Current and voltage curves/power voltage curves at different irradiance (625W)

