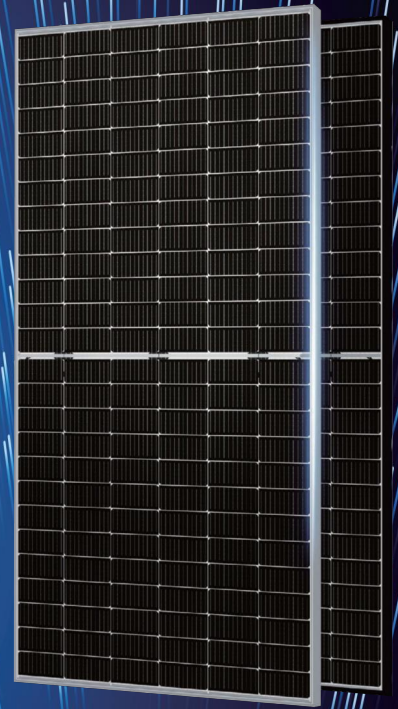


# M10-MBB TOPCon Mono Bifacial Module

(156 Half Cells)

12 years Product warranty / 30 years Linear power warranty

Integrated Solar Manufacturing & Technology Since 1964



620-640W /Output power

22.9% /Maximum efficiency

0~+5W /Power tolerance



## PID Resistant

Strict selection of encapsulation materials eliminates PID risk.



## Better Performance

30-year linear warranty, 1% decline in the first year an average annual decline of 0.40% over the first 30 years, increased return on investment No Boron-oxygen LID(Light Induced Degradation).



## High Returns

The n-type module has lower annual attenuation, better photoelectric conversion efficiency and temperature coefficient benefit, bifaciality can reach 80%.



## Multi Busbar Technology

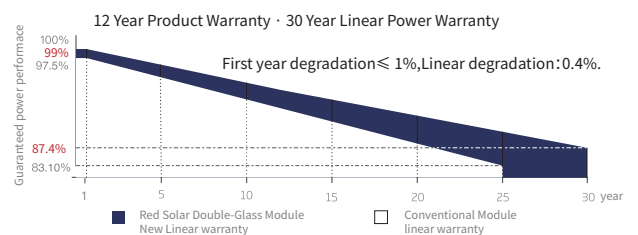
Better light utilization and current collection ability, effectively improve the power output and reliability.

### Comprehensive product certification

- IEC 61215 IEC61730
- IEC TS 62804 (PID Resistant)
- IEC 62716 (Ammonia Corrosion)
- IEC 61701 (Salt Spray Corrosion)
- IEC TS 62941 (PV quality Management System)
- ISO9001:2015 (Quality Management System)
- ISO14001 (Environmental Management System)
- OHSAS18001 (Occupational Health and Safety Management System)



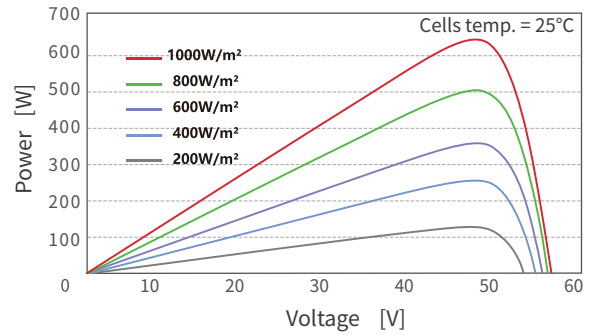
### Excellent Power Guarantee



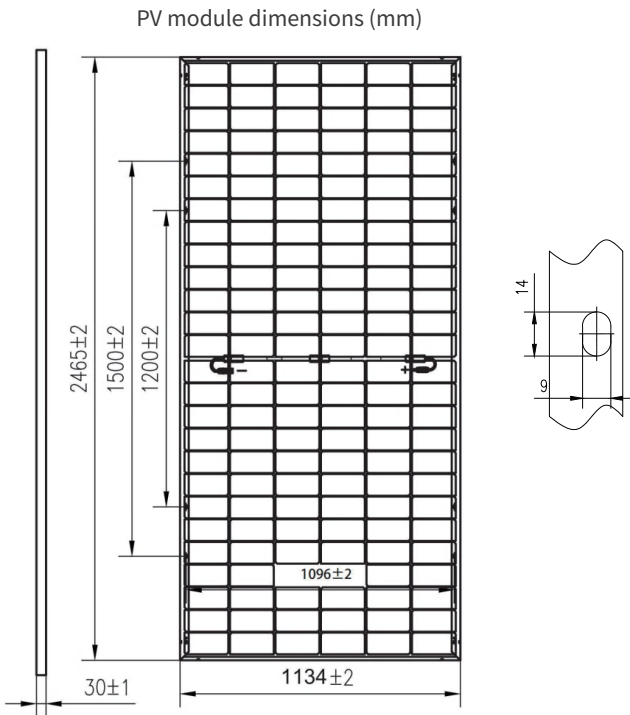
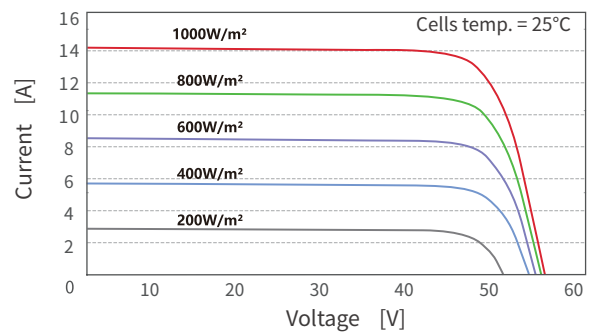
Model of PV Module  
CETC-xxxT(GDF)/156

Power Range  
620-640W

### P-V Curves of PV Module



### I-V Curves of PV Module



### Electrical Parameter(STC)

Model	620T	625T	630T	635T	640T
Maximum power (W)	620	625	630	635	640
Working point voltage (V)	46.20	46.30	46.63	46.96	47.16
Working point current (A)	13.42	13.50	13.51	13.52	13.57
Open circuit voltage (V)	55.2	55.3	55.43	55.50	55.57
Short circuit current (A)	14.17	14.25	14.32	14.37	14.42
PV module efficiency	22.18%	22.36%	22.54%	22.72%	22.90%
Standard test conditions	AM1.5, Irradiance 1000w/m <sup>2</sup> , Cell Temperature 25°C				

### RearSide Power gain

	Maximum Power	651Wp	656Wp	662Wp	667Wp	672Wp
5%	Efficiency STC	23.31%	23.50%	23.66%	23.85%	24.04%
15%	Maximum Power	713Wp	719Wp	725Wp	730Wp	736Wp
	Efficiency STC	25.53%	25.74%	25.92%	26.12%	26.33%
25%	Maximum Power	775Wp	781Wp	788Wp	762Wp	769Wp
	Efficiency STC	27.75%	27.97%	28.17%	28.40%	28.62%

The Electrical performance parameters are neither just referred to one PV panel, nor are a part of the contract; They are only used as reference.

### Mechanical Parameters

Module size	2465*1134*30mm
Number of solar cells	156Cells (2*6*13)
Weight	33.2Kg ±5%
Junction Box	IP68, 3 diodes
Cables	4mm <sup>2</sup> , +:300mm/-:200mm (Customizable)
Front plate glass	2.0mm,Ultra white AR coated semi-toughened glass
Rear plate glass	2.0mm, semi-toughened glass
Static load on the front	5400Pa
Static load on the back	2400Pa

### Packaging&Transport

40'HQ container transport 36 Pcs/box × 16box = 576 Pcs

### Temperature Parameter Maximum Ratings

NMOT	42±2°C	Working temperature	-40~+85°C
Temperature coefficient of maximum power(Pmax)	-0.30%/°C	Maximum system voltage	1500VDC
Temperature coefficient of open circuit voltage(Voc)	-0.25%/°C	Maximum fuse rated current	30A
Temperature coefficient of short circuit current(Isc)	+0.045%/°C		



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