

REDSOLAR

N series G12R TOPCon Bifacial

CETC-435-455TR(GDF)/96



Product
warranty



Linear power
warranty



Rectangular cell design



Better Performance



High Returns



High quality



435-455W

Output power

22.8%

Maximum efficiency

0~+5W

Power tolerance

Electrical Characteristics(STC)

Model	435TR	440TR	445TR	450TR	455TR
Maximum power (W)	435	440	445	450	455
Open circuit voltage (V)	34.54	34.68	34.82	34.96	35.10
Short circuit current (A)	16.05	16.11	16.17	16.23	16.29
Maximum power voltage (V)	28.25	28.48	28.71	28.94	29.16
Maximum power current (A)	15.40	15.45	15.50	15.55	15.60
PV module efficiency	21.8%	22.0%	22.2%	22.5%	22.8%
Standard test conditions	Atmospheric quality AM1.5, Irradiance 1000W/m ² Cell Temperature 25°C				

Electrical Characteristics(BNPI)

Model	435TR	440TR	445TR	450TR	455TR
Maximum power (W)	480	485	490	495	500
Open circuit voltage (V)	34.53	34.66	34.80	34.95	35.09
Short circuit current (A)	17.74	17.81	17.87	17.94	18.01
Maximum power voltage (V)	28.20	28.40	28.60	28.80	29.00
Maximum power current (A)	17.02	17.07	17.13	17.18	17.24
PV module efficiency	24.0%	24.3%	24.5%	24.8%	25.0%
Standard test conditions	Atmospheric quality AM1.5, Irradiance: front 1000 W/m ² , rear 135 W/m ² Cell Temperature 25°C,				

Mechanical Parameters

Module size	1762*1134*30mm
Number of solar cells	96Cells (2*6*8)
Weight	24Kg ±5%
Junction box	IP68, 3 diodes
Cables	4mm ² , +/-300mm/-:200(Customizable)
Front glass	2.0mm,Ultra white AR coated semi-toughened glass
Rear glass	2.0mm, semi-toughened glass
Maximum static load(front)	5400Pa
Maximum static load(rear)	2400Pa

Packaging Configurations

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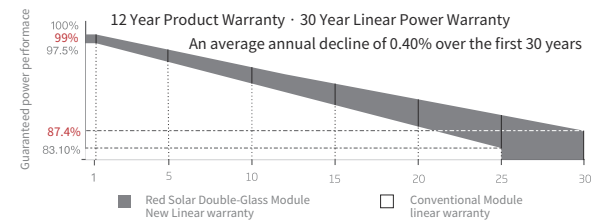
Temperature Coefficients

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

Application Conditions

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

Excellent Power Guarantee



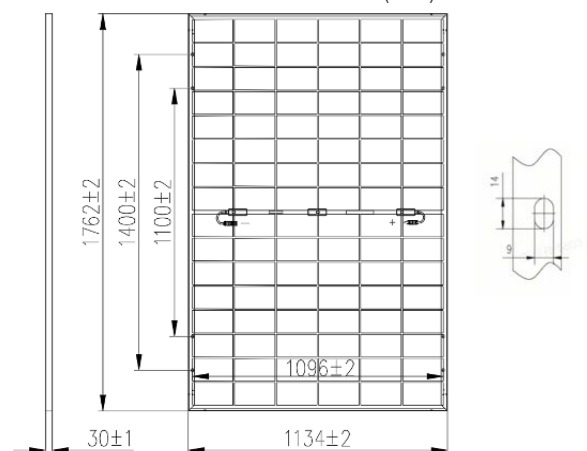
Model of PV Module

CETC-xxxTR(GDF)/96

Power Range

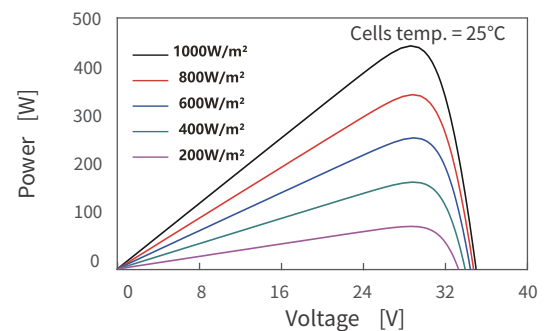
435-455W

PV module dimensions (mm)

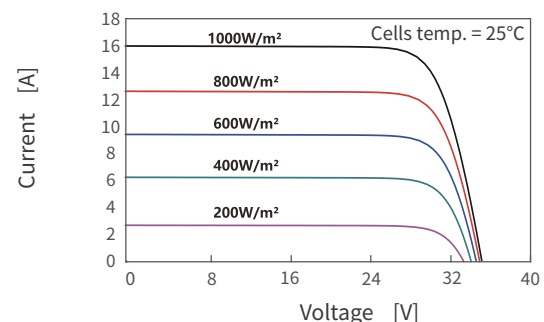


*If there are special requirements for the installation holes, please contact our technician

P-V Curves of PV Module



I-V Curves of PV Module



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