

REDSOLAR

N series

G12R- MBB TOPCon Mono Bifacial module

CETC-435-455TR(GDF)/96



Product warranty



Linear power warranty



Rectangular cell design



Better Performance



High quality



High Returns



435-455W

Output power

22.8%

Maximum efficiency

0~+5W

Power tolerance

Electrical Parameter(STC)

Model	435TR	440TR	445TR	450TR	455TR
Maximum power (W)	435	440	445	450	455
Working point voltage (V)	28.60	28.81	29.03	29.24	29.45
Working point current (A)	15.21	15.27	15.33	15.39	15.45
Open circuit voltage (V)	34.54	34.60	34.67	34.73	34.80
Short circuit current (A)	16.05	16.11	16.17	16.23	16.29
PV module efficiency	21.77%	22.02%	22.27%	22.52%	22.77%
Standard test conditions	Atmospheric quality Am1.5, Irradiance 1000w/m ² , Cell Temperature 25°C				

RearSide Power gain

5%	Maximum Power	457Wp	462Wp	467Wp	473Wp	478Wp
	Efficiency STC	22.9%	23.1%	23.4%	23.6%	23.9%
15%	Maximum Power	500Wp	506Wp	512Wp	518Wp	523Wp
	Efficiency STC	25.0%	25.3%	25.6%	25.9%	26.2%
25%	Maximum Power	544Wp	550Wp	556Wp	563Wp	569Wp
	Efficiency STC	27.2%	27.5%	27.8%	28.2%	28.5%

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.

Mechanical Parameters

Module size	1762*1134*30mm
Number of solar cells	96Cells (2*6*8)
Weight	23.9 Kg ±5%
Junction Box	IP68, 3 diodes
Cables	4mm ² , 300mm, (Customizable)
Front glass	2.0mm Ultra white AR semi-toughened glass
Front glass	2.0mm, semi-tempered glass
Static load on the front	5400Pa
Static load on the back	2400Pa

Packaging&Transport

40'HQ container transport	36 Pcs/box × 26 box = 936Pcs
Note: Packing tray requires additional customization	

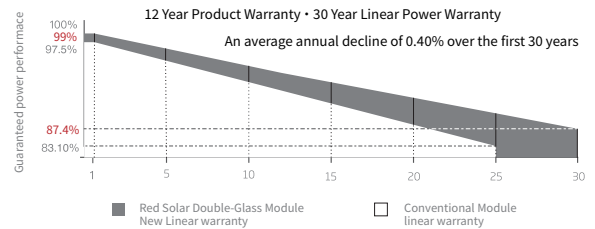
Temperature Parameter

NMOT	42±2°C
Temperature coefficient of maximum power(Pmax)	-0.30%/°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

Excellent Power Guarantee



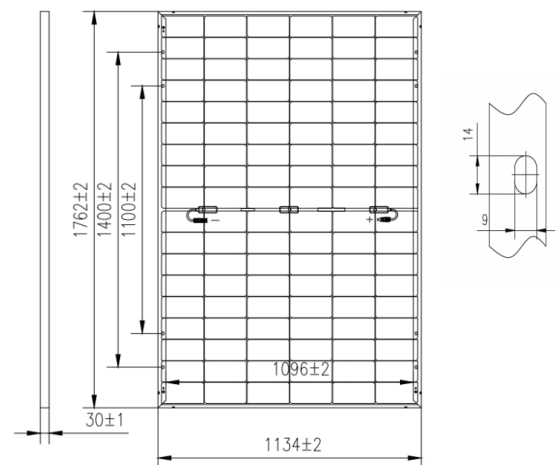
Model of PV Module

CETC-xxxT(GDF)/96

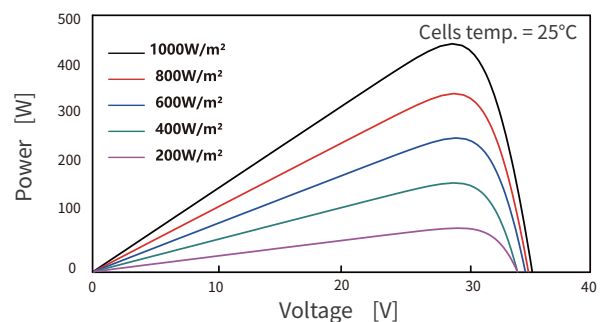
Power Range

435-455W

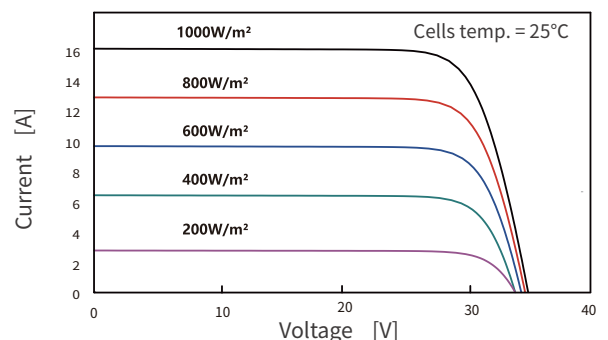
PV module dimensions (mm)



P-V Curves of PV Module



I-V Curves of PV Module



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