

REDSOLAR

N series

G12R TOPCon Ultralight

CETC-435-450TR(L)/96



Product
warranty



Linear power
warranty



Better Performance



Ultra-light weight: 6.9kg/m^2



High quality



High Returns



435-450W
Output power

22.52%
Maximum efficiency

0~+5W
Power tolerance

Electrical Parameter(STC)

Model	435TR	440TR	445TR	450TR
Maximum power (W)	435	440	445	450
Working point voltage (V)	30.42	30.45	30.47	30.49
Working point current (A)	14.30	14.45	14.60	14.76
Open circuit voltage (V)	35.64	35.68	35.72	35.76
Short circuit current (A)	15.46	15.56	15.61	15.66
PV module efficiency	21.77%	22.02%	22.27%	22.52%
Standard test conditions	Am1.5, Irradiance 1000w/m ² , Cell Temperature 25°C			

Electrical Parameter(NMOT)

Model	435TR	440TR	445TR	450TR
Maximum power (W)	327	331	335	338
Working point voltage (V)	26.63	26.83	27.03	27.23
Working point current (A)	12.28	12.33	12.38	12.43
Open circuit voltage (V)	32.20	32.45	32.69	32.87
Short circuit current (A)	12.94	12.99	13.04	13.09

NMOT conditions The irradiance is 800w/m², the ambient temperature is 20 degrees , and the wind speed is 1m/s

Mechanical Parameters

Module size	1762*1134*30mm
Number of solar cells	96Cells (2*6*8)
Weight	14Kg ±2.5%
Junction Box	IP68, 3 diodes
Cables	4mm ² , 300mm(Customizable)
Front glass	Ultra white AR coated toughened glass
Static load on the front	5400Pa
Static load on the back	2400Pa

Packaging&Transport

40'HQ container transport	36Pcs/box × 26box = 936Pcs
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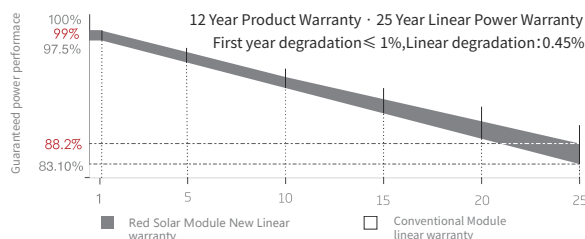
Temperature Parameter

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	25A

Excellent Power Guarantee



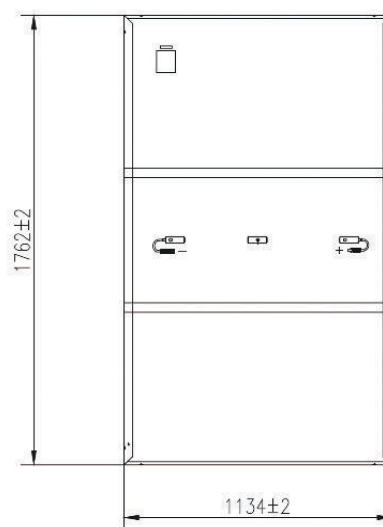
Model of PV Module

CETC-xxxTR(L)/96

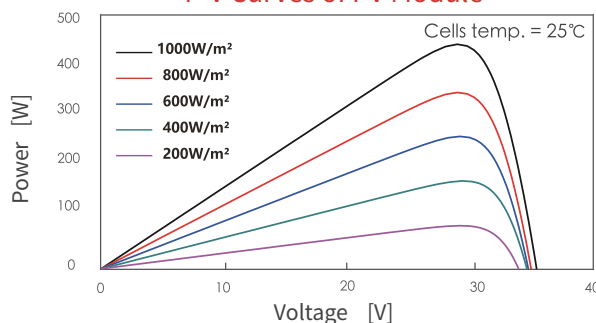
Power Range

435-450W

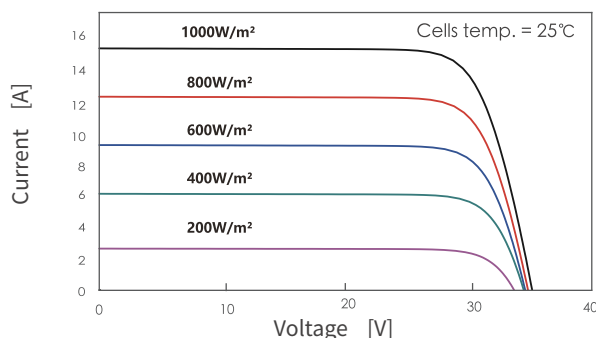
PV module dimensions (mm)



P-V Curves of PV Module



I-V Curves of PV Module



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