

M10 MBB Mono Bifacial Module

120 Half Cells

Sliver frame or black frame



12 Years Product warranty

30 Years Linear power warranty

Integrated Solar Manufacturing & Technology Since 1964

435-455W

Output power

21.0%

Maximum efficiency

0~+5W

Power tolerance

Better Performance

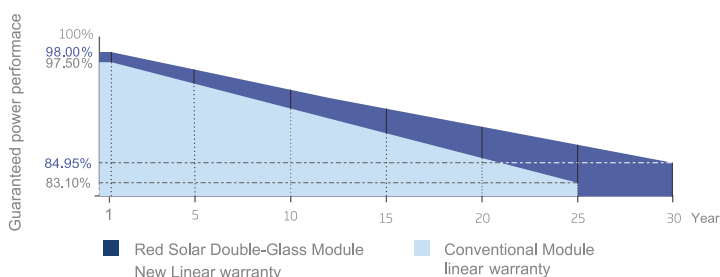
Lower Heat Loss of Internal- resistance

Better Reliability

Reduce Shading & Risk of Micro Crack

Design for Harsh Environment

Resistant to Salt, Ammonia, Dust & Sand



M10 MBB Monocrystalline Bifacial half-cell Module

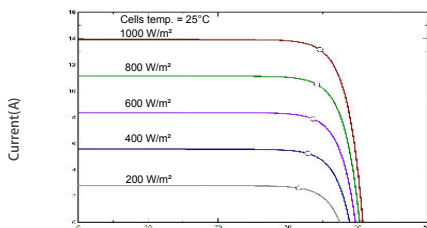


Front Electrical Parameter(STC)					
Model	435M	440M	445M	450M	455M
Maximum power	435	440	445	450	455
Working point voltage	33.5	33.8	34.1	34.3	34.5
Working point current	12.98	12.99	13.05	13.12	13.19
Open circuit voltage	39.72	39.97	40.30	40.50	40.70
Short circuit current	13.66	13.72	13.78	13.85	13.92
PV module efficiency	20.1%	20.3%	20.6%	20.8%	21.0%
Standard test conditions AM1.5, Irradiance 1000w/m ² , Cell Temperature 25°C					

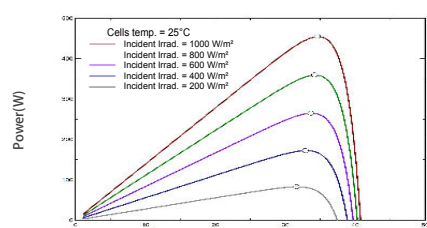
RearSide Power gain					
5%	Maximum Power	450Wp	455Wp	460Wp	465Wp
	Efficiency STC	20.8%	21.1%	21.3%	21.5%
15%	Maximum Power	481Wp	486Wp	492Wp	497Wp
	Efficiency STC	22.2%	22.5%	22.7%	22.9%
25%	Maximum Power	511Wp	517Wp	523Wp	529Wp
	Efficiency STC	23.6%	23.9%	24.2%	24.5%

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.

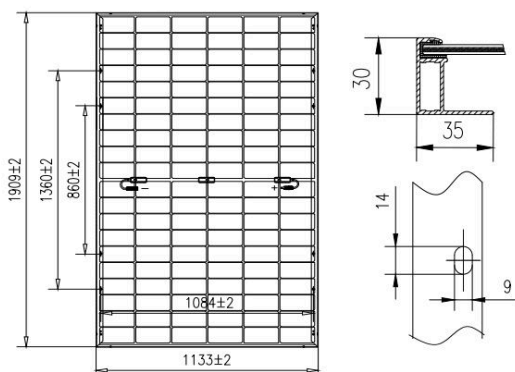
I-V Curves of PV Module



P-V Curves of PV Module



Model of PV Module Power Range
CETC-xxxM(GDF)/120 435-455W
PV Module Dimension



Mechanical Parameters

Module size	1909*1133*30mm
Number of solar cells	120Cells(2*6*10)
Weight	27Kg ±5%
Junction Box	IP68, 3 diodes
Cables	4mm ² , +:300mm/-:200mm (Customizable)
Front plate glass	Ultra white AR coated semi-toughened glass
Rear plate glass	semi-toughened glass
Static load on the front	5400Pa
Static load on the back	2400Pa

Packaging&Transport

40'HQ container transport 36 Pcs/box × 22 box =792 Pcs

Temperature Parameter

NMOT	45±2°C
Pmax	-0.35%/°C
Voc	-0.28%/°C
Isc	+0.048%/°C

Maximum Ratings

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

