

M10-MBB TOPCon Mono Bifacial Module

(108Half Cells)

(Sliver frame or black frame)

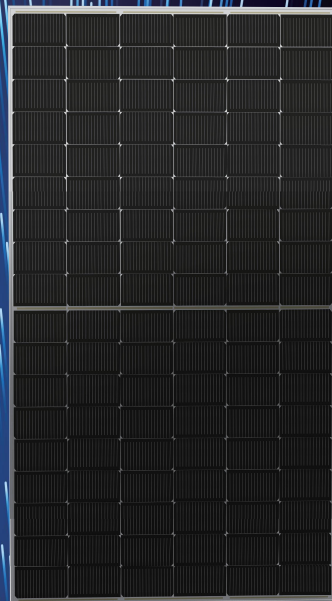


12 years Product warranty



30 years Linear power warranty

Integrated Solar Manufacturing & Technology Since 1964



415-435W /Output power



PID Resistant

Strict selection of encapsulation materials eliminates PID risk.

22.3% /Maximum efficiency



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 investment. No Boron-oxygen LID (Light Induced Degradation).

0~+5W /Power tolerance



High Returns

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

Comprehensive product certification

- IEC 61215 IEC61730
- IEC TS 62804 (PID Resistant)
- IEC 62716 (Ammonia Corrosion)
- IEC 61701 (Salt Spray Corrosion)

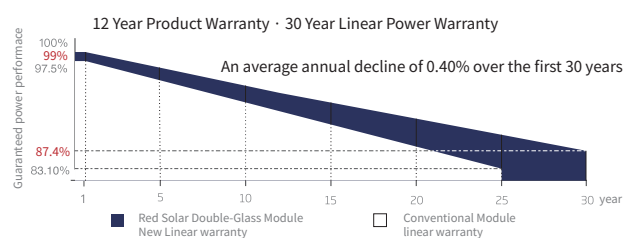
- IEC TS 62941 (PV quality Management System)
- ISO9001:2015 (Quality Management System)
- ISO14001 (Environmental Management System)
- OHSAS18001 (Occupational Health and Safety Management System)



Multi Busbar Technology

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

Excellent Power Guarantee



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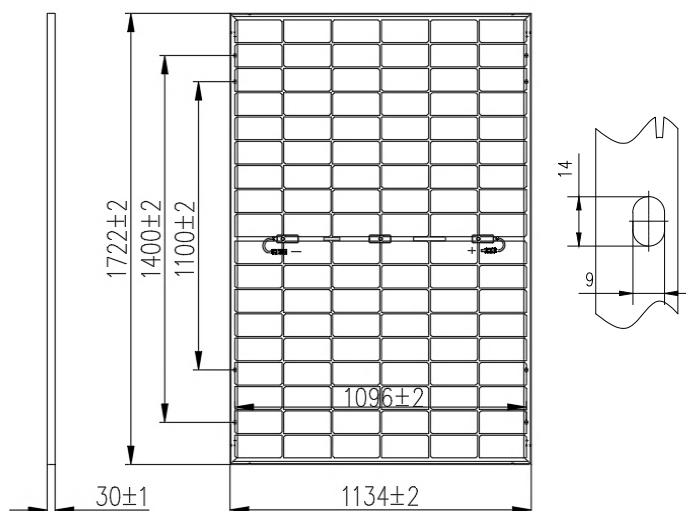
Model of PV Module

CETC-xxxT(GDF)/108

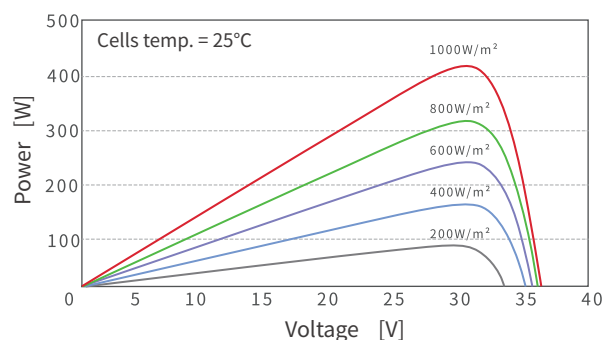
Power Range

415-435W

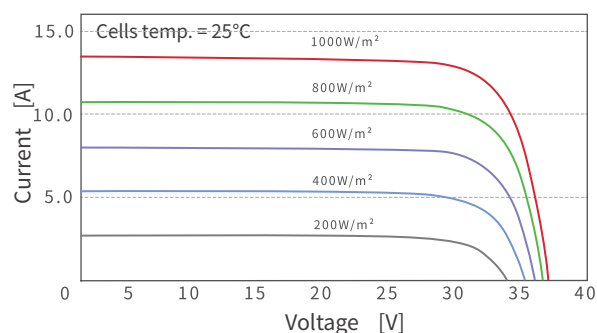
PV module dimensions (mm)



P-V Curves of PV Module



I-V Curves of PV Module



Electrical Parameter(STC)

Model	415T	420T	425T	430T	435T
Maximum power (W)	415	420	425	430	435
Working point voltage (V)	31.75	32.01	32.15	32.31	32.55
Working point current (A)	13.07	13.12	13.22	13.29	13.36
Open circuit voltage (V)	37.99	38.10	38.21	38.42	38.57
Short circuit current (A)	14.16	14.23	14.30	14.36	14.42
PV module efficiency	21.25%	21.51%	21.76%	22.02%	22.28%
Standard test conditions	AM1.5, Irradiance 1000W/m², Cell Temperature 25°C				

RearSide Power gain

	Maximum Power	435.8Wp	441Wp	446.3Wp	451.5Wp	456.8Wp
5%	Efficiency STC	22.31%	22.58%	22.85%	23.12%	23.39%
	Maximum Power	477.3Wp	483Wp	488.8Wp	494.5Wp	500.3Wp
15%	Efficiency STC	24.44%	24.73%	25.03%	25.32%	25.62%
	Maximum Power	518.8Wp	525Wp	531.3Wp	537.5Wp	543.8Wp
25%	Efficiency STC	26.57%	26.89%	27.21%	27.53%	27.85%

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	1722*1134*30mm
Number of solar cells	108 Cells (2*6*9)
Weight	23.5kg±5%
Junction Box	IP68, 3 diodes
Cables	4mm², ±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 × 26box = 936 Pcs
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Temperature Parameter

NMOT	42±2°C
Temperature coefficient of maximum power(Pmax)	-0.29%/°C
Temperature coefficient of open circuit voltage(Voc)	-0.25%/°C
Temperature coefficient of short circuit current(Isc)	+0.045%/°C

Maximum Ratings

Working temperature	-40~+85°C
Maximum system voltage	1500VDC
Maximum fuse rated current	30A



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