

# REDSOLAR

## N series

### G12R TOPCon Ultralight

CETC-435-455W(L)/96



Product warranty



Linear power warranty



Better Performance



Ultra-light weight



High quality



High Returns



# 435-455W

Output power

# 22.80%

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	Am1.5, Irradiance 1000w/m <sup>2</sup> , Cell Temperature 25°C				

## Electrical Parameter(NMOT)

Model	435TR	440TR	445TR	450TR	455TR
Maximum power (W)	327	331	335	338	342
Working point voltage (V)	26.63	26.83	27.03	27.23	27.42
Working point current (A)	12.28	12.33	12.38	12.43	12.48
Open circuit voltage (V)	32.20	32.45	32.69	32.87	33.18
Short circuit current (A)	12.94	12.99	13.04	13.09	13.14

NMOT conditions The irradiance is 800w/m<sup>2</sup>, 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	11.75 ± 0.25kg
Junction Box	IP68, 3 diodes
Cables	4mm <sup>2</sup> , +:300mm(Customizable)
Front glass	Ultra white coated toughened glass
Static load on the front	3600Pa/5400Pa
Static load on the back	2400Pa

## Packaging&Transport

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

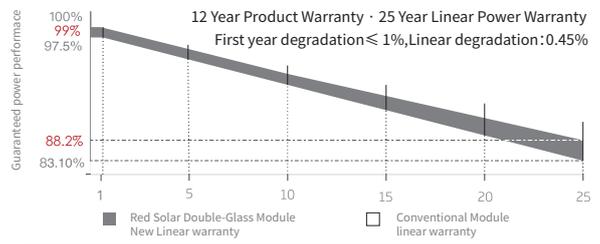
## Temperature Parameter

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



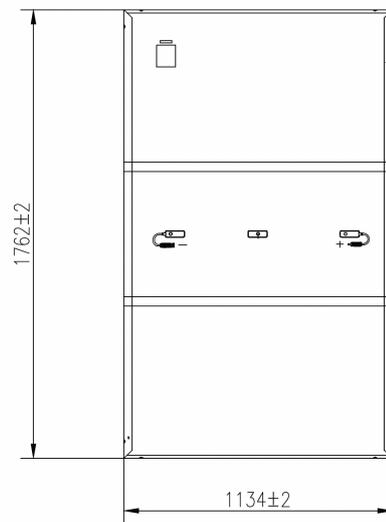
## Model of PV Module

CETC-xxxTR(L)/96

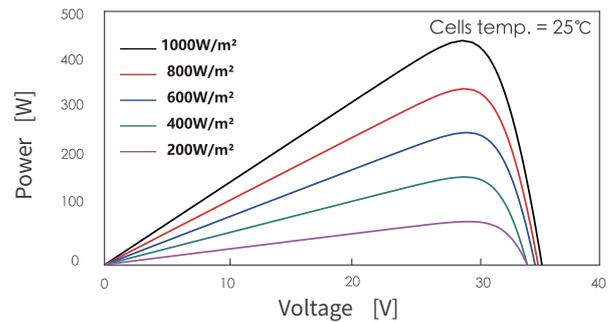
## Power Range

435-455W

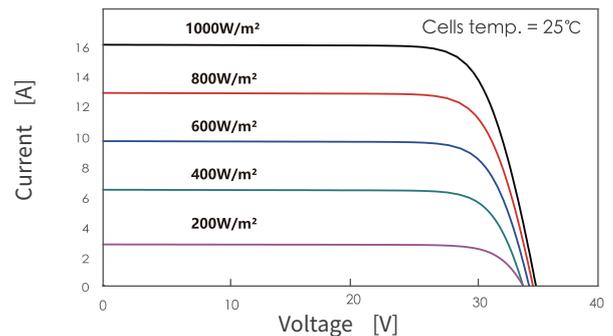
## PV module dimensions (mm)



## P-V Curves of PV Module



## I-V Curves of PV Module



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